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INDONESIAN CAPITAL MARKET REVIEW

Determinants of Islamic Banks' Stability in Malaysia and Indonesia

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The economic prosperity of any nation relies on its banking sector, which serves as the linchpin of the economy. This paper investigates key bank-specific factors influencing the stability of Islamic banks in Malaysia and Indonesia from 2012 to 2021. Using panel data analysis, the study identifies the fixed effect model as the optimal approach. The subsequent fixed effect regression analysis highlights the significance of the cost-to-income ratio in determining financial stability for both Malaysian and Indonesian Islamic banks. Notably the study reveals that the non-performing loan ratio is the primary stability indicator in Malaysia, while Indonesian counterparts prioritize maintaining a robust capital adequacy ratio. The study recommends vigilant regulatory oversight of capital adequacy and prudent expense management to safeguard banks against instability, fostering sustained financial health and success.

Keywords: Banks Stability, Comparative Study, Islamic Banks, Panel Data, Z-Score.

JEL Classification: M

Introduction

Bank a financial intermediaries connect depositors with potential borrowers, ultimately generating profits (Gobat, 2022). Maintaining customer trust is paramount, requiring sound governance and prioritization of financial health. By prioritizing the promotion and maintenance of monetary and financial stability, a resilient economy can be built and sustained. In Malaysia, Bank Negara Malaysia (BNM) oversees the financial system's sound functioning, while in Indonesia, Bank Indonesia acts as the central bank responsible for ensuring the coun-

try's financial stability and economic support.

According to BNM, financial stability translates to seamless financial intermediation and unwavering faith in the operations of key financial institutions and markets. Meanwhile, Bank Indonesia articulates that financial stability implies a robust financial system that effectively and efficiently functions while remaining impervious to internal and external threats. The proper allocation of funding sources is believed to bolster the growth and stability of the Indonesian economy (Indonesia, 2022).

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Ensuring the soundness of the financial system requires banks to monitor financial soundness indicators within a certain range, such as capital adequacy, asset quality, profitability, liquidity, and market risk sensitivity (IMF, 2022). Deviating from these thresholds not only risks financial distress but bankruptcy, impacting the economy significantly. Therefore, banks, both conventional and Islamic, play a crucial role in ensuring the stability and soundness of the financial system to support economic growth and prevent adverse events such as insolvency and bankruptcy.

Various studies have been undertaken to identify factors affecting bank stability globally. However, limited research has focused on the factors affecting the stability of the banking sector in developing countries such as Malaysia and Indonesia, especially Islamic banks (Banna, Hassan, Ahmad, & Alam, 2022). Consequently, this study aims to investigate the determinants of the financial stability of Islamic banks in Malaysia and Indonesia. These countries account for a significant proportion of Islamic banking assets in Southeast Asia, with substantial Muslim populations. Malaysia accounts for 81 percent of Islamic banking assets in Southeast Asia, while Indonesia accounts for 15 percent. Islamic banks in Malaysia and Indonesia are expected to grow at a faster rate than conventional banks in the next three years, accounting for around 8 percent of the growth rate (Murgiah, 2022).

Despite the importance of bank stability and resilience previous studies have mainly focused on conventional banking rather than solely on Islamic banking. Limited studies have examined the determinants of bank stability, including Malaysian and Indonesian Islamic banks in the same study. Therefore, this study will investigate Malaysia and Indonesia's banking industry, with a specific focus on Islamic banks. There is an urgent need for this study to examine the factors contributing to the stability of Islamic banks to mitigate future financial distress and bankruptcy risks

Literature Review

Overview of Islamic bank in Malaysia and Indonesia

Islamic banking differs fundamentally from conventional banking due to its adherence to Islamic principles and Shariah law, characterized by features such as interest-free transactions, asset-backed financing, social and ethical considerations, and risk sharing (Hasan, Zubair; 2023).

Malaysia embarked on its Islamic finance journey over thirty years ago with the establishment of its inaugural Islamic bank, Bank Islam Malaysia Berhad (BIMB), in 1983. The enactment of the Islamic Banking Act of 1983 marked a pivotal moment, paving the way for subsequent regulatory measures that facilitated the expansion of Islamic banking. This development led to the emergence of numerous Islamic financial institutions, demonstrating Malaysia's commitment to maintaining a dual financial system that incorporates both conventional and Islamic banks.

Subsequently, the introduction of Islamic windows, subsidiaries, and full-fledged Islamic banks further expanded the influence and scope of Islamic banking in Malaysia. Notably, conventional banks with Islamic subsidiaries played a crucial role, exhibiting a steadfast commitment to Shariah compliance despite being subject to rigorous Shariah supervision. The establishment of Bank Muamalat Malaysia Berhad in 1999 further underscored the flourishing Islamic banking sector. Malaysia's Islamic banking entities aimed to achieve a 40% asset base by 2020, reflecting the sector's strategic aspirations (AIBIM, 2024).

In Indonesia, a parallel dual banking system, encompassing general and Islamic banking, operates similarly to Malaysia. The legal framework for Islamic banking in Indonesia, governed by the Shariah Banking Law of 2008, underscores regulatory dedication to aligning financial practices with Islamic principles. Despite Indonesia's majority-Muslim population, the estab-

lishment of Islamic banks lagged behind that of other nations. A pivotal moment occurred in 1992 with the establishment of Perseroan Terbatas (PT) Bank Muamalat Indonesia, signaling the initiation of Islamic banking operations in the country (Setiawan et al., 2021)

The economic crisis of 1998 highlighted the resilience of Islamic banks in Indonesia, with Bank Muamalat Indonesia emerging unscathed and maintaining a robust Capital Adequacy Ratio. This crisis catalyzed the proliferation of Islamic banking, leading to the establishment of additional Islamic banks, both state-owned and private. Legislative backing, exemplified by the enactment of Law Number 21 of 2008 before it was updated to UU P2SK Number 4 of 2023 on Sharia Banking, solidified the legal foundation for Islamic banks, propelling their growth within Indonesia's national banking system.

The Capital Buffer Theory

This study is associated with the Capital Buffer Theory by Calem and Rob (1999) which posit that banks maintain a larger capital buffer than required to mitigate potential losses. The theory asserts a strong relationship between capital adequacy and bank stability, suggesting that holding excess capital can help reduce the risk of not meeting regulatory requirements when a bank's capital adequacy ratio fluctuates widely. Moreover, the theory argues that raising more capital than necessary reduces bank risks as it incentivizes banks to avoid default risk and regulatory costs associated with failing below the minimum capital ratio (Ikpesu & Oke, 2022). Additionally, having a larger capital buffer decreases likelihood of bank failure due to unforeseen losses.

The theory underscores the importance of capital in enabling banks to plan for the future more safely and efficiently. Sufficient capital allows banks to maintain their capital base by collecting adequate deposits and reduces the need to resort to risky activities to increase returns. Financial institutions near regulatory minimum

capital ratios may seek to bolster capital and reduce risk to avoid the regulatory costs associated with falling below prescribed ratios. Conversely undercapitalized bank may increase their exposure to achieve higher expected returns, thereby hampering their day-to-day operations.

In line with the Capital Buffer Theory, Bagntasarian and Mamatzakis (2019) found that higher minimum capital requirements lead to reduced incentives for banks to engage in risky activities, resulting in a lower probability of default. The authors support the conclusion that the Basel Committee's adoption of minimum capital requirements has successfully enhanced bank stability. In summary, maintaining large capital buffers contributes significantly to banking stability.

Financial Stability

Boyd & Graham (1986) introduced the Z-score as an index to measure bank risk, a common metric in the banking and financial stability literature for assessing the likelihood of bank failure. Widely used in academic research and practice, the Z-score is favored for its simplicity and reliance solely on accounting data. Unlike market-based risk measures, it applies to many unlisted financial institutions (Lepetit & Strobel, 2015). A key implication of the Z-score is that high Z-scores indicate low-risk banks with large standard deviations in their assets, whereas low Z-scores suggest riskier banks with lower standard deviations, indicating instability (Li, Tripe & Malone, 2017). According to Laura, Federica & Zhou (2016), higher Z-score values correlate with lower bankruptcy probability and greater bank stability.

Numerous studies have identified Z-scores as a measure of bank stability (Ali and Puah, 2019; Pham et al., 2021). However, most of these studies focused solely on one type of bank, neglecting comparison between different types of banks. Some studies have also compared the financial stability of conventional and Islamic banks (Widarjono, 2020).

Bank-Specifics Factors

Several studies have empirically identified various bank-specific factors that may impact bank stability. Therefore, this study identifies five internal components as independent variables to investigate their significant influence on bank stability: the financing-to-deposit ratio, capital adequacy ratio, non-performing financing, financing-to-asset ratio, and cost-to-income ratio.

Financing to Deposit Ratio

The financing-to-deposit ratio (FDR), also known as the loan-to-deposit ratio (LDR), serves as an indicator of a bank's liquidity, measuring its ability to meet short-term commitments by comparing total loans extended to third-party funds received as deposits received within the same period. Widely used to assess a bank's financial health, the FDR ratio is a crucial barometer of a bank's potential to act as a conduit for third-party funds to credit (Kurniawati & Indriyani, 2022). If the ratio falls below an acceptable level, the bank may have excess liquidity or idle funds, potentially missing out on profit-maximizing opportunities, as observed by Kusmayadi (2018).

Several authors have found that proxying liquidity risk with a loan-to-deposit ratio positively bank stability (Rupeika-Apoga, Zaidi, Thalassinou & Thalassinou, 2020; Setiawan, Sudarto, & Widiastuti, 2019; Kurniawati & Indriyani, 2022). However, sometimes studies have contradicted these findings, suggesting that liquidity risk has a significant negative impact on bank stability (Dwinanda & Sulistyowati, 2021; Ketaren & Haryanto, 2020).

Capital Adequacy Ratio

Reports on capital adequacy ratios (CAR) indicate a bank's available capital, measured as a percentage of its risk-weighted credit exposures. The primary goal is to establish a minimum level that banks must maintain to avoid insolvency if losses surpass reserve capital. Sufficient capital is identified as the precise amount needed to fulfill the crucial responsibility of ab-

sorbing losses, thus averting banking system failure. Consequently, it is viewed as a measure that provides optimal security against bank insolvency due to risk (Kharabsheh & Gharaibeh, 2022). Meeting legally required capital adequacy ratios enables banks of all types to maintain financial stability and build buffers to protect themselves from economic crises.

Kamran, Omran & Arshad, (2019) discovered that boosting the capital adequacy ratio can enhance the financial stability of commercial banks, even with only a marginal improvement. However, an overly elevated capital adequacy ratio can have the opposite effect and lead to instability in commercial banks' measures of stability. Similarly, Sang (2021) the capital adequacy ratio has a positive and significant relationship with the financial stability of Vietnamese commercial banks.

Non-Performing Financing Ratio

The non-performing financing (NPF) ratio, also known as the non-performing loan (NPL) ratio, quantifies the ratio of non-performing financing to total financing. A higher ratio indicates that banks have made more unproductive loans (Abirami, 2018). Default financing, from which the bank does not benefit, is known as distressed financing. Typically, a loan is considered in default if interest is not paid after 90 days, although regulations may vary across countries (Merhbene, 2021).

Several studies have revealed that a surge in non-performing loans induces a decline in bank performance. This is because such an increase leads to higher interest rates on bank loans, negatively impacting bank profitability. Consequently, this contributes to a rise in bank instability (Atoi, 2019; Khan, Khan & Urooge, 2020). Contrary to Ozili's (2019) findings, this study delves into the determinants of banking stability in Nigeria. It reveals that NPLs have a significant and positive impact on banking stability, contrary to the author's initial expectations of a negative effect. High NPL levels cause financial distress and may lead to bank failure. A decline in asset quality increases

these loans, eventually reducing a bank's financial stability. The surge in NPLs is an indication of poor performance management and ineffective operations. Aggressive lending with inadequate credit assessment and poor negotiation terms only exacerbates the NPLs problem.

Financing-to-Asset Ratio

When the financing-to-asset ratio (FAR) or loan-to-asset (LTA) ratio is high, a bank is likely to have a substantial amount of outstanding loans, meaning that outstanding loans make up a significant portion of the bank's total assets, potentially leading to bankruptcy if multiple borrowers, particularly those with large loans, default on their payments, as noted by Ghenimi, Chaibi, & Omri (2017).

According to various researchers (Chand et al., 2021; Pham et al., 2021; Sang, 2021), although an increase in loans could pose credit risk, a surge in structured loans directly increases a bank's assets, ultimately strengthening its stability. Based on their research, the authors concluded that the LTA ratio, a measure of credit risk, had a favorable impact on a bank's stability. However, recent studies by (Ali & Pua, 2019; Daoud & Kammoun, 2020) have revealed that the LTA ratio harms the financial stability of commercial banks in Vietnam and Pakistan. These studies also found that when lending growth surpasses credit risk management, the NPL ratio increases, further exacerbating the instability of commercial banks.

Cost-to-Income Ratio

The Cost-to-Income ratio (CIR), assessed for a bank's operational efficiency, is measured as the ratio of operating costs to income, as per Khat-tak et al. (2021). To maintain stability, banks must keep operating costs low, ideally ensuring that their CIR does not exceed 40%, according to Abirami (2018).

Rupeika-Apoga et al. (2020) conducted a study on factors determining bank stability in Latvia, a small post-transition economy. Analyzing quarterly financial statements from 2012

to 2017, the researchers utilized panel data to explore the relationship between bank operational efficiency and stability. As expected, the study reveals a significant and positive correlation between these two factors, attributed to the high efficiency of Latvian banks. Additionally, the research suggests that increased costs have a positive impact on bank stability.

Conversely, Adem's (2022) study yielded contradictory results, revealing a significant inverse correlation between bank stability and the subject under investigation. Using a panel dataset spanning 2000-2020, the study examined 45 African nations, measuring bank insolvency risk with the Z-score. The Operational efficiency's impact on instability was analyzed using the CIR as a control variable. The findings showed that higher CIRs corresponded with increased financial instability, indicating that poor cost management raises financial institutions' costs and lowers their stability. This suggests that inefficient organizations may struggle to control creditors or operational expenses, increasing risk and thereby risking bank instability.

Research Methods

Model Specifications

This study employs multiple linear regression to analyze the data. Multiple linear regression is used to predict the values of a dependent variable using several independent variables to describe their correlation. The following equation represents the multiple linear regression model for Malaysian Islamic and Indonesian Islamic banks:

Multiple Linear Regression for Malaysia/ Indonesia:

$$ZSCORE_{it} = \beta_0 + \beta_1 FDR_{it} + \beta_2 CAR_{it} + \beta_3 NPF_{it} + \beta_4 FAR_{it} + \beta_5 CIR_{it} + \varepsilon_{it} \quad (1)$$

Where:

$ZSCORE_{it}$: Bank stability of Islamic bank in Malaysia/Indonesia i at year t

β_0 : Constant

FDR_{it} : Financing-to-deposit ratio of the Malaysian/Indonesia Islamic bank i at year t

Figure 1. Proposed Framework

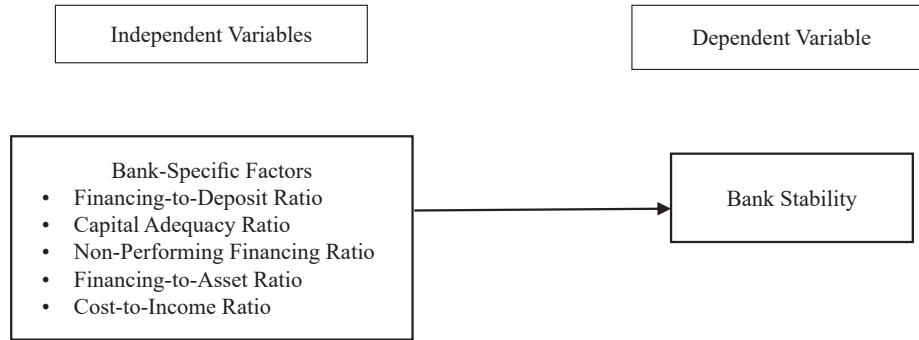


Table 1. Malaysian Islamic Banks

No	Name of banks
1	Affin Islamic Bank Berhad
2	Alliance Islamic Bank Berhad
3	AmBank Islamic Berhad
4	Bank Islam Malaysia Berhad
5	Bank Muamalat Malaysia Berhad
6	CIMB Islamic Bank Berhad
7	Hong Leong Islamic Bank Berhad
8	Maybank Islamic Berhad
9	MBSB Bank Berhad
10	Public Islamic Bank Berhad
11	RHB Islamic Bank Berhad

Table 2. Indonesia Islamic Banks

No	Name of banks
1	Bank BCA Syariah
2	Bank Jabar Banten Syariah
3	Bank Mega Syariah
4	Bank Muamalat Indonesia
5	Bank Panin Dubai Syariah
6	Bank Syariah Bukopin
7	Bank Victoria Syariah
8	BTPN Syariah

CAR_{it} :Capital adequacy ratio of the Malaysian/ Indonesia Islamic bank i at year t

NPF_{it} :Non-performing financing ratio of the Malaysian/ Indonesia Islamic bank i at year t

FAR_{it} :Financing-to-asset ratio of the Malaysian/ Indonesia Islamic bank i at year t

CIR_{it} :Cost-to-income ratio of the Malaysian/ Indonesia Islamic bank i at year t

ε_{it} :Error term

$\beta 1, \beta 2, \beta 3, \beta 4$ and $\beta 5$: Regression Coefficients

Sample Size

This study focuses on Islamic Banks in Malaysia and Indonesia. Due to data availability limitations, only local Islamic banks were included in the sample. Thus, 11 Islamic banks were cho-

sen in Malaysia, and eight Islamic banks were selected in Indonesia. Data were collected from annual reports and Refinitiv Eikon from 2012-2021, and a panel data model was used. The sample details are shown in table 1 & 2.

Results and Discussions

Table 3 and Table 4 present a summary of statistics for the variables used in the analysis for Islamic banks in Malaysia and Indonesia, respectively. The total observations in this study were 11 Islamic banks operating in Malaysia and eight Islamic banks in Indonesia. Bank stability is measured by Z-score, where a higher Z-score indicates greater stability (Hassan B. Ghassan & Krichene, 2017). The mean Z-score

Table 3. Descriptive Analysis of Malaysian Islamic Banks

	Z-SCORE	FDR	CAR	NPF	FAR	CIR
Mean	24.5434	85.6943	16.8994	1.775972	71.05196	46.00338
Median	22.9603	83.4232	16.1151	1.171154	72.43865	47.16077
Maximum	57.7239	125.443	30.9473	11.12935	102.2575	91.84194
Minimum	15.0470	47.9084	11.7308	0.220275	44.46906	19.64426
Std. Dev.	8.35755	14.4121	3.33014	1.720388	8.779877	12.95842
Skewness	2.31984	0.18964	1.54693	2.818187	-0.539276	0.336069
Kurtosis	8.78964	3.34073	5.77656	12.31748	5.345228	3.430609
Jarque-Bera	252.297	1.19149	79.2061	543.5106	30.54044	2.920470
Probability	0.00000	0.55114	0.00000	0.000000	0.000000	0.232182
Sum	2699.77	9426.37	1858.93	195.3569	7815.716	5060.372
Sum Sq. Dev.	7613.51	22640.2	1208.79	322.6113	8402.399	18303.36
Observations	110	110	110	110	110	110

Table 4. Descriptive Analysis Indonesia Islamic Banks

	Z-SCORE	FDR	CAR	NPF	FAR	CIR
Mean	16.5135	91.42342	23.98785	2.197292	61.61073	95.96639
Median	13.99370	91.69380	20.96000	2.430000	67.64392	92.70000
Maximum	58.59841	196.7300	86.91000	4.950000	90.95332	217.4000
Minimum	-0.755076	38.33000	11.10000	0.010000	12.65259	47.60000
Std. Dev.	9.459711	17.92993	11.93671	1.647307	18.41717	25.72382
Skewness	1.685180	2.523787	2.434545	0.098459	-1.257470	2.596255
Kurtosis	7.163140	18.10072	11.69170	1.638165	3.812056	12.32908
Jarque-Bera	95.63688	845.0324	330.8459	6.311236	23.28120	379.9798
Probability	0.000000	0.000000	0.000000	0.042612	0.000009	0.000000
Sum	1321.086	7313.873	1919.028	175.7833	4928.858	7677.311
Sum Sq. Dev.	7069.404	25397.11	11256.32	214.3760	26796.17	52275.48
Observations	80	80	80	80	80	80

for Malaysian Islamic banks was 24.54340, while for Indonesian Islamic banks, it was 22.96030. Consequently, Malaysian Islamic banks were found to be more stable than Indonesian Islamic Banks.

Panel Data Analysis

In this study, the likelihood Ratio Test is applied to choose the best model between the Pooled Ordinary Least Squares (POLS) model and the Fixed Effects Model (REM). The hypotheses under the Likelihood Ratio Test are as follows:

H0 = The POLS model is preferred.

H1 = The Fixed Effects Model is preferred.

The Hausman specification test was conducted to compare fixed effects and random effects estimations in selecting the most appropriate

model estimation (Baltagi, Bresson & Pirotte, 2003; Hsiao, 2003). The random effects model assumes the exogeneity of all regressors and individual effects, while the fixed effects model allows for the endogeneity of all regressors and individual effects (Mundalk, 1978). Hausman & Taylor (1981) introduced a model where some regressors are correlated with individual effects. This indicates that the individual means of strictly exogenous regressors are used as instruments for the time-invariant regressors, which are correlated with individual effects. Therefore, the choice of exogenous regressors is a testable hypothesis.

The hypotheses statement are as follows:

H0 = The Random Effects model is preferred.

H1 = The Fixed Effects model is preferred.

Table 5. Panel Data Analysis

	Islamic Bank Malaysia		Islamic Bank Indonesia	
Likelihood Ratio test	P value		P value	
	Cross-section F	22.625228	Cross-section F	10.3169
	Chi-square	(0.0000) ***	Chi-square	(0.0000) ***
	Cross-section	134.839570	Cross-section	58.508
Hausman test	Chi-square	(0.0000) ***	Chi-square	(0.0000) ***
	P value		P value	
	Cross-section	22.625228	Cross-section	10.316959
	Random	(0.0000) ***	Random	(0.0000) ***

Table 6. Fixed Effect Regression Analysis Islamic banks in Malaysia

Variables	Coefficient	t-statistics	(P-value)
C	34.31198	6.666170	0.0000***
FDR	0.467173	5.239968	0.0000***
CAR	0.102657	0.505463	0.6144
NPF	-2.691627	-6.007051	0.0000***
FAR	-0.735043	-5.631272	0.0000***
CIR	0.118881	2.367569	0.0200***
F-Statistics	33.90662		
	0.0000***		
Adjusted R-Squared	0.381274		
Durbin Watson	1.540000		

Table 7. Fixed Effect Regression Analysis Islamic banks in Indonesia

Variables	Coefficient	t-statistics	(P-Value)
C	2.690792	1.171582	0.2455
FDR	0.029087	1.478374	0.1440
CAR	0.559158	15.53355	0.0000***
NPF	0.239835	0.901669	0.3705
FAR	0.043114	1.324199	0.1899
CIR	-0.056611	-4.996723	0.0000***
F-Statistics	127.72051		
	(0.000000)***		
Adjusted R-Squared	0.381274		
Durbin Watson	1.365475		

Based on Table 5 above, the p-value of the cross-section section F statistic for Islamic banks in Malaysia and Indonesia was 0.000. Since the p-value is less than $\alpha = 0.10$, the statistic is significant. Therefore, the null hypothesis is rejected, indicating that the Fixed Effect Model is preferred.

Similarly, for the Hausman test, the cross-section section random statistic for Islamic banks in Malaysia and Indonesia was 0.000. Since the p-value is less than $\alpha = 0.10$, the statistic is significant. Thus, the null hypothesis is rejected, suggesting that the Fixed Effect Model is preferred.

Regression Analysis

In Table 6, four variables were found significant

in determining bank stability for Malaysian Islamic banks: the FDR, NPF ratio, FAR, and CIR. However, the CAR was deemed insignificant. Conversely, for Indonesian Islamic banks in Table 7, only two variables were significant in determining financial stability: the CAR and CIR, while the FDR, NPF, and FAR were insignificant.

The FDR yielded significant results for Malaysian Islamic banks but was insignificant for Indonesian Islamic banks. A higher FDR indicates increased funds provided to third parties, potentially boosting bank asset returns (Christaria & Kurnia, 2016). In contrast, if the FDR value is too low, it suggests adequate liquidity but may have a lower income, as the banking industry generates income through credit extension (Supatmin, 2021). FDR had a positive and

significant relationship with Malaysian Islamic banks, suggesting that as the FDR rose, so did bank stability. Previous studies support this notion (Setiawan et al. (2019) and Rupeika-Apoga et al. (2018)). For Indonesian Islamic banks, however, the FDR was statistically insignificant and less important to the bank's stability.

CAR was crucial for Islamic banks in Indonesia but not for those in Malaysia. Inadequate capital can lead to a run on a bank, preventing it from meeting depositors' demands and settling recurring obligations (Ikpesu & Oke, 2022). Therefore, banks must maintain minimal capital to secure depositor funds and meet financial commitments.

CAR has a significant and positive association with bank stability in Indonesian Islamic banks, implying that as the CAR rises, so does bank stability. CAR is an important measure of a bank's financial strength. Indonesian Islamic banks with higher CAR values can endure financial downturns, as they have sufficient capital available. The findings support the idea that increasing the CAR provides banks with a "buffer" to absorb shocks, thus making Indonesian Islamic banks more stable. This is consistent with the buffer theory of capital adequacy developed by Calem & Rob (1999), which suggests that banks may want to maintain a buffer of additional capital to reduce the risk of falling below legal capital requirements, especially if their CAR is unstable (Aruwa & Naburgi, 2014).

This result aligns with prior studies on CAR, indicating that banks with adequate or higher capital are stable and can protect themselves against unforeseen events that may lead to bank instability. However, for Malaysian Islamic banks, CAR was found to be insignificant and did not affect the stability of the 11 local Islamic banks in Malaysia.

The NPF ratio for Malaysian Islamic banks recorded a significant level of 1 percent with a negative relationship with bank stability, suggesting that a smaller NPF will contribute

to bank stability. Conversely, for Indonesian Islamic banks, the NPF ratio was insignificant and did not influence bank stability. This finding is consistent with Christaria & Kurnia (2016), indicating that the lower the NPL ratio, the more prudent the bank is in extending credit to customers to achieve suitable goals. Khan et al. (2020) also support this result, showing that NPLs are statistically negatively significant with the bank stability of commercial banks in Pakistan.

Therefore, a lower NPF indicates that a bank is less stable, potentially resulting in higher profit rates on bank financing and an increased likelihood that borrowers will be unable to repay their financing. Hence, banks must ensure that borrowers are likely to be able to repay their financing, as this will impact the NPF if the amount of NPF exceeds the total amount of financing that banks lend to the borrowers.

FAR was significant for Malaysian Islamic banks but not for Indonesian Islamic banks. A greater FAR shows that a bank has issued more loans or that loans issued make up a substantial share of total assets. Consequently, if many borrowers default or borrowers with substantial loan amounts default, the bank's bankruptcy risk rises (Ghenimi et al., 2017).

The negative and significant impact of FAR on Malaysian Islamic bank stability indicates that a greater FAR raises the likelihood of credit risk. According to Sang (2021), this finding indicates that as credit growth increases without adequate credit risk management, the NPL ratio rises, threatening bank instability. This finding contrasts with Chand et al. (2021) and Pham et al. (2021). Therefore, a greater FAR implies that the bank has more of its assets in financings, which suggests that if more borrowers default, the bank is on the verge of insolvency, exposing them to bank instability.

Conversely, FAR was insignificant for Indonesian Islamic banks, aligning with the findings of Ali & Puah (2019) regarding the loan-to-asset ratio and bank stability.

Table 8. Comparison between Malaysian Islamic Banks and Indonesian Islamic Banks

Independent Variables	Malaysian Islamic banks	Indonesian Islamic banks
FDR	Significance at 1% (positive)	Insignificance
CAR	Insignificance	Significance at 1% (positive)
NPF	Significance at 1% (negative)	Insignificance
FAR	Significance at 1% (negative)	Insignificance
CIR	Significance at 5% (positive)	Significance at 1% (negative)

The CIR was significant for both Malaysian and Indonesian Islamic banks but exhibited an inverse relationship with bank stability. For Malaysian Islamic banks, CIR showed a significant and positive relationship. In the financial industry, a high CIR is commonly associated with low productivity and efficiency, and vice versa (Hussain, 2014).

Rupeika-Apoga et al. (2020) obtained similar results regarding the CIR of Malaysian Islamic banks, demonstrating a significant and positive correlation between bank operational CIR and stability. This suggests that Malaysian Islamic banks may experience increased costs affecting their positive relation to bank stability. However, banks with low CIRs are considered more efficient and stable than those with higher CIRs (Ozili, 2019).

Conversely, Indonesian Islamic banks exhibited an inverse relationship, with CIR having a significant negative impact on bank stability, consistent with the findings of Adem (2022). This suggests that Indonesian Islamic banks may have ineffective cost management, resulting in higher costs and reduced stability. This supports the concept of “poor management speculation,” where inefficient banks may struggle to control operational costs or monitor lenders, leading to increased risk and decreased stability.

Conclusions and Recommendations

This study aimed to investigate the relationship between the various financial ratios and the stability of Islamic banks in Malaysia and Indonesia, identify the key factors influencing stability in both nations and compare the factors contributing to Islamic bank stability between the two countries.

The stability of Malaysian Islamic banks was explained by four significant variables, while Indonesian banks’ stability was accounted for by only two. However, both Malaysian and Indonesian Islamic banks achieved comparable outcomes, as evidenced by their significant CIR. The study identified the NPF ratio as the key factor impacting the stability of Islamic banks in Malaysia, while the CAR ratio was most influential for Islamic banks in Indonesia.

The researchers recommend that Islamic banks in Malaysia focus on maintaining a low NPF ratio, while those in Indonesia should prioritize monitoring their CAR ratio to ensure stable operations. Additionally, the study compared factors influencing bank stability in Malaysia and Indonesia. It found that only the CIR had a significant impact on stability in both countries, with opposite effects. Malaysian Islamic banks identified three additional factors - FDR, NPF, and FAR - with varying relationships to stability, while these were insignificant for Indonesian banks. Regarding CAR, only Indonesian Islamic banks showed a significant, positive relationship with stability.

The comparative analysis suggests that Malaysian Islamic banks are more susceptible to bank stability than Indonesian Islamic banks due to the existence of more significant factors directly impacting their stability.

The study’s findings yield several recommendations. Firstly, the critical importance of the CIR in maintaining stability is emphasized, given its significance in both countries. Banking management cannot afford to ignore the CIR, as it is a crucial factor affecting operational efficiency. Indonesian Islamic commercial banks should aim to reduce operational expenses while increasing investment returns. This can

be achieved by closely examining the management expense ratio, including assets utilized for administration and operating expenses. By scrutinizing banking processes and expenses, Islamic banks can ensure expenditures yield the desired income, enabling them to create realistic spending plans and avoid unnecessary expenses. Additionally, the CAR plays a crucial role in preserving Islamic banks' security. Given the unique risks posed by their products, Islamic financial institutions must secure and maintain the minimum capital requirement to prevent bank failure and absorb potential losses, acting as a protective buffer.

Furthermore, the finding of this paper aims to aid bank managers in Malaysian Islamic banks in mitigating liquidity risk by maintaining a healthy liquidity position. A useful strategy could be requiring banks to diversify their funds, focusing on creating liquidity sources. Developing innovative financial products and implementing comprehensive rules and policies will prevent future liquidity risks. In addition, bank managers can minimize liquidity risks by

keeping a fraction of their assets in cash or investing in securities.

Boosting profits in Malaysian Islamic banks necessitates closer attention to the FAR and NPF ratio. Accurately assessing borrower creditworthiness can drive earnings and asset quality for the banks. Requiring collateral security from borrowers to meet FAR targets can protect banks against default risks while providing opportunities to secure credit amounts and generate additional profits. This approach will undoubtedly improve the bank's stability and prospects for growth.

Lastly, Malaysian Islamic banks are mandated to evaluate the creditworthiness of loan applicants before approving financing, especially in cases where NPF ratios are high. By assessing borrowers' financial standing and ability to meet standard requirements, the banks can safeguard against potentially risky borrowers, thereby maintaining high-quality loan portfolios.

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