

Islamic Banks Stability in Indonesia: Assessing the Role of Islamicity Performance Amidst the Pandemic Challenges

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Abstract

Research Originality: Islamicity performance reflects adherence to Sharia principles, which are fundamental to Islamic banking operations. Research that emphasizes the contribution of Islamicity performance to the stability of Islamic bank requires additional studies.

Research Objectives: This research examines the influence of banks' internal factors, Islamicity performance, and macroeconomic factors on the Islamic bank stability amidst the pandemic challenges using financial intermediation theory.

Research Methods: A random effects test was performed on a balanced panel data covering the period of 2017.1-2023.3 on 10 Islamic banks continuously publishing quarterly financial reports.

Empirical Results: Credit risk and efficiency affect stability. Higher expenses enhance stability during pandemic. Reserves for uncollectible debt reduce stability. Islamicity performance in profit-sharing financing may reduce stability. Economic growth and inflation negatively affect stability pre-pandemic. Interest rate and dummy variables have positive effects.

Implications: These findings imply the significance of preemptive risk management, cost-effective operations, prudent reserves allocation, and regulatory compliance to enhance stability in Islamic bank across varying economic circumstances.

Keywords:

Islamic banks; Islamicity performance; stability; profit sharing

How to Cite:

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INTRODUCTION

At the end of 2023, rumors began to circulate about the resurgence of the COVID-19 virus, evoking memories of events from a few years previously. In March 2020, the World Health Organization (WHO) officially declared the spread of the COVID-19 virus as a global pandemic. The Director-General of WHO stated that hundreds of thousands of people from various nations were affected by COVID-19 at the time. Furthermore, the pandemic prompted government and business to anticipate its impact on the financial, social, and economic spheres (Bhattacharya et al., 2021).

Since February 2020, Indonesia's Financial Services Authority (FSA) has implemented economic stimulus policies in the banking, stock market, and non-banking industry to mitigate the coronavirus outbreak's countercyclical impact. The country's president announced the first confirmed case of COVID-19 in Indonesia in early March 2020. Subsequently, The FSA issued several policy packages to address and mitigate the spread of COVID-19 within the financial sector. These regulations addressed the adaptation of new services in the financial services sector.

Table 1. The Performance of Islamic Banks in Indonesia (in percent)

	2017	2018	2019	2020	2021	2022	2023
FDR	79.61	78.53	77.91	76.36	70.12	75.19	79.06
PSF	35.22	36.56	39.89	39.03	38.85	38.72	43.20
PL	3.29	3.47	2.70	3.46	4.65	4.45	3.67
CAR	17.91	20.39	20.59	21.64	25.71	26.28	25.41
ROA	0.63	1.28	1.73	1.40	1.55	2.00	1.88

Source: Islamic Banks Statistic, FSA (2023)

Table 1 depicts the performance indicators of Islamic banks, including Financing Deposit Ratio (FDR), Profit-Sharing Financing (PSF), Potential Loss (PL), Capital Adequacy Ratio (CAR), and Return on Assets (ROA) during the period 2017-2023. The data provided showed that FDR reached its highest level in 2017 at 76.61% and continuously declined, with the lowest ratio occurring in 2021 at 70.12%. The PSF performance was recorded at 35.22% in 2017 and experienced a fluctuating increasing trend over several years, reaching its highest at 43.20% in 2023. The PL had its lowest value in 2019 at 2.70% and increased over the following years, peaking at 4.65% in 2021. Meanwhile, CAR was at its lowest at 17.91% in 2017 and increased, with the highest percentage at 26.28% in 2022. The ROA ranged from 0.63% in 2017 to 1.88% in 2023, with the highest value at 2% in 2022. The data suggests that there has been a movement in the performance of Islamic banks, particularly evident from 2020 to 2021 across several indicators.

According to Gurley (1956), in the financial intermediation theory, the function of the banking sector is to promote economic growth within a nation by serving as an intermediary between entities with surplus and deficit funds. Consequently, banks

streamline the payment process, contribute to financial stability, and act as intermediaries for monetary policy. Banks must receive attention to promote sound finances as suppliers of funds and their stability (Daoud & Kammoun, 2020). The safety and health of banks are important because a bank default can potentially damage the entire financial system (Isa & Rashid, 2018). Banking instability can manifest as bank runs or insolvency issues (Ngalawa et al., 2016). In mirroring conventional banks, Islamic banks encounter sharia constraints, which may have contributed to instability concerns (Gulzar et al., 2021).

The impact of the COVID-19 pandemic on bank stability across countries has been widely researched. Shabir et al. (2023) found that the pandemic adversely affects bank stability, yet this influence is contingent upon bank characteristics and market structure. Elnahass et al. (2021) revealed that COVID-19 negatively impacts bank stability, although this impact is less pronounced for Islamic banks. Ho et al. (2023) discovered a negative impact of the pandemic and suggested bank managers consider diversifying income streams, mainly through fee-based services, trading activities, and foreign exchange, to enhance bank performance and stability during the period. Mansour et al. (2022) demonstrated non-uniform responses among Islamic banks, where Saudi Arabia, UAE, and Kuwait tend to be less affected than in other countries.

Previous studies have indicated variations in findings regarding the factors influencing bank stability. Isnurhadi et al. (2021) discovered that capital and efficiency positively impact bank stability. Ali et al. (2023) found that credit risk is a factor utilized to assess the soundness and stability of the financial system. Ariffin et al. (2009) have affirmed that Islamic banks are particularly susceptible to credit and liquidity risks. Jabari and Muhamad (2022) concluded that opting for excessive risks leads to bank instability. Miah and Uddin (2017) discovered that banks with significant capitalization levels are ineffective despite being more stable. According to them, conventional banks are typically more stable than Islamic banks, although they are momentarily more solvent. Serly and Handayani (2020) analyzed conventional banks as having superior asset quality and stability, whereas Islamic banks are more efficient than conventional. Belkhaoui et al. (2020) constructed a conceptual model to investigate the impact of risk-taking, efficiency, and financing methods on the profitability of Islamic banks in GCC nations. The study found that cost-effectiveness had a positive effect on earnings. However, *mudharabah* and *musyarakah* financing increases the risk for Islamic banks.

Taktak (2010) proposed using loan-loss reserves (LLRs) to communicate credit portfolio quality to stakeholders, aiming to improve asset quality. However, Akram and Rahman (2018) found that increasing LLRs led to decreased loan portfolios. Ayagre et al. (2022) also found that LLRs negatively affected bank loan aggregates. Meanwhile, Incekara and Çetinkaya (2019) emphasized the vulnerability of Islamic banks in a dual banking system. Ghenimi et al. (2017) investigated the causes of bank vulnerability with a sample of 49 banks in the MENA region during the 2006-2013 period. According to the research, bank stability is determined by z-score lagged 1, liquidity risk, ROA, CAR, GDP, inflation, and other variables. Using quarterly data, Ghassan and Guendouz (2019) examined the stability of Islamic and conventional banks in Saudi Arabia. They

discovered that the stability of banks was negatively impacted by inflation. Meanwhile, Pham et al. (2021) discovered that inflation positively impacts bank stability in Vietnam, while Ullah et al. (2024) revealed that inflation does not affect bank stability.

Gulaliyev et al. (2021) developed a comparison methodology of efficiency in the economy and Islamic banks. The study demonstrated a significant relationship between GDP growth and financial institutions in Azerbaijan, Turkey, and Iran. Neifar and Gharbi (2023) investigated the sensitivity of banking stability and insolvency toward the 2011 revolution, both conventional and Islamic banks in Tunisia, for 2005-2014. The research confirmed that macroeconomic and bank-specific factors influence bank stability. Bank stability increases if GDP growth and foreign investment increase, while stability will decrease if inflation, interest rates, and exchange rates increase.

It is fascinating to research how bank interest policies affect bank stability. Nurfalah and Rusydiana (2021) found that high interest rates negatively affect bank stability since the number of defaulted loans increases. According to Boukhatem and Djelassi (2022), when Bank Indonesia increases the BI7DRR interest rate in a dual banking system like Indonesia, Islamic banks will increase yields as conventional banks increase interest rates. Hafidh (2021) confirmed empirically that interest rates produce a negative response in the third month after the policy issuance. The exchange rate is also a significant element influencing its financial stability. If the value strengthens, a country's financial condition strengthens as well. Several studies have shown that the currency rate negatively impacts banks' financial performance and stability (Neifar & Gharbi, 2023; Nurfalah & Rusydiana, 2021; Widarjono, 2020).

The performance of Islamicity in a dual banking system is also negligible. Mutia et al. (2019) suggested Islamicity performance, which uses the profit-sharing ratio to assess the performance of Islamic banks. Meanwhile, Al-Suhaibani and Naifar (2014) thought that risk sharing should be the foundation of the existing financial system. Lenders may only receive cash benefits if it is a result of commercial endeavors. Danlami et al. (2022) found that CAMELS supports Islamic bank stability, and *mudharabah* contracts reduce Islamic bank stability. However, *musyarakah* contracts stimulate Islamic bank stability. Meanwhile, Bakhouch et al. (2022) proposed the "Islamicity-Stability" hypothesis to test Islamic banking stability. By considering a sample of Islamic banks in 14 Muslim-majority nations, the study concluded that the stability of Islamic banks is not impacted by the Islamic environment.

To ascertain the impact of the pandemic on the stability of Islamic banks in Indonesia, it is imperative to evaluate whether these banks possess vigorous financial fundamentals to withstand the ensuing challenges. Therefore, it is crucial to examine whether these internal bank factors, Islamicity performance, and macroeconomics influence the stability of Islamic banks in Indonesia both pre-pandemic and during the pandemic using updated data. The primary emphasis of this research is to reevaluate whether Islamicity performance saves stability amidst the pandemic. Investigating the link between Islamic performance and bank stability in the Islamic banking system offers insights into how adherence to Islamic

financial principles impacts stability. Lastly, testing the "Islamicity-Stability" hypothesis advances understanding Islamic banking systems' distinctive features.

METHODS

This study examines the impact of various factors, including credit risk, efficiency, lending risk reserves, Islamicity performance, GDP Growth, inflation, interest rate, and exchange rates, on the stability of Islamic banks. It employs balanced panel data on Islamic banks in Indonesia, which have published financial statements for the first quarter of 2017 to the third quarter of 2023. From these criteria, 10 Islamic banks are identified as suitable research samples. Some of these banks include the Bank of Aceh Sharia, Bank of Muamalat Indonesia, Bank of Mega Sharia, Bank of Panin Dubai Sharia, Bank of Sharia Bukopin, Bank of BTPN Sharia, Bank of Victoria Sharia, Bank of BCA Sharia, Bank of BJB Sharia, and Bank of Aladin Sharia.

This study employs a panel data methodology because it assists in managing individual heterogeneity, reducing concerns associated with multicollinearity, and elucidating the time-varying between dependent and independent variables. Panel data regression offers more informative results, more significant variability, less multicollinearity, and an increased degree of freedom compared to other regression methods. In this study, three estimators were tested: the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM).

Model tests were performed to ascertain the most suitable model among the three estimators. The Chow test or likelihood ratio compared the CEM and FEM models to assess differences in individual effects. The Hausman test was employed to compare the FEM and REM models by examining the relationship between independent factors and individual errors. The REM is favored over the FEM when a correlation between individual errors and independent variables is present. The Breusch-Pagan Lagrange Multiplier (BP-LM) test was utilized to determine the most effective model between the CE and REM by assessing the relationship between composite errors. The CEM is preferred over the REM if there is no correlation between composite errors.

The dependent variable in this study is the stability of Islamic banks, measured by ZSCORE, while the independent variables encompass banks' internal factors, Islamicity Performance, and macroeconomic factors. Banks' internal factors are measured by three variables. First, credit risk assessed through Non-Performing Financing (NPF). Second, efficiency evaluated using Operating Expenses Ratio (OER). Third, lending risk reserves determined by Loan Loss Reserves Ratio (LLRR). Islamicity performance is measured by the Profit-Sharing Ratio (PSR). Additionally, macroeconomic factors are incorporated by Gross Domestic Products Growth (GDPG), inflation (INF), Bank of Indonesia 7-Day (Reverse) Repo Rate (BI7DRR), and the logarithm natural of the exchange rate (LnEXC). Table 2 presents a detailed description of each variable.

In this work, panel data regression is used since the data combine cross sectional data with time series data. The regression equation proposed is as follows:

$$ZSCORE_{it} = \alpha_0 + \sum_{j=1}^3 \beta_j BIF_{it} + \varphi_j IP_{it} + \sum_{j=1}^4 \theta_j ME_{it} + \varepsilon_{it} \tag{1}$$

Where *i* is the bank individually; *t* refers to time (quarterly); α is an intercept; β , φ , and θ are coefficients; BIF is a vector of 3 banks' internal factors which include NPF, OER, and LLRR. IP is Islamic Performance as measured by PSR; ME is a vector of macroeconomic factors including 4 variables, namely GDPG, INF, BI7DRR, and the LnEXC; and ε is the error term

Table 2. Variables Description

Variables	Description	References
Z-SCORE	The sum of Return on Assets (ROA) and Capital Adequacy Ratio (CAR) divided by the standard deviation of ROA. ZSCORE is used to measure bank stability	Srairi (2019), Asmild et al. (2019), Hassan et al. (2021), Yunita (2022), Banna et al. (2022)
NPF	Financing in an Islamic bank's portfolio that do not generate the expected income or profit due to delayed or missed payments by the borrowers	Mohd Isa and Abdul Rashid (2018), Nurfalalah and Rusydiana (2021)
OER	A financial metric that assesses the efficiency of an Islamic bank's operations by comparing its operating expenses to its operating income	Puteh et al. (2018)
LLRR	A financial indicator utilized by bank to evaluate sufficiency of their reserved funds designated to mitigate potential losses arising from non-performing loan/financing	Taktak et al. (2010)
PSR	A financial arrangement in Islamic banking such as mudharabah and musyarakah contracts where profits are distributed on each party's contribution, risks, and roles	Guizani (2021); Mutia et al. (2019)
GDPG	An indicator used to measure the rate of national economic activity	Gulaliyev et al. (2021); Neifar and Gharbi (2022)
INF	An economic phenomenon characterized by a sustained increase in the general price level of goods and services in an economy over a period time	Ghenimi et al. (2017); Ghassan and Guendouz (2019)
BI7DRR	A key monetary policy tool used by central bank in Indonesia to influence short-term (7-day) interest rate and manage liquidity in the financial system	Boukhatem and Djelassi (2022); Hafidh (2021)
LnEXC	A logarithma Natural from the value of one currency expressed in terms of another currency. This proxy is used to measure the exchange rate of The Indonesia Rupiah against the US Dollar	Neifar and Gharbi (2023); Widarjono (2020)
Dummy	Categorical variable to distinguish between different conditions where 0=pre-pandemic and 1=pandemic period	Shabir et al. (2023); Elnahass et al. (2021)

Whereas in the second panel data regression equation model is conducted without differentiating the period, but through dummy variables. The purpose of this test is to ascertain whether the impact of each variable has changed. The regression equation with dummy is as follows:

$$ZSCORE_{it} = \alpha_0 + \sum_{j=1}^3 \beta_j BIF_{it} + \varphi_j IP_{it} + \sum_{j=1}^4 \theta_j ME_{it} + \delta_j D_{it} + \varepsilon_{it} \tag{2}$$

Where δ is the coefficient; and D is a dummy where 0 is for before the pandemic and 1 is for the pandemic period.

RESULTS AND DISCUSSION

Empirical Result

This section presents descriptive statistics to summarize the characteristics of the variables examined in this study. Table 3 contains the observations, mean, median, and standard deviation. Mean, median, and standard deviation are used to measure different aspects of a dataset. The mean provides the average value of the data, the median represents the middle value when the data is arranged in ascending order, and the standard deviation quantifies the dispersion or spread of the data points around the mean. Mean, median and standard deviation are measures of central tendency in data and provide insights into the typical value of a variable.

Table 3. Statistics Descriptive

Variables	Observations	Mean	Median	Standard Deviation
ZSCORE	270	12.662	5.982	20.330
NPF	270	1.699	1.330	1.635
OER	270	97.257	92.720	48.967
LLRR	270	2.427	1.710	2.994
PSR	270	44.180	49.975	31.775
GDPG	270	0.933	0.870	1.234
INF	270	3.066	3.120	1.185
BI7DRR	270	4.667	4.500	0.902
LnEXC	270	9.584	9.576	0.049

Source: EViews Output

The correlation test is essential in research as it evaluates the connection between variables, identifies patterns, and validates hypotheses. It aids in recognizing dependencies, patterns, and associations, thereby improving the credibility and comprehensiveness of research outcomes by facilitating decision-making grounded in empirical evidence. A positive correlation means that as one variable increases, the other variable also increases, while a negative correlation indicates that as one variable increases, the other variable decreases.

Table 4. Correlations

	NPF	OER	LLRR	PSR	GDPG	INF	BI7DRR	LnEXC
NPF	1.0000							
OER	-0.0207	1.0000						
LLRR	0.2573	-0.0786	1.0000					
PSR	0.5423	-0.1177	0.0076	1.0000				
GDPG	-0.0408	0.1146	0.0338	0.0334	1.0000			
INF	-0.0800	-0.0186	0.0323	0.0207	-0.0519	1.0000		
BI7DRR	-0.0253	-0.1315	-0.0134	-0.0110	-0.5329	0.3715	1.0000	
lnEXC	-0.1171	0.0579	-0.1727	0.1192	-0.0446	0.1047	0.1801	1.0000

Sources: EViews Output

The correlation between independent variables was presented in table 4, indicating that PSR and NPF exhibited the highest correlation of 0.5423. these findings suggest that there are no concerns regarding multicollinearity, and the level of correlation remains moderate. This outcome is aligning with the guideline proposed by Trabelsi and Trad (2017), stating that the correlation between independent variables should not exceed 0.70.

Model selection in research using EViews with panel data is used to assess how well the chosen statistical model fits the observed data. It measures the degree of agreement between the value predicted by the model and the actual value in the dataset. A good model fit indicates that the chosen model effectively captures the patterns and relationships in the data, providing reliable estimates and predictions. This assessment is important for ensuring the validity and accuracy of the research findings, allowing researchers to draw meaningful conclusions and make informed decisions based on the results.

This section will display the results of the common, fixed, and random models used for panel data analysis. Subsequently, model selection tests are conducted to obtain appropriate models for the processed data. The Chow test detects changes in the model, the Hausman test aids in analyzing panel data, and the LM test assesses heteroscedasticity in regression models. The comprehensive outcome of these tests will be meticulously displayed in table 5, providing an insightful overview of the model selection process.

Tabel 5. CE, FE, and RE Models (2017.1-2023.3)

Variables	CE		FE		RE	
	coeff	t-stat	coeff	t-stat	coeff	t-stat
Intercept	-207.606	-1.2282	-292.1255	-2.4148**	-293.6637	-2.5106**
NPF	-2.8945	-4.4794***	-1.5212	-2.2257**	-1.7872	-2.8687***
OER	0.2483	14.3832***	0.1126	7.9537***	0.1259	9.0919***
LLRR	-0.2823	-0.9671	-0.9317	-4.2236***	-0.8421	-3.9259***
PSR	-0.1399	-4.3124***	-0.1601	-2.4379**	-0.1746	-3.6784***
GDPG	-0.1028	-0.1278	0.3484	0.6542	0.2998	0.5632
INF	-0.7908	-1.0351	-0.4488	-0.8855	-0.4868	-0.9615
BI7DRR	-0.6756	-0.5638	-1.5661	-1.9592*	-1.5073	-1.8964*
LnEXC	22.285	1.2554	32.775	2.5555**	32.881	2.6652***
Observations	270		270		270	
R-Squared	0.5756		0.8221		0.4101	
F-Statistics	44.244***		68.5180***		22.677***	
Chow (CE vs FE)						
Cross-Section F				38.8139***		
Hausman (FE vs RE)						
Chi-Square Statistics						0.0000
Lagrange Multiplier (CE vs RE)						
Breusch-Pagan		557.6877***				

*** significance at 1%; ** significance at 5%, * significance at 10%

coeff= coefficient; t-stat= t-statistics

Source: EViews Output

The findings of the model selection test are outlined in Table 5, indicating that the RE is the most suitable for this study. The significant F-statistic value in the Chow test leads to the rejection of the null hypothesis, favoring the FE. However, the RE is preferred as the Hausman test reveals a non-significant Chi-Square value. Furthermore, the LM test shows a significant Breusch Pagan value, supporting the selection of the RE as the preferred estimator. The RE model, using the Generalized least-squared approach, is superior due to its ability to account for a panel data structure (Hassan et al., 2021), and it is more suitable for studies using identical indicators across all subjects (Srairi, 2019).

Table 5 also presents the results of the Random Effect (RE) test on variables influencing the stability of Islamic banks without a dummy variable. The overall observation test covering the period from 2017 quarter 1 to 2023 quarter 3 reveals that NPF, LLRR, PSR, and BI7DRR exhibited adverse effects on bank stability with various significance levels. Meanwhile, OER and LnEXC demonstrated a positive effect on bank stability with a significance level of 1%. On the other hand, GDPG and INF showed no significant influence on bank stability.

Table 6. Results of Random Effects Test and Dummy

Variables	RE					
	Pre-Pandemic (2017.1-2019.4)		Pandemic Period (2020.1-2023.3)		All Observations (2017.1-2023.3)	
	Coeff	t-stat	coeff	t-stat	Coeff	t-stat
Intercept	48.2467	0.2427	189.4889	0.7513	23.322	0.1279
NPF	0.7388	1.2324	-2.1599	-2.4789**	-1.4854	-2.3494**
OER	-0.0522	-1.7310*	0.1165	6.4338***	0.1222	8.851***
LLRR	-0.5566	-3.7955***	-3.4842	-3.6029***	-0.8196	-3.8486***
PSR	-0.4608	-6.8042***	-0.2001	-6.4338***	-0.2134	-4.2442***
GDPG	-1.5095	-1.6595*	0.1452	0.2148	0.5947	1.0942
INF	-3.1447	-2.6501***	0.289	0.4051	-0.3532	-0.6988
BI7DRR	0.4993	0.4817	-1.4561	-0.9462	0.2410	0.2179
LnEXC	-0.7698	-0.0368	-16.7417	-0.621	-1.2607	-0.0645
Dummy	-	-			5.1778	2.2546**
Observations	120		150		270	
R-Squared	0.4879		0.3774		0.4201	
F-Statistics	13.2207***		10.684		20.91	

Source: EViews Output

Based on the testing on the pre-pandemic period (2017.1-2019.4) presented in Table 6, it was revealed that OER, LLRR, PSR, GDPG, and INF negatively affected bank stability in various significance levels. Meanwhile, NPF, BI7DRR, and LnEXC did not significantly impact bank stability. The results of the pandemic (2020.1-2023.3) also varied. It was found that NPF, LLRR, and PSR negatively impacted bank stability with various levels of significance. Conversely, OER positively impacted bank stability. However, GDPG, INF, BI7DRR, and LnEXC did not affect bank stability. In a test to

determine the influence of the pandemic, a dummy variable was examined throughout the observation period from 2017.1 to 2023.3. The testing indicated that NPF, LLRR, and PSR negatively impacted bank stability with various significance levels. Meanwhile, the OER positively affected bank stability, while the Dummy variable positively influenced bank stability. However, macroeconomic variables such as GDPG, INF, BI7DRR, and LnEXC did not affect bank stability.

DISCUSSION

This study investigated the factors influencing Islamic banks' stability, particularly emphasizing Islamicity performance as its distinguishing characteristic. All tests on the random model throughout the observation period revealed that Islamic bank stability was negatively impacted, partly due to credit risk or financing risk in the model full model without dummy variables during the pandemic period and testing with dummy variables. The findings corroborated the study by Jabari and Muhamad (2022), which asserts that high risks lead to bank instability. However, this study found that credit risk did not affect the stability of Islamic banks before the pandemic period. This condition can be attributed to the fact that Islamic banks operate on the principles of Sharia with various types of contracts, namely profit-sharing and non-profit-sharing contracts, thereby presenting different risks (Muljawan et al., 2004). Islamic banks must enhance their credit risk management practices to ensure stability, particularly during economic uncertainty like the pandemic. This practice entails developing strategies to mitigate the impact of credit risk on bank stability.

Banks are deemed efficient if they have low operating expense ratios, indicating that higher ratios lead to inefficiency. However, this study presented contrasting results where higher expense-to-income ratios can enhance the stability of Islamic banks during the pandemic period. These findings supported research by Adem (2023), suggesting that banks with high liquidity, elevated costs, and large deposit ratios encourage faster resilience. The coronavirus outbreak has incurred costs beyond medical expenses, encompassing sociological, psychological, and economic impacts (Yang et al., 2020). Increased costs are necessary to navigate uncertainties during the pandemic and address the rising expenses of adapting services. The heightened reliance on banks is due to increased online transactions resulting from stay-at-home measures and social isolation. While conventional wisdom suggests that efficient operations lead to stability, this study reveals that higher expense-to-income ratios can bolster Islamic banks' stability. Therefore, Islamic banks should optimize their expense-to-income ratios to improve stability.

The negative impact of reserves for uncollectible debt on the stability of Islamic banks was evident across all tests. These findings suggested that setting aside reserves for uncollectible debt can diminish stability. This observation corresponds with an earlier study that provisions for loan losses reduce the loan portfolio (Akram & Rahman, 2018; Ayagre et al., 2022). A reduction in the nonperforming loan portfolio can adversely affect financial distress, undermining Islamic banks' stability. The negative

impact of reserves for uncollectible debt on the stability of Islamic banks accentuates the importance of prudent reserve management. Islamic banks should reassess their policies regarding reserve allocation to ensure sufficient coverage for potential losses while preserving stability.

The adverse effect of Islamicity performance on the overall test suggested that the higher profit-sharing-based financing may reduce the stability of Islamic banks. However, it's important to note that despite these challenges, Islamic banks have historically demonstrated resilience during crises. The findings of this study provide further support for the research conducted by Bakhouché et al. (2022) which indicated that the Islamic aspect becomes irrelevant in the dual banking system. Challenges associated with profit-sharing financing include increasing monitoring costs and depositors' reluctance to take risks (moral hazard). These results affirm the study of Danlami et al. (2022) that *mudharabah* contract can decrease bank stability. Islamic financial institutions must conduct a thorough assessment of the consequences of profit-sharing-base financing on stability. Despite their historical resilience during crises, this study suggests that increased reliance on profit-sharing financing may diminish stability. Hence, Islamic banks should evaluate the equilibrium between profit-sharing financing and stability to mitigate potential risks.

Economic growth, in this study, had a negative impact before the pandemic, whereas in other tests, it did not affect the stability of Islamic banks. This result implies that economic growth may decrease the stability of Islamic banks. These results did not confirm the finding of Neifar and Gharbi (2023) that GDP growth enhances bank stability. Inflation also had a negative influence before the pandemic but did not affect other periods, including during the pandemic period. These results support previous research conducted by Ghassan and Guendouz (2019), which found that inflation had a negative effect on bank stability. Economic growth and Inflation findings highlight the complex relationship between macroeconomic factors and bank stability. Islamic banks should meticulously observe economic indicators and adapt strategies to uphold stability in fluctuating economic conditions.

The interest rate negatively affected the testing of all observations without dummy variables. The stability of Islamic banks increases as interest rates decline. These findings confirm previous studies by Nurfalalah and Rusydiana (2021), which stated that the interest rate would weaken bank stability. This research outcome also aligns with the studies conducted by Boukhatem (2022) and Hafidh (2021), which found a negative response of Islamic banks' performance to an increase in interest rates. Conversely, the exchange rate has a positive impact on the stability of Islamic banks in the testing of the entire sample without dummy variables. These results also contradict the research conducted by Widarjono (2020), which found that the exchange rate negatively influences bank stability. However, this finding aligns with the research by Kasri and Azzahra (2020), indicating a positive influence of the exchange rate on bank stability.

Meanwhile, the dummy variable has a positive effect on the stability of Islamic banks. This finding supports the research conducted by Mansour et al. (2022), which highlighted variations in the stability of Islamic banks during the pandemic. In the case of Indonesia, Islamic banks demonstrated stability amid the pandemic, attributed to internal policies focusing on bolstering capital adequacy and managing operational costs.

CONCLUSION

This study delved into the factors influencing the stability of Islamic banks, with a specific focus on Islamicity Performance as a distinguishing characteristic. The findings revealed several noteworthy insights. Firstly, the study identified that the stability of Islamic banks was adversely affected by credit risk or financing risk, particularly evident during the pandemic. However, it was observed that credit risk did not significantly impact the stability of Islamic banks before the onset of the pandemic, possibly due to the diverse risk profiles inherent in Islamic banking operations. Contrary to conventional understanding, higher expense-to-income ratios were found to enhance the stability of Islamic banks. This unexpected result challenges traditional notions of bank efficiency and underscores the need for a nuanced understanding of operational dynamics in Islamic banking.

Moreover, the study highlighted the detrimental impact of reserves for uncollectible debt on the stability of Islamic banks, emphasizing the crucial role of prudent reserves management in mitigating financial distress. Additionally, economic indicators such as economic growth and inflation were found to have complex relationships with the stability of Islamic banks, with varying impacts across different testing periods. Interest rates were observed to negatively affect bank stability, while exchange rates had a positive influence. Overall, the study underscores the need for Islamic banks to carefully manage risk factors, optimize operational efficiency, and adapt to changing economic conditions to maintain stability. Additionally, regulatory compliance and capital adequacy are crucial for enhancing the resilience of Islamic banks against economic uncertainties. These findings contribute valuable insights for policymakers, regulators, and practitioners in fostering a stable and robust Islamic banking sector.

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