

MANAGING FINANCING RISK IN ISLAMIC BANKS ACROSS ASEAN: THE ROLE OF FINANCIAL PERFORMANCE AND MACROECONOMIC FACTORS

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Abstract

This study rigorously examines the influence of Financial Performance and Macroeconomic Factors on the financing risk associated with Islamic banks within the ASEAN region. The analysis utilizes panel data collected from five countries—Indonesia, Malaysia, Brunei Darussalam, Thailand, and the Philippines—spanning the period from 2010 to 2019. A dynamic panel regression methodology, specifically the Arellano-Bond Generalized Method of Moments (GMM), is employed for this purpose. The findings indicate that Liquidity Risk (LRISK), Profitability (ROE), and Good Governance (GGV) significantly exacerbate financing risk, whereas the Capital Ratio (CAR) is found to significantly mitigate it. Conversely, Economic Growth (GDP) does not demonstrate a significant effect. Furthermore, financing risk is affected by its value in the preceding period (RISK_{t-1}), underscoring its dynamic nature. These results highlight the crucial role of effective internal bank management in alleviating financing risks through enhanced capital adequacy, judicious liquidity management, and the implementation of sound governance practices. This study endeavors to contribute to the advancement of risk management strategies for Islamic banks in the ASEAN region.

Keywords: Financing Risk, Islamic Banking, Financial Performance, Macroeconomics

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Introduction

The United States Subprime Mortgage Crisis triggered significant global economic turbulence, with its effects reverberating across various regions, including Southeast Asia. Subsequent phenomena, such as the economic crises in Greece and Spain, China's economic slowdown, currency depreciation in Southeast Asia, and the United States' conservative interest rate policy, underscored the vulnerability of interconnected economies. Furthermore, the COVID-19 pandemic exacerbated global economic instability, disrupting financial systems worldwide, including in Southeast Asia, and raising concerns about the recurrence of similar crises in the future (Iqbal et al., 2022).

Amidst these challenges, the Islamic finance industry has demonstrated rapid and stable growth, positioning Southeast Asia as a pivotal region in the global Islamic financial system. Malaysia leads the development of Islamic banking in ASEAN, followed by Indonesia, which has shown aggressive expansion efforts. Brunei Darussalam has also actively pursued the growth of its Islamic banking industry. At the same time, countries with Muslim minority populations, such as Singapore, the Philippines, and Thailand, have expressed ambitions to accommodate and develop Islamic finance (Solihin et al., 2016). However, despite its progress, Islamic banking in the region faces significant challenges, particularly heightened competition within the financial services industry. Structural constraints, including limited capital, inadequate funding sources, human resource shortages, and outdated information technology, continue to hinder the performance of Islamic banks in ASEAN.

The study of financing risks has garnered considerable attention, with existing research offering diverse findings. Both internal and external factors influence financing risks. Internal factors include capital adequacy, liquidity risk, and profitability. Studies have demonstrated that higher capital ratios enable banks to absorb operational losses and enhance financial stability, thereby reducing financing risks. Conversely, elevated liquidity risks can exacerbate financial vulnerabilities, while improved profitability mitigates financing risks by strengthening a bank's financial position. Profitability, as highlighted in prior research, is critical for ensuring the sustainability of financial institutions, as it attracts external capital and fosters long-term stability.

External factors, notably macroeconomic variables such as economic growth and governance quality, also significantly affect financing risks. Strong economic growth can stimulate higher demand for financing, enhancing banking profitability and reducing risks. Meanwhile, good governance plays a pivotal role in shaping financial stability. Effective governance improves the reputation of financial institutions, safeguards stakeholder interests, and ensures compliance with legal and ethical standards (Al-Khouri & Arouri, 2016). It also fosters investor confidence,

enhances organizational efficiency, and supports the implementation of sound economic policies, collectively contributing to mitigating financing risks. Previous studies have established that countries with robust governance frameworks exhibit higher productivity and economic growth, creating a more resilient financial system.

This study aims to measure and identify financing risks in Islamic banks across ASEAN and examine the factors influencing these risks, focusing on the role of good governance. Using a dynamic panel regression method with the Generalized Method of Moments (GMM) approach developed by Arellano & Bond (1991) and refined by (Arellano & Bover, 1995) and (Blundell & Bond, 1998), this research contributes to understanding financing risks. It provides actionable insights for enhancing the resilience of Islamic banks in ASEAN.

Methods

The research method section does not have to explain all the steps or stages involved in conducting the research. This section must be made in detail and clearly to facilitate the reader in evaluating the suitability of the method, reliability, and up-to-dateness of the analysis tool with the objectives and problems discussed by the researcher.

This research uses a dynamic panel data model to determine the determinants of bank-specific and macroeconomic variables on the risk of Islamic bank financing in ASEAN. The panel data consists of 5 ASEAN countries that have operated Islamic banks: Indonesia, Malaysia, Brunei Darussalam, Thailand, and the Philippines. The observation period was 10 years, from 2010-2019. Definitively, the variables used in this research are Financing Risk (RISK), Capital Ratio (CAR), Liquidity Risk (LRISK), Profitability (ROE), Economic Growth (GDP), and Good Governance (GGV). A description of the research variables can be explained in Table 1.

Table 1.
Description and Measurement of Variables

Variable	Symbol	Measurement	Source
Financing Risk	RISK	Non-Performing Financing	(Demirgüç-Kunt & Detragiache, 1998); (Al-Khouri & Arouri, 2016); (Hardy & Pazarbaşıoğlu, 1999); (Ghenimi et al., 2017); (Al-Khouri & Arouri, 2016);
Capital Ratio	CAR	Capital Adequacy Ratio	(Iqbal et al., 2021); (Shahid et al., 2019)(Trabelsi & Trad, 2017)
Liquidity	LRISK	Total Financing to Total Deposit	(Ali et al., 2019); (Ali & Puah, 2018); (Trad et al., 2017); (Čihák & Hesse, 2010)

Profitability	ROE	Return on equity	(Trabelsi & Trad, 2017); (Ghenimi et al., 2017); (Ozili, 2018); (Hamza & Saadaoui, 2013); (Ariefianto & Soepomo, 2013);
Economic growth	GDP	The percent rate of increase in real gross domestic product, or real GDP	(Khasawneh, 2016); (Ghenimi et al., 2017); (Ali & Puah, 2018); (Trad et al., 2017); (Srairi, 2013); (Rajhi & Hassairi, 2013); (Wong et al., 2010)
Good Governance	GGV	The combined average value of institutional quality from the six good governance indices.	(Olson et al., 2000);(Iqbal et al., 2024) (Kaufmann et al., 2013)

The research uses a dynamic panel regression data analysis method with the Arellano-Bond Generalized Method of Moment (GMM) approach. This method is often used because many economic variables are dynamic. Dynamic means that the value of a variable is influenced by the value of other variables and the value of the variable in question in the past. The dynamic model was chosen because it is understood that the relationship between economic variables is unstable. In other words, economic variables are determined by current economic condition variables and time variables in the previous period (Baltagi, 2008). Therefore, applying dynamic data models is deemed more appropriate for describing actual conditions in economic analysis.

Furthermore, the research model used is the GMM (General Method of Moments) estimator, which was developed by (Arellano & Bover, 1995) and (Blundell & Bond, 1998). The model with endogenous variables in this research refers to research by (Trabelsi & Trad, 2017); (Ghenimi et al., 2017); (Diaconu & Oanea, 2014); (Trad et al., 2017); (Ozili, 2018); (Čihák & Hesse, 2010); (Korbi & Bougatef, 2017); (Khasawneh, 2016); with modifications. The model formed is as follows:

$$RISKs = \alpha + \delta RISKs-1 + \beta1CARs + \beta2LRISKs + \beta3ROEs + \beta4GDPs + \beta5GGVs + eit (1)$$

Result And Discussion

Table 2 presents descriptive statistics from sample data. Descriptive statistics provide an overview of the data regarding sample size, average value, standard deviation, maximum and minimum of VUL, CRISK, LRISK, ROE, GDP, and GGV.

Table 2.
Descriptive Statistics

Variable	Observations	Mean	Maximum	Minimum	Std. Dev.
NPF	50	3.268	11.907	-3.713	4.711
CAR	50	2.575	24.200	10.010	11.580
LRISK	50	76.398	104.555	42.540	20.020
PRO	50	1.798	24.060	-56.110	17.529
GREW	50	4.262	7.500	-2.500	2.611
GGV	50	0.013	0.714	-0.539	0.410

Source: Processed data

Table 3 shows the correlation coefficient value between independent variables. The correlation coefficient shows no multicollinearity problem between the independent variables in the regression model.

Tabel 3.
Correlation matrix of included variables

	CAR	LRISK	PRO	GREW	GGV
CAR	1.000				
LRISK	-0.071	1.000			
PRO	0.115	0.101	1.000		
GREW	0.164	-0.257	0.478	1.000	
GGV	-0.440	0.219	-0.006	-0.595	1.000

Source: Processed data

Table 4 shows that the dynamic panel method with the Arellano-Bond GMM approach meets the criteria for the best model statistically, namely consistent and valid instrument variables. The Arellano-Bond (AB) results on m2 show a p-value of 0.1032. it can be said to be consistent, and there is no autocorrelation in the second-order first-difference error. Sargan's estimation results show a p-value of 0.734. So, there is no problem with the validity of the instrument.

Table 4.
Estimation results of the Financing Risk Equation for Islamic banks with GMM
Arellano-Bond

Variable	Common effect	Fixed Effect	Random effect	GMM
RISK _{t-1}				0.567 *** (7.31)
CAR	-0,281 (-1.50)	0.155 (1.04)	-0.280 (-1.56)	-0.235** (-4.71)
LRISK	0.057*** (5.01)	0.005 (0.55)	0.057*** (5.20)	0.029* (2.31)
ROE	0.104*** (7.09)	0.060*** (5.37)	0.104*** (7.35)	0.055*** (7.18)
GREW	0.190 (1.41)	0.03 (0.34)	0.191 (1.46)	-0.028 (-1.23)
GGV	8.733*** (11.37)	-0,300 (-0.21)	8.733*** (11.80)	3.455*** (4.91)
C	-1.499 (-1.18)	2.246* (0.03)	-1.499 (-1.22)	-0.349 (-0.47)
Hausman test	X ² = 64.33			
Ho: fixed effect not consistent	Prob > Who ² = 0.000			
AR (1)				-2.47
P value				0.014
AR (2)				1.63
P value				0.103
Sargan Test				4.39
P value				0.734

t statistic in parentheses * p < 0.05. ** p < 0.01. *** p < 0.001

Source: Processed data

This research reveals several significant findings regarding the factors influencing financing risk in Islamic banks in the ASEAN region. The research results show that CAR, LRISK, ROE, and GGV significantly influence the Financing Risk of Islamic banks in ASEAN. Only the Economic Growth (GDP) variable does not significantly affect the risk of Islamic bank financing in ASEAN. In addition, the results of this research show that internal and external indicators influence Islamic bank financing risk and are also influenced by financing risk in the previous period, namely (RISK_{t-1}).

The research results show that the Capital Ratio (CAR) significantly negatively influences financing risk. Theoretically, a high capital ratio reflects a bank's capacity to absorb unexpected losses. When banks have adequate capital reserves, the risk of losses from problematic financing can be minimized. In this context, the capital ratio is a buffer that protects the bank from financial shocks. As a result, banks with high CARs tend to be more stable and able to maintain their financing risk levels at a controlled level. This finding is consistent with research by (Al-Khouri & Arouri, 2016); (Demirgüç-Kunt & Detragiache, 1998); (Hardy & Pazarbaşıoğlu, 1999); (Laeven & Valencia, 2013); (Ghenimi et al., 2017); (Al-Khouri & Arouri, 2016); (Ali & Puah, 2018), which emphasizes that capital adequacy is critical in reducing financing risks faced by banks.

Liquidity risk shows the extent to which a bank can meet its short-term obligations without facing material losses. This research finds that LRISK has a significant favorable influence on financing risk. This indicates that an increase in liquidity risk can trigger an increase in financing risk. Banks that face liquidity difficulties will be more vulnerable to failure to fulfill their financing obligations to customers. This condition can worsen operational stability and increase the overall risk burden. This finding is in line with studies conducted by (Ali et al., 2019); (Ali & Puah, 2018); (Trad et al., 2017); (Čihák & Hesse, 2010), which emphasizes the importance of effective liquidity management in reducing financing risk.

Profitability, which is measured through Return on Equity (ROE), shows the bank's ability to generate profits from the equity it owns. This research shows that ROE has a significant favorable influence on financing risk. More profitable banks have a more remarkable ability to absorb financing risks. However, high profits can also trigger more extraordinary risk-taking behavior, especially in the form of aggressive financing expansion. This phenomenon creates the potential for increased financing risk. This finding is in line with research conducted by (Trabelsi & Trad, 2017); (Ghenimi et al., 2017); (Amara & Mabrouki, 2019); (Srairi, 2013); (Ozili, 2018) and (Hamza & Saadaoui, 2013), which shows that more profitable banks tend to be more willing to take risks in their operations.

Implementation of good governance (Good Governance) has a significant favorable influence on financing risk. Good governance includes transparency, accountability, and protection of stakeholder interests. Banks that implement strong governance principles tend to have higher trust from investors and customers to maintain financial stability. In addition, good governance helps banks mitigate risks arising from financing activities. The results of this study support the findings of (Olson et al., 2000) (Iqbal et al., 2022) those who stated that good governance practices contribute to increased bank financial stability and more effective risk management.

This research finds that economic growth, as measured through GDP, does not significantly influence the risk of Islamic bank financing in ASEAN. These results indicate that even though a country's economy is experiencing growth, internal bank factors such as risk management policies, capital structure, and good governance practices have a more significant role in determining the level of financing risk. These findings are consistent with research conducted by Ghenimi et al. (2017), which shows that banks' internal risk management is more decisive in reducing financing risk compared to macroeconomic conditions such as GDP growth.

Overall, this research confirms the importance of internal bank factors in managing financing risk. Banks must strengthen capital ratios, manage liquidity well, sustainably increase profitability, and implement good governance practices to reduce financing risks. On the other hand, macroeconomic growth does not always directly affect financing risks, so banks must focus on managing internal risks to maintain their financial and operational stability.

Conclusion

This research uses the Generalized Method of Moments (GMM) approach to analyze the factors influencing Islamic bank financing risk in ASEAN. The research results show that Capital Ratio (CAR), Liquidity Risk (LRISK), Profitability (ROE), and Good Governance (GGV) have a significant effect on financing risk. In contrast, Economic Growth (GDP) has no significant effect. With these findings, it is recommended that Islamic banks in ASEAN should pay attention to adequate capital management, increase the efficiency of liquidity management, and optimize governance to reduce financing risks. In addition, regulators need to consider policies that support strengthening capital and governance in the Sharia banking sector. Further research could include additional variables such as inflation and interest rates to provide a more comprehensive picture of financing risks.

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