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THE COMPARATIVE PERFORMANCE OF SHARIA AND CONVENTIONAL BANKS DURING THE PANDEMIC: ANALYSIS OF INDONESIAN BANKS

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Abstract: The banking industry serves a crucial role in the economy. Unpredictable conditions, such as the COVID-19 outbreak, have had a widespread effect on global health and banking. The study examines the performance differences between conventional and Sharia banks in the pre-pandemic and during the pandemic. In addition, the study also assesses whether conventional banks are more resilient during times of crisis compared to Sharia banks or vice versa. This quantitative study uses a paired sample T-test as the research method. Secondary data from Indonesian Banking Statistics were used in this study. Data was collected two years before the COVID-19 pandemic (2018-2019) and during the COVID-19 pandemic (2020-2021). Regarding ROA and NPL, the results show that Sharia banks did better than conventional banks during the crisis. Conventional banks suffered a deteriorating CAR and NIM during 2020-2021. Even though this study shows that the financial performance ratios of both types of banks go up and down in different ways, the overall financial performance ratios are still within the limits set by Bank Indonesia. This study supports the central bank and financial service authority's strategy and measures in sustaining the financial service industry during a troubled time like the pandemic in 2020-2021 based on these notions. In conclusion, we emphasize the importance of bank management exercising greater caution in allocating funds to corporations and effectively monitoring their debtors to mitigate the risk of a rising non-performing loan ratio.

Keywords: NPL, Conventional Banks, Sharia Banks, COVID-19

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INTRODUCTION

During the COVID-19 pandemic, the Indonesian economy, which is reflected by the GDP, has started to decline significantly by 2.1% as of 2020, when COVID-19 first struck, and deteriorated by the end of the year (Suroyo and Sulaiman, 2022). However, GDP starts to climb starting from 2021 as the government has eased the Community Activities Restrictions Enforcement while still implementing strict policies in areas with high infection rates. Moreover, the boost of the GDP is driven by the vaccination policy by the government, as they are targeting to get all the citizens vaccinated at least one dose by the end of 2021. Moreover, due to COVID-19, Indonesia's economy contracted in 2020 for the first time in more than two decades as the pandemic affected business activity across the country. After the economy expanded by 3% in the first quarter of 2020, it saw a rapid slide in growth for the following three quarters, contracting by minus 5.3%, negative 3.5%, and minus 2.2%. The last time Indonesia's GDP shrank was in 1998, when the Asian financial crisis hit Southeast Asia, and Indonesia's economy contracted by -13.3%.

Early crises in Indonesia and other countries showed that banking sector problems worsen economic crises. Thus, preventing the crisis from spreading to banking and finance is crucial to preventing a deeper economic downturn. Debt restructuring can help the government, monetary, and financial authorities keep the financial system, including banking, secure until the third quarter of 2020. The banking climate is favourable, as shown by the Capital Adequacy Ratio (CAR), above 20%, and Non-Performing Loans (NPL), below 5%. Credit growth slowed, but Third-Party Funds (TPF) rose, indicating banking industry liquidity (Kompas, 2021). However, this case must be closely monitored because economic constraints have hurt the banking industry in previous crises. The subprime mortgage crisis triggered the 2008 global financial crisis as US housing prices fell in 2007 as supply outpaced demand. The banking crisis caused Lehman Brothers, one of the world's largest financial institutions, to fail.

Several studies have been conducted to analyze the impact of COVID-19 on Indonesia's banking industry using a quantitative study design (Esfendi and Hariani, 2020; Fatmala et al., 2019; Si-

rait and Pardede, 2020; Supeno and Hendarsih, 2020). However, most comparison studies regarding Indonesian banks' financial performances between pre- and post-COVID-19 have used data from 2019 to 2020. Thus, the analysis of the bank's financial performance has not been represented fully. Moreover, research on the disparity between Sharia and conventional banks' financial performance in Indonesia was primarily conducted before the COVID-19 outbreak (Balafas and Arvanitaki, 2018; Anwar, 2016; Sukmana and Febriyati, 2016). While previous studies regarding financial performance evaluation of the Sharia and conventional banks show that since they do not assume risks typical of the banking industry when it comes to external shocks, Sharia banks are more resilient than other banks in the same category (Alabbad and Schertler, 2022).

To close this gap, this study aimed to examine any differences between conventional and Sharia banks' financial performance before and during the COVID-19 pandemic and to determine whether Sharia banks in Indonesia are better equipped than conventional banks to withstand exogenous shocks like the COVID-19 pandemic in this particular case or vice versa. This study employed financial data from 2018-2019 for the pre-COVID-19 period and from 2020-2021 for the pandemic period. Financial performance is a subjective measure of how well banks can use assets from their primary business mode and generate revenues using financial performance indicators such as current ratio, gross profit margin, return on assets, net profit margin, etc.

In this study, the authors analyzed both Sharia and conventional banks operating in Indonesia. We employ bank-specific financial performance variables, such as return on assets (ROA) which is an indicator that shows the contribution percentage of the assets held by the bank to the net income of the bank (Daly and Frikha, 2017), non-performing loan (NPL) which reflects loans that are past due at least 90 days (Epure and Lafuente, 2015), capital adequacy ratio (CAR) as the basis for assessing capital ratios in the context of the level of health of a bank (Fahlevi et al., 2019), loan to deposit ratio (LDR) which reflects total credit composition provided compared to total society fund and own capital used (Riadi, 2018), and net interest margin ratio (NIM) which reflects measures

the net profitability of the bank as the difference between interest income and interest expense (Nguyen et al., 2021). The author used a quantitative method for this study, as in this study, the author will compare the financial performance of Sharia and conventional banks before and during the COVID-19 pandemic using datasets provided by the OJK.

The COVID-19 pandemic has resulted in many disturbances within the banking system, such as an increase in non-performing loans (NPL), reduced profitability, and a contraction of margins. Previous research has revealed that conventional banks experienced more significant adverse consequences from the epidemic than Sharia banks. Alabbad and Schertler (2022) stated that Sharia-compliant banks have greater resilience than regular banks in economic turmoil. Therefore, this study aims to analyze the performance of conventional and Sharia banks throughout two distinct periods to determine whether there are substantial disparities in performance between these two types of banks.

LITERATURE REVIEW

Bank Financial Performance Comparison During Crisis

During every crisis, the banking industry has always been the industry that suffered the most. The banking industry is one of the most important industries in a country since it supports economic activity as banks obtain funds from society and channel those funds in the form of loans to businesses and individuals. Before COVID-19 disrupted the banking industry, we had seen previous crises that had a long-term effect on the economy, especially on banking industries, such as the 1997 Asian financial crisis, the 2008-2009 financial crisis, etc. These crises have changed the landscape of the banking industry so much that continuous improvement within banking operations has been monitored closely by the regulators to prevent catastrophic failure that can lead to more severe crises in a country.

In Indonesia, a study by Viverita (2011) examined how Sharia banks performed compared to regular banks. When various ratios were used, it was shown that Sharia banking had lower cost efficiency ratios and greater revenue and profit efficiency ratios than regular banks. In addition, Sha-

ria banks' maximum net interest margin (NIM) is 0.182 as opposed to 0.097 for conventional banks. Compared to the conventional bank's average of 0.06, the operating income to average asset ratio for the Sharia bank was 0.013. Because Sharia financial institutions are able to generate more income from their assets, they are performing better in terms of the efficiency with which they generate revenue.

Hasan and Dridi (2011) compared the performance of Sharia banks (SB) and conventional banks (CB) in Gulf Cooperating Countries (GCC) countries after the 2008 global financial crisis. They found that IBs and CBs were affected differently during the global financial crisis. The Sharia banks' business models helped reduce profitability in 2008, but risk management issues caused a higher profit drop than CBs in 2009. Due to their Sharia beliefs, SBs were barred from sponsoring or participating in goods that hurt conventional businesses and contributed to the global financial crisis. Islamic banks' 2008–2009 profitability was comparable to CBs', despite their superior profitability before the global financial crisis (2005–2007). Thus, higher profitability before the crisis was not due to risk-taking and higher cumulative profitability. During the crisis, SBs' credit and asset growth was twice as high as CBs', indicating a future market share and supervisory duty increase. External rating agencies often rejudged SBs' risk favorably or similarly to CBs'. Greater solvency has made it easier to meet the rising demand for Sharia banking credit while maintaining external ratings.

Conventional Banks

Conventional banks offer loans, certificates of deposit, savings accounts, bank overdrafts, and more, according to Amba and Almkharreq (2013). These organizations make money by lending and charging interest. Banks offer business, auto, mortgage, personal, and student loans. Traditional bank deposits into various accounts fund these loans. For loans, deposits are capital. Conventional banks boost capital, credit, and market liquidity, making them vital to an economy. More of these banks are online, but they're often in cities. Private citizens and small and medium-sized businesses use traditional banks for basic banking services. Charges for services and other expenses make banks mon-

ey. The availability determines overdraft, safe deposit box, late, etc. fees. In addition to interest, some loans have fees. Loan-granting banks use consumer deposits to make money. Meanwhile, they charge higher interest rates on deposits but lower rates on loans. In Indonesia, conventional banks include state-owned banks, private banks (local and international), and digital banks that have become popular.

Sharia Banks

Sharia Development Bank (IDB) stated that Sharia banking is financial activities that follow Sharia principles. The two main pillars of Sharia banking are sharing profits and losses and prohibiting interest. Islamic holy book, the Quran, inspired Sharia finance. The Quranic Sharia legal code must be followed in all Sharia banking transactions. Sharia banking follows Fiqh al-muamalat, or conventional transaction principles. Company employees in Sharia banking are believed to follow Quranic principles. If they need more guidance, Sharia bankers consult experienced scholars or use their research and customs. Islamic banking forbids interest rates and speculation. However, Sharia law forbids *maisir*, or gambling. Sharia law prohibits loan interest and investment in gambling, pork, alcohol, and other illegal activities. Thus, sharia finance represents ethical investing culturally. Equity participation arrangements replace interest for sharia banks. If the bank lends money, the business will pay a percentage of its profits instead of interest. Literature calls this as an "equity participation." Unprofitable or defaulting businesses hurt the bank. Thus, Sharia banks invest less riskily. Consequently, they avoid economic bubble-related transactions.

Islamic banks offer Profit-Loss Sharing (PLS) and non-PLS contracts, according to Alabad and Schertler (2022). PLS financing contracts are mostly Mudaraba and Musharaka partnership contracts that provide equity participatory finance rather than debt finance on the asset side of the balance sheet. Mudaraba is a PLS-based business partnership between the bank and borrowers, or entrepreneurs, where profits are shared at a predetermined ratio, and losses are borne exclusively by the bank with limited liability provisions for the entrepreneur. Musharaka, like Mudaraba, involves the Islamic bank as one of several investors who

share profits and losses proportionally. The liability side of PLS is funded by Mudaraba-based contracts that pool depositor funds. Investment deposits can be linked to the bank's profit level or a specific asset-side investment account. Thus, "depositors" or investment account holders receive dividends, similar to conventional banks' equity holders rather than creditors.

HYPOTHESIS DEVELOPMENT

Non-Performing Loans

NPLs are loans that have not generated any income for a lengthy period, whether interest or principal. A loan can be considered non-performing if it has been left unpaid for more than 90 days (see Angahar and Mejabi, 2014). It is frustrating for the banking institutions when the debtor experiences unforeseen financial problems, for example, when a business experiences significant income problems or when a specific bank client is unable to repay their consumer credit as agreed owing to various reasons (Balafas and Arvanitaki, 2018). As scholars mentioned, despite the fact that loan categorization varies by country and location, the Institute for International Finance established a loan classification scheme that divides loans into five groups based on how long they take to repay: standard loans, watch (special attention) loans, substandard loans, doubtful loans, and write-off. The higher a bank's NPL ratio is, the worse the bank's lending quality is, and the less secure the depositor's deposit is. However, it is also true that the lower a bank's NPL ratio is, the lesser the risk of financing it bears. The ratio of NPL can be referred to as follows:

Non – performing loan

$$= \frac{\text{Total doubtful account in } x \text{ year}}{\text{Total loan outstanding}} \times 100\%$$

Since the previous crisis and the recent outbreak of COVID-19, which triggered the global financial crisis, the number of non-performing loans (NPLs) has increased, negatively impacting credit institutions' liquidity and profitability and, as a result, jeopardizing banking system stability. Despite significant attempts to control and minimize NPLs, the issue continues to be a focus for regulators and banking institutions. Bank Indonesia's

regulation No. 23/2/PBI/2021 showed that the maximum percentage of NPL for Indonesian banks is 5%, with an NPL ratio above 12% considered poor. Assessment of NPL based on the regulation are stipulated as follows: (1) $NPL < 2\%$ as "superb", (2) $2\% < NPL < 5\%$ as "fine", (3) $5\% < NPL < 8\%$ as "fair", (4) $8\% < NPL < 12\%$ as "unsatisfactory", and (5) $NPL > 12\%$ as "poor".

During the COVID-19 pandemic, banks in Indonesia experienced an increment of NPL as the economic condition worsened. Businesses have been impacted significantly as the demand has dropped. At the same time, procurement of raw materials has been limited due to soaring prices and border closing, thus making it difficult for them to conduct their operations. Below is the NPL chart of conventional banks in Indonesia prior to and during the outbreak. In 2020, the average NPL ratio for conventional banks in Indonesia started at 2.77% as of January 2020. However, with the progressing case of COVID-19 and fueled by border closing and social restrictions, the average NPL began to increase during the year. The average NPL hit the highest number at 3.22% during July-August 2020 as Indonesia's economic growth contracted by 5.32% and unemployment increased by 7.07% compared to the same quarter in 2019 due to COVID-19. The average NPL ratio started to decline by the end of Q3 of 2020. It kept decreasing towards the end of 2020 as the government implemented various stimulus and monetary strategies, such as lowering the interest rate, tax incentives, credit restructuring, etc.

Return on Asset

The return on assets (ROA) is one of the most widely used markers for determining a bank's profitability. The profit-to-total-assets ratio shows how profitable a company is compared to its total assets expressed in percentage. The ratio also assesses how effectively a business utilizes its assets to produce profit. The formula can be stipulated as follows:

$$\text{Return on assets} = \frac{\text{Net profit}}{\text{Total assets}}$$

Hussain et al. (2022) stated that the lower the rate of ROA, the higher the rate of NPL would be and vice versa. Abdul-Rahman et al. (2018) fo-

und that banks with greater ROA have more modest NPL since proper credit management is achievable. Bank Indonesia has ROA categories from 1 to 5 that can be referred to as follows: Rank 1: $ROA > 1.5\%$; Rank 2: $1.25\% < ROA \leq 1.5\%$; Rank 3: $0.5\% < ROA \leq 1.25\%$; Rank 4: $0\% < ROA \leq 0.5\%$; Rank 5: $ROA \leq 0\%$.

Capital Adequacy Ratio

The capital adequacy ratio (CAR) measures a bank's available capital as a percentage of bank's risk-weighted credit exposures. The ratio is utilized to provide protection for depositors while promoting the financial system's stability and efficiency. Banks require CAR to have sufficient cushion to sustain reasonable losses before going bankrupt. The ratio is stipulated as follows:

$$\text{Capital Adequacy Ratio} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk - Weighted Assets}}$$

Every financial institution is required to maintain a minimum capital adequacy ratio (Basel Accord). Portfolio risk rises when the minimum capital ratio rises and vice versa (Koju et al., 2018). Bank Indonesia stated that CAR requirements for banks in Indonesia can be stipulated as follows: $CAR > 8\%$: Fine; $6.4\% < CAR < 7.9\%$: Special mention or substandard; $CAR < 6.4\%$: Loss or doubtful.

One of the fundamental ratios for capital strength is called CAR. Anbar and Deger (2011) state that the expectation is that the greater this ratio, the smaller the requirement for outside borrowing and the higher the bank's profitability. It demonstrates the bank's capacity to take losses and manage risk exposure with shareholders. The ratio of equity to total assets is anticipated to have a positive relationship with performance since well-capitalized banks experience lower failure costs, which lowers their funding costs and risks.

Net Interest Margin

Net interest margin (NIM) is the indicator of a bank's profitability that is most frequently utilized (Hamadi and Awdeh, 2012). The NIM evaluates a bank's management's capacity to generate interest revenue by considering the bank's success

in disbursing loans (Silaban, 2017). Hakimi and Hamdi (2017) stated that the NIM ratio is used to assess a bank's management team's ability to generate net interest income by keeping an eye on their productive assets. The bank's managed productive assets generate more interest revenue with a rise in NIM percentage. In accordance with Bank Indonesia Circular Letter number 13/24/DPNP/2011 dated October 25, 2011, NIM is calculated using the following formula: $NIM > 3\%$: Superb; $2\% < NIM < 3\%$: Fine; $1,5\% < NIM < 2\%$: Fair; $1\% < NIM < 1,5\%$: Unsatisfactory; $NIM < 1\%$: Poor.

NIM represents market risk brought on by market circumstances where such alterations might hurt banks (Al-Harbi, 2019). Due to the fact that the operational income of banks is heavily reliant on the difference between interest income and credit issued, a bank's management's ability to create interest income can be assessed with NIM. Thus, to assess the impact on the performance of the Indonesian banking industry financially prior to and during the COVID-19 pandemic, which consists of conventional and Sharia banks, the hypothesis can be stipulated as follows:

- H1:** The financial performance of Indonesia's conventional banks before and during the COVID-19 outbreak differed significantly.
- H2:** The financial performance of Sharia banks in Indonesia before and during the COVID-19 outbreak differed significantly.

METHOD

The data used in this study comprises 94 (ninety-four) conventional banks and 13 (thirteen) sharia banks registered by the Indonesia Financial Authority (OJK). It is worth noting that the conventional banks category in Indonesia includes state-owned banks, digital banks, private-owned banks (local and international) and regional development banks. This research uses bivariate analysis. Bivariate analysis is one of the statistical analyses where two variables are observed (Wasserstein and Lazar, 2016). For this study, bivariate analysis can be answered by conducting a paired-sample t-test to contrast two means for the same sample assessed under two distinct conditions or at two different times. Pretest-post-test designs or

within-subjects studies can also benefit from this comparison. The population's mean at each point in time or under the two circumstances is assumed to be equal. They are not the same, according to a competing theory.

For this study, a t-test is used to examine differences in means between Sharia and conventional banks before and during the COVID-19 pandemic in Indonesia with respect to each financial ratio. It is possible to make claims regarding whether the performance indicators of the two types of banks considerably differ and which bank type performs better overall across all ratios due to the different means. Data used to conduct paired-sample t-tests should fulfil assumptions of (1) data must be independent, in a nearly normal condition, and an independent group assumption.

RESULTS

Table 1 presents descriptive statistics for conventional and Sharia banks. We conclude that there are differences in the performances of conventional and Sharia banks during the two-observation period. Next, the data normality test is used to determine whether the data that has been obtained is normally distributed or not. In this study, to determine the normality of the data, it is necessary to carry out the Shapiro-Wilk normality test with a significance level of 5%. The use of the Shapiro-Wilk test instead of Kolmogorov-Smirnov is due to the sample (N) of each ratio being lower than 100 (Razali and Wah, 2011). In this study, SPSS 20 software was used to test data normality. If the significance value resulting from the Shapiro-Wilk normality test is > 0.05 , then the normality assumption is fulfilled, meaning the data is normally distributed.

Conversely, if the significance value resulting from the Shapiro-Wilk normality test < 0.05 , the data is not normally distributed. Not normally distributed data will be tested using non-parametric statistical tests, namely the two-sample Wilcoxon Signed Rank Test. Additionally, this study uses the Shapiro-Wilk normality test because it is based on a general normality test and has been widely used to test data normality in research with sample (N) below 100.

Table 1. Descriptive Statistics of Conventional Banks

Variable	N	Min.	Max.	Mean	Std. Deviation
ROABeforeCOV	12	2.40	2.58	24.81	0.054
ROADuringCOV	12	1.72	2.44	19.80	0.217
NIMBeforeCOV	12	4.91	5.06	50.02	0.037
NIMDuringCOV	12	4.46	4.81	45.59	0.102
CARBeforeCOV	12	22.31	23.5	230.36	0.404
CARDuringCOV	12	22.86	24.92	238.45	0.675
NPLBeforeCOV	12	2.59	2.74	26.69	0.046
NPLDuringCOV	12	2.97	3.29	31.27	0.116

Source: Author estimation

Table 2. Descriptive Statistics of Sharia Banks

Variable	N	Min.	Max.	Mean	Std. Deviation
ROABeforeCOV	12	0.97	1,54	1.38	018836
ROADuringCOV	12	1.47	2,00	1.68	0.17426
NIMBefore COV	12	1.10	1,72	1.55	0.20429
NIMDuringCOV	12	1.55	2,05	1.75	0.15909
CARBeforeCOV	12	18.77	20,94	19.96	0.76368
CARDuringCOV	12	21.05	23,68	22.54	0.65446
NPLBeforeCOV	12	3.25	4,33	3.212	0.34388
NPLDuringCOV	12	2.86	3,35	3.85	0.16388

Source: Author estimation

Table 3. Normality Test Results

Group	Period	Statistic	df	Sig.	Conclusion
ROAConventional	Pre-crisis	0.934	12	0.424	Normally distributed
	During crisis	0.895	12	0.138	Normally distributed
ROASharia	Pre-crisis	0.718	12	0.001	Not normally distributed*
	During crisis	0.925	12	0.331	Normally distributed
NIMConventional	Pre-crisis	0.878	12	0.083	Normally distributed
	During crisis	0.856	12	0.044	Not normally distributed*
NIMSharia	Pre-crisis	0.718	12	0.001	Not normally distributed*
	During crisis	0.933	12	0.409	Normally distributed
CARConventional	Pre-crisis	0.896	12	0.142	Normally distributed
	During crisis	0.947	12	0.594	Normally distributed
CARSharia	Pre-crisis	0.917	12	0.259	Normally distributed
	During crisis	0.898	12	0.148	Normally distributed
NPLConventional	Pre-crisis	0.776	13	0.004	Not normally distributed*
	During crisis	0.895	11	0.161	Normally distributed
NPLSharia	Pre-crisis	0.915	12	0.25	Normally distributed
	During crisis	0.748	12	0.003	Not normally distributed*

Table 4. Wilcoxon Signed Rank Test

Variable	Z	Asymp. Sig.	Conclusion
NPL-Conventional Banks	-3.061 ^b	0.002	Significant variation in the dataset
ROA-Sharia Banks	-2.903 ^b	0.004	Significant variation in the dataset
NIM-Sharia Banks	-1.295 ^b	0.006	Significant variation in the dataset
NPL-Sharia Banks	-3.059 ^b	0.002	Significant variation in the dataset

Table 5. T-test Results

Paired Samples Test								
Variable	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	Sig. (2-tailed)	Conclusion
				Lower	Upper			
ROA-Conventional Banks	0.5016	0.21788	0.0629	0.3632	0.6401	7.976	0.000	Significant variation in the dataset
NIM-Conventional Banks	-0.4583	0.13002	0.03753	-0.5409	-0.3757	-12.211	0.000	Significant variation in the dataset
CAR-Conventional Banks	-0.80927	0.55864	0.16127	-1.1641	-0.4542	-5.018	0.000	Significant variation in the dataset
CAR-Sharia Banks	-2.5758	0.73112	0.21106	-3.0403	-2.1113	-12.205	0.000	Significant variation in the dataset

Paired Sample Wilcoxon Signed Rank Test Data that has gone through the Shapiro–Wilk normality test and the results are not normally distributed, then the paired samples Wilcoxon Signed Rank Test on ratios can be conducted. In this study, the Paired Samples Wilcoxon Signed Rank Test used has a significance level of $\alpha = 0.05$. Thus, the test results are analyzed for this test by looking at the P-value or Sig. (2 - 2-tailed): (1) if p-value < α , then there is a significant variation in tested financial performance variables on both conventional and Sharia banks in Indonesia prior to and during the COVID-19 pandemic and (2) if p-value > α , then there is no significant variation in tested financial performance variables on both conventional and Sharia banks in Indonesia prior and during the COVID-19 pandemic.

In addition, Tables 4 and 5 show paired sample test statistics for our main variables for banks

during the tested observation periods. The paired sample t-test indicates significant differences in main variables (ROA, NIM, NPL, CAR) in Indonesia before and during the pandemic (1% significance).

DISCUSSION

Return on Asset

This study compares conventional and Sharia banks' financial performance before and during the COVID-19 pandemic in Indonesia. The Sharia banks outperform conventional banks in ROA and NIM. Due to the economic downturn, more debtors requested loan restructuring for lower interest rates. Banks rely on interest income, so this would affect their net income, but fees, commissions, and trading activities would also decrease. This finding is consistent with past literature on banking studies, especially research reported by (Abdulla

and Ebrahim, 2022; Aliyah and Syariah, 2022).

Capital Adequacy Ratio

The findings of the study are similar to previous empirical studies (Asykarulloh et al., 2023; Hasan and Dridi, 2011; Mesta, 2022) CAR on conventional and Sharia banks has increased due to government stimulus like the OJK's countercyclical policy in Indonesia. Implementing this policy can prevent widespread bankruptcies and reduce bank damage. These stimulus packages indirectly improved bank asset quality and capital positions by supporting the borrowers and businesses. Other OJK measures like capital adequacy relaxation allow banks to use capital buffers and temporarily relieve regulatory ratios. These measures boosted banks' capital and loss-absorbing capacity.

Net Interest Margin

Sharia banks have a more stable and sustainable income than conventional banks because their Islamic business practices prevent them from engaging in uncertain transactions, reducing risk-taking and market exposure. Sharia banks had lower income than the conventional banks due to non-performing loans, loan defaults, and asset write-downs due to their high-risk portfolios. Sharia banks reduce operational costs and streamline processes by avoiding complex financial instruments and speculative activity—Sharia banks value asset-backed finance and risk-sharing. Encouraging prudent lending reduces credit risk, bad debt allowances, and operational costs. Therefore, the findings of this study are comparable to past studies conducted by Abdulla and Ebrahim (2022). However, it differed from the findings reported in past research (Aliyah and Syariah, 2022; Wijana and Widnyana, 2022). In the troubled financial environment and high business uncertainties, businesses were less likely to take out new loans for expansion or investment, thus lowering loan demand. Due to high pandemic uncertainty, people and businesses saved and built liquidity. As people clung to their cash reserves, deposit inflows increased, thus giving banks a larger deposit base.

Non-Performing Loans

This study found that COVID-19 increased NPL and CAR in Indonesian conventional and Sharia banks. NPL growth is mostly due to system-

ic economic disruption that caused businesses to struggle financially and lose revenue, making it hard to repay their loans and obligations. Job losses and unemployment caused many people to struggle financially and default on their loans, which increased personal NPLs like mortgage defaults and delinquent consumer loans. As the NPL of conventional banks grew significantly during the pandemic, we can conclude that Sharia banks can manage and control bad debts more efficiently than conventional banks did. It is consistent with previous studies (Aliyah and Syariah, 2022; Nizar et al., 2023), which documented significant differences in the performances of Islamic and non-Islamic banks during and before the COVID-19 crisis.

IMPLICATIONS

The discussions and empirical studies on comparative analysis between Sharia and non-Sharia banks' performance during the financial crisis are still limited, particularly in the context of the Indonesian banking industry. Thus, considering the gap in the literature, this study analyzed the performance of Sharia and conventional banks in Indonesia, especially during two distinct periods of time, before the COVID-19 pandemic and during the COVID-19 pandemic. By far, Indonesia is one of Asia's largest economies and the most populated nation with the largest Muslim economy. Thus, the study focuses on Islamic or Sharia bank performances, which is considered crucial and beneficial for the Indonesian literature. Results indicate that Sharia banks outperform conventional banks regarding their ROA and NIM. Therefore, some implications can be derived from this study. First, the government stimulus package implemented during the pandemic effectively prevented high bad debt levels and bankruptcies in the corporate sector.

Second, the OJK's relaxation of the CAR policy also helped the banking sector utilize capital buffers and provided temporary relief from the requirements. This study supports the central bank and financial service authority's strategy and measures in sustaining the financial service industry during a troubled time like the pandemic in 2020-2021 based on these notions. In conclusion, we emphasize the importance of bank management exercising greater caution in allocating funds to corporations and effectively monitoring their deb-

tors to mitigate the risk of a rising non-performing loan ratio.

RECOMMENDATIONS

Empirical comparative studies of Sharia and non-Sharia banks' financial crisis performance are limited, especially in Indonesia. Thus, to fill the gap in the literature, this study examined the performance of Sharia and conventional banks in Indonesia before and during the COVID-19 outbreak. The findings of this study indicate that the performance of Sharia banks surpasses that of non-Sharia banks.

There are limitations of the study. First, the data sets only include data from Indonesian banks that are readily available. Scholars will be able to figure out how COVID-19 affects the financial performance of countries like theirs by looking at data from other countries with dual banking systems. Second, due to the unavailability of the Financial Services Authority (OJK) information for 2022 during the research period, the authors utilized data spanning two years, encompassing the periods preceding and during the pandemic. If the data for the year 2022 were easily accessible, the analysis could furnish data and conduct examinations on the performance of conventional banks and Sharia banks in the pre-pandemic and pandemic periods. In light of this concept, conducting a comprehensive study on this topic is imperative to make a valuable contribution to the existing empirical literature on bank and financial performance.

CONCLUSIONS

In conclusion, we suggest that Sharia and conventional banking can improve ROA during COVID-19. Bank management must be more cautious when channeling funds to businesses to maintain profits, and they must also maintain good debtor control to avoid NPL ratio increases. Customer collection and loan restructuring based on business trends and financial performance can help eliminate non-performing loans. Banks early review debtors at risk of NPL to control and mitigate the risk. NPLs must be managed by banks through loan restructuring, provisioning, and risk mitigation. When banks can manage their operational costs to maintain capital and generate profits, they can increase the LDR ratio, which increases their profit if they can channel their credit effectively so those

funds are not idle and can be rotated.

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