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RESILIENCE REINFORCED: AN IN-DEPTH ANALYSIS OF BANK SYARIAH INDONESIA'S POST-MERGER PERFORMANCE

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A B S T R A C T

The merger of Bank Syariah Indonesia (BSI) was considered a strategic move to improve corporate resilience and support economic recovery after the pandemic. This study evaluates BSI's performance two years after the merger. It compares the bank's performance before and after the merger using metrics such as non-performing financing (NPF), financing to deposit ratio (FDR), return on assets (ROA), capital adequacy ratio (CAR), operating cost on operating income (BOPO), and net-operating margin (NOM). The study uses a quantitative approach and secondary data from the official BSI website, including financial and annual reports from 2015 to 2022. It also compares Bank Umum Syariah's (BUS) performance using Sharia banking statistics from the Otoritas Jasa Keuangan (OJK) website. We used the Mann -Whitney test to analyze the data and determine any significant differences in the banks' performance before and after the merger. The results show that there is a significant difference in the performance of the reviewed banks for NPF, ROA, CAR, BOPO, and NOM, but not for FDR. Performance in all variables has increased, indicating the positive effects of the mergers on the Sharia banking sector. This research sets the stage for further exploration of best practices for managing bank mergers.
Keywords: *merger, performance, resilience, Sharia bank*

Penggabungan Bank Syariah Indonesia (BSI) dianggap tepat sebagai upaya strategis yang bertujuan meningkatkan ketahanan perusahaan dan memulihkan ekonomi pasca pandemi. Studi ini bertujuan untuk mengevaluasi kinerja BSI setelah periode dua tahun pasca penggabungan. Evaluasi dilakukan dengan analisis perbandingan kinerja bank sebelum dan sesudah penggabungan, dengan menggunakan metrik seperti *non-performing financing (NPF), financing to deposit ratio (FDR), return on assets* (ROA), *capital adequacy ratio* (CAR), biaya operasional terhadap pendapatan operasional (BOPO), dan *net-operating margin* (NOM). Studi ini menggunakan pendekatan kuantitatif dan data sekunder dari situs web resmi BSI, yang meliputi laporan keuangan tahunan dari tahun 2015 hingga 2022. Studi juga membandingkan kinerja dan Bank Umum Syariah (BUS) berdasarkan statistik perbankan syariah dari situs web Otoritas Jasa Keuangan (OJK). Uji *Mann-Whitney* diterapkan untuk menganalisis data, dengan tujuan untuk menentukan apakah ada perbedaan signifikan dalam kinerja bank syariah setelah penggabungan dibandingkan sebelum penggabungan. Hasil menunjukkan bahwa terdapat perbedaan signifikan dalam kinerja bank yang ditinjau untuk NPF, ROA, CAR, BOPO, dan NOM tetapi tidak untuk FDR. Kinerja dalam semua variabel mengalami peningkatan, menunjukkan dampak yang menguntungkan dari penggabungan pada sektor perbankan syariah. Penelitian ini mendasari eksplorasi lebih lanjut tentang praktik terbaik dalam mengelola penggabungan bank.
Kata kunci: merger, kinerja, resiliensi, bank Syariah.

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INTRODUCTION

The potential for developing Sharia banking in Indonesia is enormous. The world's largest Muslim population, reaching 237.56 million (RISSC, 2022), supports this. Globally, this figure represents 12.3% of the world's Muslim population. It covers 86.7% of the national Muslim population. Despite this potential, Indonesia's economic and financial penetration of Shariah stands at only 6.51%, significantly lagging behind Malaysia's 29%. We must make efforts to expand Indonesia's sharia banking sector, including leveraging mergers as one strategy.

Mergers can significantly enhance business resilience by promoting efficient management, integration, and diversified portfolios. In the context of economic distress, firms may choose to exit the market through bankruptcy, liquidation, or mergers (Bank, 2020). Minister Erick Thohir, from the Ministry of State-Owned Enterprises, oversaw the merger of Mandiri Syariah, BNI Syariah, and BRI Syariah into Bank Syariah Indonesia (BSI) during the COVID-19 pandemic. This merger aims to improve Sharia banking efficiency and increase Sharia finance penetration in Indonesia, contributing to global competitiveness, particularly after the pandemic. Considering that other countries are still dealing with pandemic challenges, Indonesia's proactive merger strategy during the pandemic demonstrates a forward-thinking approach to positioning itself favorably once the crisis subsides.

Several countries have demonstrated the success of sharia bank mergers, such as the United Arab Emirates' Dubai Islamic Bank and Noor Bank. According to Wayastaff (2020), mergers have successfully reduced labor costs by half. Ahdizia & Masyita (2018) revealed that mergers have a significant impact on long-term performance. This is because there are several benefits to the merger of Islamic financial institutions, including expanding product and service coverage, building solid infrastructure for new services, achieving efficiency through diversification, and improving management quality. The merger of Islamic banks in Britain has empirically proven that there are significant differences in managing the crisis that Britain faced from 2007 to 2010 (Kandil & Chowdhury, 2014). Prakoso, Andreas & Firmansyah (2023) revealed the story of the unsuccessful fusion. He revealed that the merger had a negative impact on the financial performance of Oke Indonesia Bank. The decline in share returns reflects the negative impact. Additional research findings indicated that mergers failed to yield a substantial enhancement in post-merger revenue efficiency and, in fact, exerted a detrimental influence on post-merger efficiency (Kwon, Stoeberl & Joo, 2008; Sufian, Muhamad, Bany-Ariffin, Yahya & Kamarudin, 2012). Therefore, we need to investigate whether the merger has a positive impact on the performance of sharia banks.

The success of mergers in other countries has motivated Indonesia to develop Shariah's potential. The Government of Indonesia, through President Joko Widodo's speech at the inauguration of the 2nd Economic Congress of Majelis Ulama Indonesia (MUI), is committed to making Indonesia the world's economic center of Shariah (Kominfo, 2021). The Financial Services Authority (OJK) issued authorization for the merger of three Sharia banks on January 27, 2021, through letter No. SR-3/ PB.1/2021. The merger of BSI began on February 1, 2021, so it has been running for more than two years. Numerous studies have examined the Sharia Bank merger, starting from its initial discussion until its actual implementation.

Hassan & Giouvris (2021) suggest that mergers among banks in the UK tend to enhance financial system stability, thereby reducing systemic risk and improving profitability, as indicated by Return on Assets (ROA). Conversely, Adhikari, Kavanagh & Hampson (2023) found that a comparison of average financial ratios over three years before and after mergers in Nepal showed no significant change in bank profitability post-merger, despite a noted improvement in liquidity. Alsharif (2023) analyzed two case studies of bank mergers, revealing that the efficiency of the merged entity formed by the Saudi British Bank and Alawwal Bank deteriorated after the merger, while the efficiency of the combined entity of the National Commercial Bank and Saudi American Bank improved. These findings imply that bank mergers do not uniformly result in cost-efficiency gains. Generally, the acquiring banks exhibit superior financial performance prior to mergers, with higher net income, EPS, ROA, and ROE relative to the target banks. Significant disparities in financial metrics and strategic approaches

between the acquiring and target banks can contribute to the suboptimal performance of the merged entity (Kuriakose & Paul, 2016).

Several previous studies examining the performance of Islamic banks have yielded varying results. Yusuf & Ichsan (2021) analyzed the performance of the Shariah public bank at the time of the COVID, resulting in the finding that the capital adequacy ratio (CAR), non-performing financing (NPF), and financing to deposit ratio (FDR) have no influence on the Sharia general bank's performance. While operating cost on operating income (BOPO) has a negative impact on financial performance, this research differs from previous research. The study focuses on evaluating the performance of BSI with a comparative approach before and after the merger. According to Iswanto, Alawiyah, Komariah & Anwar (2022), there was a significant difference in financial performance, and the bank performed better after the merger. Ahmed, Manwani & Ahmed (2018) also state that there was a significant difference, but the banks had better performance before the merger. The research didn't explore CAR or MCR. In contrast, Walakandou, Lambey & Tulung (2018) revealed no differences that affected the bank's financial performance after the merger. The study didn't explore net-operating margin (NOM). The previous study revealed that there is a difference in NOM before and after merger (Sucipto, 2023; Rini, Lestari & Sapta, 2023). On the other hand, Saputri & Kaharti (2022) and Ahmed et al. (2018) revealed different results; there was no difference in NOM before and after the merger.

The previous studies still exhibit limitations that require evaluation. Yunistiyani & Harto (2022) conducted a one-year comparison of the financial performance of pre- and post-merger sharia banks but did not investigate BOPO for efficiency. They revealed that there was a significant difference in ROA, whereas NPF, CAR, FDR, and GCG showed no difference before and after the merger. The ROA indicator demonstrated significantly better results in the post-merger period (Ullah, Nor & Seman, 2021). However, Sheidu & Yusuf (2015) revealed no difference in ROA before and after the merger. This research domain holds academic interest due to the divergent outcomes in prior studies. Moreover, prior research has yet to delve into the disparities in efficiency. Financial institutions with lower efficiency levels are more likely to experience distress or insolvency. The existence of low efficiency should serve as an early warning sign for the management team, prompting proactive responses from managers to adapt and reform their operational and strategic approaches (Li, Feng & Tang, 2022). In emerging countries, empirical evidence suggests that efficiency gains from mergers and acquisitions (M&A) are typically weak (Aljadani & Toumi, 2019).

Key financial performance parameters represented by ratios such as profitability ratios (ROA, BOPO, and NOM), liquidity ratios (NPF and FDR), and solvency ratios (CAR) need to be compared. The theory of synergistic evaluation posits that functional synergy is more prominent than other types of synergy. Merger and acquisition advisors emphasize that a quantitative understanding is crucial, consistently striving to steer partners towards functional synergy due to its measurability (Bauer & Friesl, 2024). Literature indicates the formation of clusters based on the close relationship between mergers and financial performance (Yuliawati, Adirestuty Miftahuddin & Hardiansyah, 2022). Previous research utilizing text mining and both quantitative and qualitative analyses demonstrates that the religious identity of Islamic banks enhances their marketing and positioning, although the results are limited and require further validation (Hudaefi & Badeges, 2022). Hati, Wibowo & Safira (2020) provide empirical evidence in Islamic marketing, showing that customers' product knowledge alone is insufficient to influence Muslims' investment intentions without of risk perception. Sharia-compliant companies exhibit higher brand equity in the long term; however, there is no consistent short-term increase in brand

equity immediately following their initial Sharia-compliance listing (Hati, Prasetyo & Hendranastiti, 2022).

The study validates the benefits of Islamic banking mergers from a financial performance perspective while also considering risk profiles for two years following the merger. Additionally, Sengar, Badhotiya Dobriyal & Singh (2021) have noted that mergers among Indian banks yield qualitative advantages for the newly formed bank, shareholders, and customers. Beyond analyzing differences in financial performance before and after the merger, this research qualitatively describes the context behind the findings. At least two aspects of this study emphasize its novelty: the inclusion of efficiency measurement as an impact of mergers and its methodology that integrates not only quantitative difference tests but also descriptive qualitative exploration of the findings.

Based on the phenomenon and the research gap, the research question is: Is there a significant difference in bank performance before and after the merger as examined by ROA, NPF, FDR, CAR, BOPO, and NOM? Additionally, this study aims to describe qualitatively the factors behind the findings, exploring both the quantitative differences in performance and the qualitative aspects influencing these differences. This study seeks to identify how operational, managerial, and strategic adjustments impact post-merger performance. The study also wants to look into how mergers affect operational efficiency, going beyond quantitative measures to find out the qualitative factors that make a difference in whether effectiveness goes up or down, such as functional synergies, system integration, and changes in managerial strategy. This study stands out for its emphasis on efficiency measurement as a result of mergers, as well as the use of both quantitative comparative tests and qualitative descriptive exploration.

Theoretically, this research contributes to understanding synergy theory's perspective on the impact of mergers. Practically, it adds value by evaluating whether mergers influence bank performance through an analysis of disparities in business practices before and after the merger. This is crucial for bank management to assess, prioritize, and strategically focus on future operations in the Islamic banking sector, which is considered a perfect alternative to the current conventional financial system (Achsani & Kassim, 2021).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

A merger is the combination of two or more companies in which only one company continues to operate, retaining its identity (Gitman & Zutter, 2015). There are four primary types of mergers: horizontal, vertical, congeneric, and conglomerate. A horizontal merger occurs when two banks offering similar services combine, expanding their market presence and eliminating competition. For example, this might involve the merger of two commercial banks. The merger of Bank Syariah Mandiri (BSM), BNI Syariah (BNIS), and BRI Syariah (BRIS) into BSI is an example of a horizontal merger, as these banks operated in the same segment—Islamic banking—and offered similar services. This merger aimed to increase market share, enhance operational efficiency, and strengthen competitive positioning in Indonesia's Islamic banking industry.

Companies engage in mergers for expansion and to enhance shareholder value, often motivated by diversification, tax benefits, owner liquidity, or the acquisition of specific assets from the target company. Mergers aim to increase profitability through expanding market share, reducing expenses, improving production processes, and achieving other intangible goals such as enhancing technological and organizational knowledge (Khotbi & Rousseau, 2018; Majumdar, Moussawi & Yaylacicegi, 2020; Roberts & Wallace, 2016). Companies engage in mergers and acquisitions (M&A) to achieve greater benefits or synergies than if the companies remained independent. Synergy occurs when the business value after M&A is higher than the

combined value of each company before joining (Septian & Dharmastuti, 2019). Mergers lead to a diversification of business models, which in turn affects business resilience. A study by Marques & Alves (2021) revealed that more resilient banks tend to be more diverse in their asset distribution. Mergers also affect the creation of synergy. The set of knowledge, skills, experience, and technology that each company brings creates more effective synergies for target markets (Bhardwaj, Tazeen & Hussain, 2021). Oloye & Osuma (2015) research supports these findings, revealing that the primary motives behind bank mergers are the benefits of synergy. Synergy will affect other motives, such as raising funds, developing digitization, and increasing liquidity.

Mamun, Tannous & Zhang (2021) found that bank mergers facilitated by the Federal Deposit Insurance Corporation (FDIC) after the 2008–09 financial crisis significantly improved profitability and cost efficiency, in contrast to non-regulatory mergers, which did not exhibit meaningful performance changes. Regulatory mergers refer to those supported by the FDIC as part of financial system stabilization efforts during and after the financial crisis, where the FDIC provided incentives to banks acquiring troubled institutions. In contrast, BSI's merger was not a regulatory merger but rather a strategic non-regulatory merger initiated with government support through the Ministry of State-Owned Enterprises. Although BSI's merger was a strategic non-regulatory initiative rather than a regulatory one, its potential performance improvement stems from synergies, increased economies of scale, broader market access, a stronger capital structure, enhanced reputation, innovation capabilities, and risk diversification. The merger, executed during the COVID-19 pandemic, provided strategic advantages by enabling BSI to consolidate resources from three major banks, expand its customer base, and improve operational efficiency, thus enhancing its ability to adapt to evolving customer needs and strengthening its competitive position in Islamic banking. These factors collectively suggest that the BSI merger could enhance financial performance. According to Aggarwal & Garg (2022), mergers have significantly improved the profitability and liquidity of acquiring firms over the past five years but have not notably affected solvency. This can be done using ratios such as profitability (ROA, BOPO, and NOM), liquidity (NPF and FDR), and solvency (CAR).

ROA before and after the Bank Syariah Indonesia merger

ROA measures how effectively a company's management uses assets to generate profits. Investors find a higher ROA

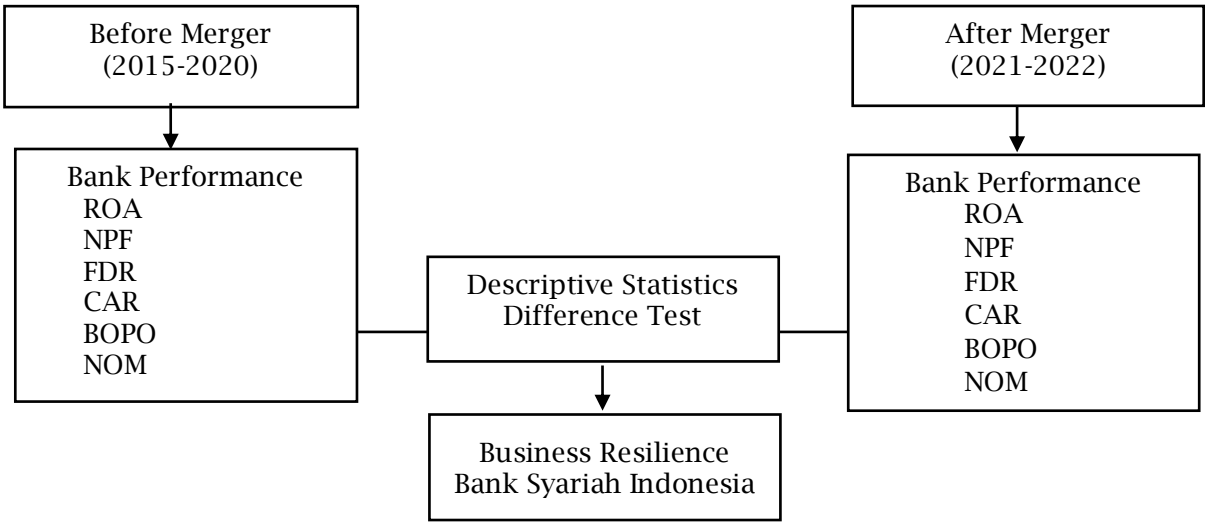


Figure 1.
Research Model

indicative of more efficient performance, which can positively impact the company's stock value in the capital market and lead to increased profitability (Rosikah et al., 2018). Numerous studies have highlighted the differences in ROAs before and after mergers (Yadav & Jang, 2021; Yunistiyani & Harto, 2022). Mergers and acquisitions typically result in a significant increase in ROA (Pratito & Puspitasari, 2016; Omoye & Aniefor, 2016; Yazar Soyadı, 2019; Sawitri, 2022; Oktaviony, Taufik & Saputri, 2024). According to Gitman & Zutter (2015), one of the primary objectives of a merger is to acquire assets from the targeted firms. Mergers introduce new assets and often lead to improved asset utilization. The combined entity can benefit from economies of scale, improved operational efficiency, and better asset allocation, all of which contribute to an overall increase in ROA. The value of the merged entity typically exceeds the sum of the original entities due to these synergies and improved asset management. Consequently, it is logical to expect that the ROA will increase following a merger, reflecting the more effective use of the expanded asset base and the operational efficiencies gained from the merger.

H1: There is a difference in ROA before and after the Bank Syariah Indonesia merger, and it improves after the merger

NPF before and after the Bank Syariah Indonesia merger

Similar to how conventional banks measure asset and credit quality with the Non-Performing Loan to Total Loans (NPL_TL) ratio, Islamic banking institutions use the NPF ratio to assess the quality of their financing assets (Setiawan, Hasan, Hassan & Mohamad, 2017). Given that loans represent a significant service offered by banks, effective loan management is crucial. Loans inherently carry risk, as there is always a chance of delays or defaults. Hence, every loan carries an inherent risk of potentially becoming non-performing. NPF represents the financing that has been delayed. The high ratio to the NPF indicates a problem in the bank's lending portfolio. Previous research has shown that there are differences in the level of NPF before and after the merger (Bahri & Wardhani, 2023; Oktaviony et al., 2024). Sharia Bank's post-merger financial performance improved, as evidenced by lower non-performing financing (NPF) and higher overall net receivables. Murabahah financing particularly showed significant growth, and collectibility levels indicated improved financial stability (Rusli & Fitriana, 2022). Business mergers create operational, strategic, and financial synergies, enhancing overall performance. In banking, merging entities with diverse business focuses improves risk diversification, reducing concentration in specific sectors or segments.

H2: There is a difference in NPF before and after the Bank Syariah Indonesia merger, and it improves after the merger.

FDR before and after the Bank Syariah Indonesia merger

FDR measures how banks use third-party funds to finance activities. Ineffective financing disbursement leads to surplus liquidity due to inefficient utilization of third-party funds (Mutmainah, Sukmadilaga & Sari, 2022). The FDR indicates how effectively Sharia banks can use their financing activities to meet customer withdrawal demands, serving as a measure of liquidity management. A high FDR suggests that a Sharia bank is successfully managing its financial performance by utilizing distributed financing to cover fund withdrawals, reflecting healthy liquidity. Conversely, a low FDR implies poor liquidity management, indicating the bank's inability to meet withdrawal demands through its financing activities. Thus, an increase in the FDR correlates with a more effective distribution of financing, while a decrease signals a decline in this capability (Hilman, 2016; Kartika, Jubaedah & Astuti, 2020). FDR differences before and after a merger can occur due to the influence of market value and financial strategy. The company experienced growth and expansion following the merger. It requires additional

debt. Previous research has shown that there is a difference in FDR before and after the merger (Yadav & Jang, 2021). Post-merger, banks often manage increased debt capacity and larger operations, which can affect FDR. Although this suggests the ability to handle more debt, it also implies a need for careful management of increased financial resources to maintain effective liquidity.

H3: There is a difference in FDR before and after the Bank Syariah Indonesia merger, and it improves after the merger.

CAR before and after the Bank Syariah Indonesia merger

CAR is a ratio that evaluates a bank's capacity to manage the risks it encounters. Capital adequacy measures a bank's ability to meet its financial obligations during economic stress, ensuring adequate capital to guard against unexpected failures (Majeed & Zainab, 2021). A high CAR signifies that a bank has a robust ability to manage credit risks, losses, and other asset -related risks, leading to enhanced banking performance (Kepramareni Apriada, Fajar, Putra, Ayu & Saputra, 2022; Susy, 2021; Sufyati, Handayani, Maulida & Melati, 2022). Previous research revealed that there were differences between CAR before and after the merger (Pratito & Puspitasari, 2016; Sawitri, 2022; Rusli & Fitriana, 2022). Mergers often lead to economies of scale, where larger firms can operate more efficiently and raise capital more effectively. During the post-merger period, the newly formed entity has the opportunity to strategically enhance its financial and operational resources. This restructuring allows for improved capital management, potentially augmenting the bank's capital base and optimizing its capital structure. Enhanced capital adequacy in the post-merger phase positions the bank better to handle future financial challenges, thus reinforcing its stability and performance in a competitive market.

H4: There is a difference in CAR before and after the Bank Syariah Indonesia merger, and it improves after the merger.

BOPO before and after the Bank Syariah Indonesia merger

BOPO is an indicator that measures the efficiency of the bank's operating costs. A high BOPO indicates that a bank spends a large amount of operating income on operational costs. The higher the BOPO, the less efficient a bank is at allocating resources and controlling its operating expenses. The efficiency scores after the merger exhibit a slight improvement when compared to the scores before the merger (Nguyen & Pham, 2020). Previous research revealed that there was a difference between BOPO before and after the merger (Sawitri, 2022). Afza & Yusuf (2013) examined how mergers affected cost and profit efficiency in Pakistan's banking sector from 1998 to 2006, finding that mergers led to enhanced cost efficiency. Following a merger, business integration often leads to better resource allocation and more effective control over operational costs, contributing to this improvement. Post-merger, streamlined operations, and consolidated functions all contribute to a more efficient operational framework, potentially lowering the BOPO indicator and improving overall efficiency. These findings underscore the potential benefits of mergers for driving operational efficiency and optimizing cost management.

H5: There is a difference in BOPO before and after the Bank Syariah Indonesia merger, and it improves after the merger.

NOM before and after the Bank Syariah Indonesia merger

The NOM metric evaluates a bank's management proficiency in efficiently managing its productive assets to produce income-sharing returns. It indicates the profitability level of shariah banks (Minarni, Abidin & Ekowati, 2023). As the NOM value increases, the net income a bank earns from its productive assets rises, resulting in higher profits (Aulia & Anwar, 2021). We must maintain the stability of the NOM. A higher NOM indicates improved

financial performance, while conversely, a lower NOM suggests otherwise. The previous study revealed that there is a difference in NOM before and after merger (Sucipto, 2023; Rini et al., 2023). In the post -merger period, Rani, Yadav & Jain (2013) primarily generated higher cash flows due to improved operating margins. Mergers can stabilize a firm's income stream by consolidating resources and optimizing asset management. The integration of acquired assets and operations often leads to better financial outcomes and increased profitability, as the combined entity can leverage improved efficiencies and income generation capabilities.

H6: There is a difference in NOM before and after the Bank Syariah Indonesia merger, and it improves after the merger.

This research complements the limitations of previous research, which limited performance data after mergers to one year. The difference from previous research is also due to the presence of BOPO variables, which reflect bank efficiency. Cost efficiency helps face uncertainty in the future (Narawish, Sharma, Suman & Regin, 2022). If the company can control costs, it guarantees the development's sustainability.

RESEARCH METHODS

This research employs a mixed-methods approach, incorporating both quantitative and qualitative analyses. The study used secondary data from financial and annual reports on BSI's official website. Sample

Table 2.
Descriptive Statistics

Variable	Operational Definition	Measurement
Return on Assets (ROA)	How profitable a company is in relation to its total assets (Ross, Westerfield, Jordan & Biktimirov, 2022)	ROA = Net Income / Total Assets (Ross et al., 2022)
Non-Performing Financing (NPF)	The level of problematic financing, where borrowers are unable to meet their repayment obligations, often due to overly high financing levels (Damanhur, Albra, Syammi & Habibie, 2017)	(Total Impaired Financing/ Total Distributed Financing) x 100% (Yuwannita et al., 2022)
Financing to deposit ratio (FDR)	The proportion of deposite used for the distribution funds of financing (Wasiaturrahma, Rohmatul, Sukmana, Novita & Hudaifah, 2020)	(Total Financing/ Total Third Party Fund) x 100% (Widyaningrum & Septiarani; 2015)
Capital Adequacy Ratio (CAR)	The ability of an organization to face abnormal losses and to survive that situation (Khan, Siddique & Sarwar, 2020)	(Total Capital/ Risk Weighted Assets) x 100% (Wahyudi, Sari, Hersugondo & Udin, 2019; Hasanah & Septiarini, 2020)
Operating cost on Operating Income (BOPO)	The comparison business expenses with business income (Widyakto, Santoso, Hanifah & Taruna, 2023)	(Operating Cost/ Operating Income) x 100% (Widyakto et al., 2023)
Net Operating Margin (NOM)	Company's ability to efficiently produce revenue through its core business activities (Budianto & Dewi, 2023)	(Income after Revenue Sharing—Operating Cost)/Average of Earning Assets x 100% (Fakhri & Darmawan, 2021; Rini et al., 2023)

selection is based on purposive sampling. The sample in this study includes the state-owned Sharia Bank for the period 2015–2020 (pre-merger) and 2021–2022 (post-merger). The consistent publication of financial and annual reports for the relevant periods, along with the presentation of financial reports in rupiahs, constitute additional criteria. To describe the data condition, we used descriptive statistics as well as the Mann-Whitney test to test the hypothesis. We used SPSS as the data analysis tool. In this study, we tested the following variables:

For the qualitative approach, this research utilized qualitative descriptive analysis. The study drew on a variety of sources, including books, journal articles, and reports. The qualitative descriptive analysis aims to provide a thorough and comprehensive understanding of mergers' impact by interpreting data that reflects contextual realities.

ANALYSIS AND DISCUSSION

The descriptive statistical analysis aims to visualize the data and compare it to the average of its industry or Bank Umum Syariah (BUS). Based on Table 2, prior to the merger, Bank Rakyat Indonesia Syariah (BRIS) had a significantly lower ROA compared to Bank Syariah Mandiri (BSM) and Bank Negara Indonesia Syariah (BNIS), with a notably poor ROA of 0.31% in 2019. This indicates inefficiencies in BRIS's asset management. All three banks had average ROAs below the industry standard before merging, highlighting systemic issues in their operations. The merger, resulting in BSI, was a pivotal development. In 2021, BSI's ROA surpassed the industry average, reflecting improved asset utilization due to the merger's synergies, resource consolidation, and expertise integration. Although BSI's ROA continued to improve the following year, it remained slightly below average for the general sharia banking industry, indicating ongoing opportunities for optimization. Achieving a ROA above 1.5%, as required by PBI No. 13/1/2011, demonstrates that BSI meets regulatory profitability standards. However, it raises questions about whether these gains are due to actual operational improvements or merely the advantages of scale. To maintain and exceed industry benchmarks sustainably, BSI must continue enhancing its asset management and strategic operations in a dynamic competitive environment.

Prior to the merger, the net NPF ratios for BSM and BNIS were favorable, falling below the industry average, thereby indicating stronger financial health compared to their peers. Conversely, BRIS exhibited a higher NPF ratio than the industry average, indicating poorer asset quality and higher risk exposure compared to the general performance of sharia banks. When examining the average NPF across these three banks, data from 2019 reveals that their combined NPF was above the industry average, signifying systemic challenges in managing financing risks effectively at that time. However, by 2020, the average NPF fell below the industry benchmark, suggesting some improvements in handling financing risks, although this period also reflected a general decline in the NPF ratio for all three banks, possibly indicating proactive measures or tightening of financing standards in anticipation of the merger. The merger, which consolidated these banks into BSI, has led to a notable reduction in NPF ratios through 2022. This decline demonstrates initial success in mitigating financing risks and enhancing asset quality. Despite this progress, BSI's NPF ratio remained higher than the industry average, pointing to ongoing challenges in aligning risk management practices with industry standards. According to PBI No. 13/1/2011, NPF ratios below 5% are considered healthy, and although BSI meets this threshold, its NPF ratio exceeds the industry average, highlighting areas that require further improvement. The post-merger period suggests that while consolidation has yielded some positive outcomes in risk management and asset quality, BSI must continue to address underlying issues to achieve optimal performance.

FDR is a crucial indicator that measures the extent to which banks utilize third-party funds, particularly customer

Table 2.
Descriptive Statistics

	2022	2021	2020	2019	2018	2017	2016	2015
				ROA				
BSM			1.65%	1.69%	0.88%	0.59%	0.59%	0.56%
BNIS			1.33%	1.82%	1.42%	1.31%	1.44%	1.43%
BRIS			0.81%	0.31%	0.43%	0.51%	0.95%	0.76%
Average			1.26%	1.27%	0.91%	0.80%	0.99%	0.92%
BSI	1.98%	1.61%						
Average of BUS	2.00%	1.55%	1.54%	2.04%	2.24%	2.47%	1.77%	1.81%
				NPF				
BSM			0.72%	1.00%	1.56%	2.71%	3.13%	4.05%
BNIS			1.35%	1.44%	1.52%	1.50%	1.64%	1.46%
BRIS			1.77%	3.38%	4.99%	4.75%	3.19%	3.89%
Average			1.28%	1.94%	2.69%	2.99%	2.65%	3.13%
BSI	0.68%	0.87%						
Average of BUS	0.64%	0.81%	1.57%	1.88%	1.95%	2.57%	2.17%	3.19%
				FDR				
BSM			73.98%	75.54%	77.25%	77.66%	79.19%	81.99%
BNIS			68.80%	74.30%	79.62%	80.21%	84.57%	91.94%
BRIS			80.99%	80.12%	75.49%	71.87%	81.42%	84.16%
Average			74.59%	76.65%	77.45%	76.58%	81.73%	86.03%
BSI	79.37%	73.39%						
Average of BUS	75.19%	70.12%	76.36%	77.91%	78.53%	79.61%	85.99%	88.03%
				CAR				
BSM			16.88%	16.15%	16.26%	15.89%	14.01%	12.85%
BNIS			21.40%	18.90%	19.31%	20.14%	14.92%	15.48%
BRIS			19.04%	25.26%	29.23%	20.05%	20.63%	13.94%
Average			19.11%	20.10%	21.60%	18.69%	16.52%	14.09%
BSI	20.29%	22.09%						
Average of BUS	26.28%	25.71%	21.64%	20.59%	20.39%	17.91%	16.63%	15.02%
				BOPO				
BSM			81.81%	82.89%	91.16%	94.44%	94.12%	94.78%
BNIS			84.06%	81.26%	79.10%	80.21%	80.75%	83.21%
BRIS			91.01%	96.80%	95.32%	95.24%	91.33%	93.79%
Average			85.63%	86.98%	88.53%	89.96%	88.73%	90.59%
BSI	75.88%	80.46%						
Average of BUS	77.28%	84.33%	85.55%	84.45%	92.09%	93.23%	91.57%	95.01%
				NOM				
BSM			1.76%	1.85%	0.96%	0.61%	0.64%	0.58%
BNIS			0.62%	1.00%	0.81%	0.71%	0.90%	0.67%
BRIS			0.08%	0.59%	0.27%	0.12%	0.39%	1.81%
Average			0.82%	1.15%	0.68%	0.48%	0.64%	1.02%
BSI	2.17%	1.75%						
Average of BUS	2.59%	1.66%	1.46%	1.92%	1.42%	0.67%	0.68%	0.52%

deposits, for financing. Managing the FDR within acceptable limits is essential because excessively high FDRs indicate a heavy reliance on these funds, potentially jeopardizing liquidity if significant withdrawals of deposits occur. According to Bank Indonesia Regulation No. 15/7/ PBI/2013, the prescribed FDR range is 78%–92%, balancing the need to utilize deposits for financing with maintaining adequate liquidity. Before the merger, BSM met this regulatory standard in 2015–2016, BNIS in 2015–2018, and BRIS complied with the FDR regulation except in 2017–2018. On average, the FDRs of the three banks before the merger were still below the industry average, and only in 2015–2016 did they meet the healthy FDR standard, reflecting systemic inefficiencies in leveraging deposits effectively while adhering to liquidity norms. Post-merger, BSI initially experienced a decline in its FDR in 2021 and did not meet the healthy FDR standard, indicating a cautious approach to balancing liquidity and financing during the integration period. This decline could reflect strategic adjustments aimed at mitigating risks associated with excessive reliance on third-party funds. However, by 2022, BSI's FDR had increased, falling within the regulatory range at 79.37% and surpassing the industry average. This increase suggests a more aggressive stance on utilizing deposits for financing, which, while more compliant with regulatory standards, also raises the potential for increased liquidity risks if deposit withdrawals surge.

According to Regulation OJK No. 21/ POJK.03/2014, banks are required to maintain a CAR within a range of 8% to 11%, depending on their respective risk profiles. Table 2 reveals that before the merger, BSM, BNIS, and BRIS consistently exceeded the OJK's minimum CAR requirements. Despite this, the average CAR of these banks was slightly below the industry average, suggesting that while they maintained sufficient capital, they did not leverage it as effectively as industry leaders. It prompts a critical evaluation of the banks' capital management strategies prior to the merger. High CAR levels typically indicate robust capital reserves, which are essential for absorbing losses and maintaining stability in the face of financial risks. However, a CAR that is only marginally above the minimum regulatory threshold, yet below the industry average, raises questions about capital efficiency and optimal allocation. It implies that although the banks were secure from a regulatory perspective, they may have been conservative in their risk-taking or inefficient in deploying capital to maximize returns, potentially limiting their competitiveness. Post-merger, BSI's CAR rose in 2021, signaling improved capital management, but declined in 2022, reflecting challenges in maintaining adequacy amid integration issues or market shifts. Despite the merger, BSI's CAR stayed below the industry average after two years, highlighting ongoing inefficiencies in capital utilization and raising questions about the merger's effectiveness in enhancing capital adequacy. BSI needs more strategic capital management to boost its competitiveness and stability.

Before the merger, the BOPO of BRIS was significantly higher than that of BSM and BNIS. This disparity indicates that BRIS faced greater inefficiencies in managing its operating costs relative to its income. The average BOPO for these three banks collectively exceeded the industry average, implying suboptimal cost management practices across the board. According to the Bank of Indonesia, a BOPO ratio below 90% is considered acceptable. The fact that all three banks exceeded this benchmark highlights systemic inefficiencies in cost control and operational management prior to the merger. Post-merger, the formation of BSI brought about notable improvements. By 2021, BSI's BOPO had dropped to 80.46%, and it further decreased to 75.88% in 2022. The declining BOPO ratios indicate improved efficiency in managing operating costs relative to income, highlighting effective resource integration and the elimination of redundant expenses. Maintaining a BOPO below the industry average for two consecutive years demonstrates the merger's positive impact on operational efficiency. This trend likely stems from

initial cost-cutting and economies of scale achieved through the merger. However, for sustained long-term efficiency, continuous improvement in operational processes and strategic cost management are crucial. While the post-merger phase can pinpoint inefficiencies for resolution, improper handling can potentially lead to operational disruption. The enhanced BOPO indicates that BSI has successfully streamlined operations after the merger, but it's crucial to evaluate whether these efficiencies are driving growth and innovation or merely leading to lower expenses.

Before the merger, the NOM of the banks involved was lower than the average NOM of BUS, indicating suboptimal revenue generation efficiency relative to their peers. In a competitive banking landscape, a lower NOM indicates an inability to convert operational activities into sufficient earnings, thereby questioning the banks' pre-merger strategic and operational effectiveness. Post-merger, the NOM increased significantly and surpassed the average NOM of BUS in 2021, indicating an initial positive impact of the merger on operational efficiency and profitability. The merger allowed for better resource allocation, enhanced operational synergies, and more effective pricing strategies, which collectively contributed to improved revenue margins. While NOM continued to rise, it fell below the BUS average in 2022. This reversal raises critical questions about the sustainability of the merger's benefits and suggests potential issues in maintaining the efficiency gains initially realized. The fluctuating NOM points to underlying challenges in achieving consistent operational efficiency post-merger. According to Bank Indonesia, a NOM ratio of 6% or above is considered a benchmark for financial soundness (Tristiningtyas & Mutaher, 2016). The fact that the latest NOM falls short of this standard is cause for concern. It indicates that despite the initial post-merger improvements, the bank has not reached the level of financial robustness deemed acceptable by regulatory standards. This shortfall underscores the need for continuous evaluation and enhancement of the bank's strategies for managing operational efficiency and revenue generation.

We have presented the results of a descriptive-comparative analysis. We perform the Mann-Whitney test, a non-parametric test, on non-normally distributed data to determine the difference between two independent samples. Here are the results of different tests analyzed using SPSS.

Table 3.
Hypothesis Testing

Variable	Average of two years pre-merger	Average of two years post-merger	P value (sig)	Description	Conclusion
ROA	1.27%	1.80%	0.046*	Significant and improved	H1 supported
NPF	1.61%	0.78%	0.046*	Significant and improved	H2 supported
FDR	75.62%	76.38%	0.505	Insignificant but improved	H3 not supported
CAR	19.61%	21.19%	0.096**	Significant and improved	H4 supported
BOPO	86.31%	78.17%	0.046*	Significant and improved	H5 supported
NOM	0.99%	1.96%	0.046*	Significant and improved	H6 supported

Source: Data processed, 2023
Notes: ROA= Return on Assets, NPF= Non-Performing Financing, FDR= Financing to Deposit Ratio, CAR= Capital Adequacy Ratio, BOPO= Operating cost on Operating Income, NOM= Net Operating Margin.
*sig level at 5%; **sig level at 10%

Table 3 shows significant differences in bank performance before and after the reviewed merger in terms of ROA, NPF, CAR, BOPO, and NOM. This is evident by the p-value < 0.05, and particularly for CAR, it is significant at 10%. However, in terms of FDR, there is no difference between the bank's performance before and after the reviewed merger, with a p-value of 0.505 > 0.05. This implies that in the two post-merger years, the bank's performance has not exhibited any difference in terms of financing distribution. This study supported five of the six hypotheses, leaving only one unsupported.

The results reveal differences in ROA before and after the merger. This asserts that a merger's success is associated with effective management policies for navigating change and meticulously planning integration. A robust management strategy can positively impact ROA. The company's ability to enhance its net income and efficiently manage its assets is responsible for the significant difference in ROA post-merger compared to pre-merger. This result differs from Sheidu & Yusuf (2015), which revealed there is no difference in ROA after a merger. These results are supported by previous research showing mergers can improve ROA (Pratito & Puspitasari, 2016; Omoye & Aniefor, 2016; Yazar Soyadı, 2019; Sawitri, 2022; Ullah et al., 2021).

Many factors can influence profitability growth. After the merger, digital banking played an integral role in performance improvements. Prior to the merger, Sharia banks had no digital banking. Digital acceleration through mobile BSI shows significant progress. Before the merger, digital services were limited and semi-manual, but post-merger, Shariah banks offer sophisticated real-time digital services (Kurniawati, Fernando, Dzil Ikhram & Masyhuri, 2024). By 2022, BSI's mobile active users had jumped by 3.77 million, or 124%. This growth generated 58.94 billion in fee-based income (Kontan, 2022). Digital transformation has played a crucial role in improving Islamic finance growth amidst financial and economic challenges (Sidaoui, Ben Bouheni, Arslankhuyag & Mian, 2022). It can draw in additional customers, boost efficiency, lower expenses, and expand the product range, enhancing the sector's competitiveness against traditional finance while maintaining profit margins (Reuters, 2018).

The results indicate a notable difference between NPF before and after the merger. The merger likely enhanced the institution's debt capacity, making it easier to secure additional funding post-merger. Bahri & Wardhani (2023) support this finding by demonstrating a lower risk of NPF at the time of the merger, as measured by the NPF ratio. Ismanto & Laksono (2020) support this finding by stating that the merger significantly influences the NPF ratio, resulting in a notable reduction in NPF values post-merger. Another study aligns with this finding (Oktaviony et al., 2024; Jawotho & Wahyudi, 2022). However, the finding contrasts with Sucipto's (2023) results, which found no significant difference in NPF before and after the merger. The significant improvements in NPF underscore BSI's strategic efforts to address problematic financing, particularly through a meticulous assessment of debtor character and proactive handling of distressed loans.

According to Bank of Indonesia Regulation No. 10/18/PBI/2008, banks can implement various strategies for restructuring financing, including rescheduling, reconditioning, and rearrangement. BSI has successfully implemented these strategies, and even branch offices are actively participating in restructuring efforts. The creation of specialized account maintenance staff to manage the restructuring of troubled financing exemplifies this comprehensive approach (Nafi'ah & Widyianingsih, 2021). BSI's robust management practices and a well-coordinated restructuring strategy, which have been critical in mitigating the adverse effects of the COVID-19 pandemic on financing quality, are responsible for this improvement in NPF post-merger. By enhancing their debt management and

restructuring capabilities, BSI has demonstrated a capacity for improving the quality of their asset portfolio, which is crucial for maintaining financial stability and resilience. The case of BSI illustrates how mergers, when coupled with effective post-merger integration strategies, can lead to improved financial performance, thereby affirming the theoretical premise that mergers can enhance debt capacity and overall financial health.

Further research revealed that there were no significant differences between FDR before and after the merger. This result doesn't reflect that the merger substantially altered the bank's capacity to utilize customer deposits more effectively for lending purposes. However, the variable indicates the direction of improvement. Badarin, Al-Jarrah, Rababah & Alotoom, (2024) suggest that a higher FDR correlates with increased liquidity risk, as Islamic banks allocating more funds to financing activities may face heightened exposure to such risks.

This result implies that BSI's management has been cautious, focusing on maintaining financial stability rather than pursuing aggressive lending strategies. Such a conservative approach is crucial to mitigating risks, especially given the anticipated economic uncertainties for developing countries in 2023. This finding is consistent with the studies by Yusuf & Ichsan (2021) and Yunistiyani & Harto (2022), which also found no significant FDR change post-merger. However, it contrasts with Yadav & Jang (2021), who reported a different outcome. Therefore, the lack of significant variation in FDR reflects BSI's strategic emphasis on stability and risk management over aggressive expansion.

Despite not showing a significant difference from the pre-merger period, the bank's implementation of digitalization is responsible for the modest improvement in the FDR ratio. Digitalization has improved efficiency in deposit management and financing distribution. It allows banks to improve services, optimize customer data management, and accelerate the financing approval process, thereby reducing wait times and increasing the bank's ability to utilize third-party funds more effectively. This digital innovation also helps banks assess risks more accurately, enabling more prudent allocation of financing and reducing potential liquidity risks. Consequently, banks are more confident in distributing financing by leveraging third-party funds. BSI continues to actively promote extensive financing initiatives, particularly through Small and Medium Enterprise (SME) financing and green financing schemes (Victoria, 2022; Wulandari, Setiawan & Nurdin, 2022). These financing schemes enable more effective utilization of depositor funds, mitigate risk, and support sustainable growth strategies.

The subsequent results indicate a significant change in the CAR following the merger, observed at a 10% significance level. CAR is a vital metric for assessing a bank's financial health (Linh, Phuong, Xuan, Duc, Diep & Trang, 2020). This result underscores the potential for large firms to achieve economies of scale in capital formation post-merger. Specifically, the merged entity appears to strategically utilize enhanced resources to optimize its capital structure. The results suggest that the larger, combined entity benefits from improved capital efficiencies, which can lower the cost of capital and enhance its financial stability. Previous research by Pratito & Puspitasari (2016) and Sawitri (2022) also found similar enhancements in capital adequacy and resource allocation following mergers. The company's financial performance, as gauged by the CAR, shows improvement following the merger compared to its performance prior to the merger (Rusli & Fitriana, 2022; Sumitha & Valarmathi, 2024). However, the study diverges from the conclusions of Yusuf & Ichsan (2021), Ekadjaja, Siswanto & Rorlen (2022), and Yunistiyani & Harto (2022), which did not observe a significant impact on CAR post-merger. The notable improvement in CAR indicates that the post-merger entity achieves a more robust capital structure compared to its pre-merger status, reinforcing mergers' strategic advantage in strengthening large firms' financial resilience and capital

adequacy. Technology also facilitates enhanced monitoring of credit portfolios and capital management. BSI continues to strengthen its capital structure and pursue business expansion through a rights issue in the fourth quarter, aiming to enhance the CAR to over 22%. (Mardiansyah & Perwitasari, 2022; Kumparan, 2022).

The BOPO results showed a significant difference before and after the merger. The decline in BOPO suggests that the merger's benefits are associated with goal pursuit, monitoring, staffing, and resource allocation. The finding is consistent with the previous research (Nguyen & Pham, 2020; Sawitri, 2022). We can attribute the significant difference to the integration of systems and processes. The integration of business systems and processes during mergers has the potential to yield operational efficiencies and cost savings (Puri & Saxena, 2013; Akgun, 2023). BSI has allocated 900 billion rupiah for IT expenditures, which represents approximately 1.4% of its revenue or 29.13% of its total operational expenses (Yolandha & Puspaningtyas, 2022). This strategy can help the company achieve efficiency.

The result in NOM indicates a significant difference between before and after the merger. The finding implies that the merger stabilizes the income stream. The merger holds the potential to improve both asset management efficiency and income generation. The finding is in line with the previous study, which revealed that there is a difference in NOM before and after merger (Sucipto, 2023; Rini et al., 2023). The study contradicts Saputri & Kaharti (2022) and Ahmed et al. (2018), which revealed no difference in NOM pre- and post-merger. The significant improvement in BSI's NNOM) post-merger reflects the bank's enhanced financial performance, as demonstrated by the increased profitability and revenue from operating activities. Specifically, BSI's profits surged in alignment with a 10 percent year-over-year growth in financing revenue, rising from 18.6 trillion rupiah in 2021 to 20.46 trillion rupiah in 2022 (Burhan, 2023). The enhanced NOM post-merger indicates that the merger has enabled BSI to achieve greater operational efficiency and profitability.

CONCLUSION

Bank Syariah Indonesia merger has been running for two years. Bank performance assessments showed that there were significant differences from before the merger was reviewed in ROA NPF, CAR, BOPO, and NOM whereas the FDR side has not shown any significant differences. Nevertheless, the evaluation revealed that all performance variables indicate a direction for improvement. We can infer that the merger had the expected impact. The merger strengthens the resilience of BSI. The enhanced performance following the merger aligns with the synergy theory. The synergy theory posits that the fusion of the operational and financial resources of both merging companies generates primarily additional value. By combining the strengths and competencies inherent to each company, they can achieve increased efficiencies, cost reduction, and overall performance enhancement. As a result, the value generated by the merger exceeds the cumulative value of the two independent companies.

LIMITATIONS AND SUGGESTIONS

One important limitation of this research is its absence of ESG variables, which are crucial for understanding business resilience. Further research can explore ESG variables and good corporate governance (GCG) to gain an understanding of best practices in the business of sharia banking. The two-year period is a limited time to assess the long-term impact of a merger. Therefore, we must continue this research and further develop it to confirm whether Sharia banks' merger practices are truly as successful as those in other countries. For technical and efficiency analysis, it is also necessary to examine non-parametric variables such as harmony analysis and DEA.

REFERENCES

Achsani, M.N.F.F., & Kassim, S. (2021). Determinant of Indonesian banking profitability: Case study dual banking

system. *International Journal of Islamic Economics and Finance*, 4(SI), 1–18.

Adhikari, B., Kavanagh, M., & Hampson, B. (2023). A comparative analysis of the financial performance of commercial banks after mergers and acquisitions using Nepalese data. *Central Bank Review*, *23*(3), 100128.

Afza, T., & Yusuf, M.U. (2013). The impact of mergers on efficiency of mutual funds in Pakistan. *Caspian Journal of Applied Sciences Research*, 2(10), 69–76.

Aggarwal, P., & Garg, S. (2022). Impact of mergers and acquisitions on accounting-based performance of acquiring firms in India. *Global Business Review*, 23(1), 218–236.

Ahdizia, K., & Masyita, D. (2018). *Business valuation of Islamic banks in the merger plan to become Indonesia' s state-owned bank*. 17(46), 223–236.

Ahmed, F., Manwani, A., & Ahmed, S. (2018). Merger & acquisition strategy for growth, improved performance and survival in the financial sector. *Jurnal Perspektif Pembiayaan dan Pembangunan Daerah*, 5(4), 196–214.

Akgun, A.I. (2023). The relationship between the accounting standards and the global financial crisis: Empirical analysis of mergers and acquisitions in banking industry. *China Accounting and Finance Review*.

Aljadani, A., & Toumi, H. (2019). Causal effect of mergers and acquisitions on EU bank productivity. *Journal of Economic Structures*, 8(1).

Alsharif, M. (2023). Short- and long-term impacts of merger activities in the banking industry: evidence from an emerging market. *Journal of Financial Economic Policy*, 15(6), 628–644.

Andreani, C.B., & Erick, B. (2016). Analisis faktor-faktor yang mempengaruhi non performing loan pada bank umum di Indonesia. *Jurnal Wira Ekonomi Mikroskil*, 6(2), 113–122.

Aulia, R., & Anwar, S. (2021). Pengaruh biaya operasional dan pendapatan operasional, net operating margin, dana pihak ketiga dan capital adequacy ratio terhadap profitabilitas bank syariah. *Bukhori: Kajian Ekonomi Dan Keuangan Islam*, 1(1), 21–38.

Azis, M.I., Rohansyah, M., Muthalib, D.A. & Rosikah (2018). Effects of return on asset , return on equity , earning per share on corporate value. *The International Journal of Engineering and Science*, 7(3), 6–14.

Badarin, A.M.K., Al-Jarrah, M.F.M., Rababah, A.M.Y., & Alotoom, A.Y.M. (2024). Systematic and unsystematic determinants of liquidity risk in the Islamic banks in the Middle East. *Uncertain Supply Chain Management*, 12(3), 1399–1408.

Bahri, A., & Wardhani, R.W. (2023). Comparative analysis of non-performing financing at PT. Bank Syariah Indonesia, Tbk (BSI) before and after the merger. International Journal of Management and Business Economics, 1(2), 93–98.

Bank, E. (2020). *Business resilience in the face of COVID-19* (Issue October).

Bauer, F., & Friesl, M. (2024). Synergy evaluation in mergers and acquisitions: An attention-based view. *Journal of Management Studies*, 61 (1), 37–68.

Bhardwaj, J.K., Tazeen, & Hussain, M.V. (2021). Synergy impact of merger in banking industry -special reference to Dena Bank and Vijaya Bank. *Ijariie*, 7 (4), 242–246.

Budianto, E.W.H., & Dewi, N.D.T. (2023). Net Operating Margin (NOM) on Islamic banking: Mapping research topics using VOSviewer bibliometric and library research. *Ecobankers: Journal of Economy and Banking*, 4(2), 84–94.

Burhan, F.A. (2023). *Bank Syariah Indonesia (BRIS) raup laba rp4,3 triliun pada 2022, terbang 42,3 persen*. Diakses dari https://finansial.bisnis.com/

Damanhur, Albra, W., Syammi, G., & Habibie, M. (2017). What is the Determinant of non-performing financing in branch Sharia Regional Bank in Indonesia. *Proceedings of MICoMS*, 265–271.

Ekadjaja, M., Siswanto, H.P., & Rorlen, R. (2022). The impact of mergers on the performance of conventional banks in Indonesia. *Proceedings of the Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, 653, 448–452.

Fakhri, U.N., & Darmawan, A. (2021). Comparison of Islamic and conventional banking financial performance during the Covid-19 period. *International Journal of Islamic Economics and Finance*, 4(SI), 19–40.

Gitman, L.J., & Zutter, C. J. (2015). Principles of managerial finance 14th

edition. *Pearson Education Limited*.

Hasanah, R., & Septiarini, D.F. (2020). Pengaruh CAR, ROA, BI 7-day rate, dan inflasi terhadap non-performing financing KPR pada Bank Umum Syariah Periode 2016–2018. *Jurnal Ekonomi Syariah Teori dan Terapan*, 7(4), 774.

Hassan, M., & Giouvris, E. (2021). Bank mergers: The cyclical behaviour of regulation, risk and returns. *Journal of Financial Economic Policy*, 13(2), 256–284.

Hati, S.R.H., Prasetyo, M.B., & Hendranastiti, N.D. (2022). Sharia vs non-Sharia compliant: Which gives much higher financial-based brand equity to the companies listed in the Indonesian stock market? *Journal of Islamic Marketing*, 14(9), 2167–2187.

Hati, S.R.H., Wibowo, S.S., & Safira, A. (2020). The antecedents of Muslim customers' intention to invest in an Islamic bank's term deposits: evidence from a Muslim majority country. *Journal of Islamic Marketing*, 12(7), 1363–1384.

Hilman, I. (2016). The factors affecting mudharabah deposits of Sharia banking in Indonesia. *International Journal of Business and Management Invention*, 5(9), 56–66.

Hudaefi, F.A., & Badeges, A.M. (2022). Maqāṣid al-Sharī'ah on Islamic banking performance in Indonesia: A knowledge discovery via text mining. *Journal of Islamic Marketing*, 13(10), 2069–2089. https://doi.org/10.1108/JIMA-03-2020-0081

Ismanto, D., & Laksono, D. (2020). Analisis Perbandingan Kinerja Keuangan pada Bank Umum Syariah BUMN (Bank BRI Syariah, Bank Syariah Mandiri, dan Bank BNI Syariah). *The Indonesia Capital Market Institute*, 2(2), 99–114.

Iswanto, B., Alawiyah, S., Komariah, K., & Anwar, I. (2022). Financial performance of Bank Syariah Indonesia (BSI) before and after merger. *Muqtasid*, 13(2), 178–193.

Jawotho, J.S., & Wahyudi. (2022). Analysis of banks' health before and after consolidated. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(1), 7100–7108.

Kandil, T., & Chowdhury, D. (2014). Islamic banks' mergers and acquisitions - Impacts on performance and financial crisis in the United Kingdom. *Contemporary Studies in Economic and Financial Analysis* (95).

Kartika, R., Jubaedah, S., & Astuti, A.D. (2020). The influence of financing to deposit ratio, return on assets and non performing finance on profit Sharing finance of Sharia banks in Indonesia. *1st International Conference on Accounting, Management and Entrepreneurship (ICAMER 2019)*, *123*, 136–140.

Kepramareni, P., Apriada, K., Fajar, I.N., Putra, A., Ayu, I.G., & Saputra, I. (2022). *The effect of credit risk, capital adequacy ratio, liquidity, operational efficiency, and solvency on the financial performance of BPR in the city of Denpasar*, 9, 7–14.

Khan, M.A., Siddique, A., & Sarwar, Z. (2020). Determinants of non-performing loans in the banking sector in developing state. *Asian Journal of Accounting Research*, 5(1), 135–145.

Khotbi, S., & Rousseau, P. (2018). The characteristics of mergers and acquisitions and their impact on performance in emerging countries: A Saudi Arabian study. *Hal Open Science*, December, 14–15.

Kontan, T.M.K. (2022). *Hingga Maret lalu, pengguna aktif BSI Mobile capai 3,77 juta*. Diakses dari https://keuangan.kontan.co.id/

Kumparan. (2022). *Rasio modal kalah dari bank konvensional jadi alasan BSI rights issue*. Diakses dari https://kumparan.com/

Kuriakose, S., & Paul, J. (2016). Strategic and financial similarities of bank mergers. *Review of International Business and Strategy*, 26(1), 50–68.

Kurniawati, D.T., Fernando, Y., Dzil Ikhram W.M.A., & Masyhuri. (2024). Financial technology readiness for Shariah-compliant banking services: Post-merger perspectives. *Journal of Islamic Marketing*, 1651–1671.

Kwon, H.B., Stoeberl, P. A., & Joo, S.J. (2008). Measuring comparative efficiencies and merger impacts of wireless communication companies. *Benchmarking*, 15(3), 212–224.

Li, Z., Feng, C., & Tang, Y. (2022). Bank efficiency and failure prediction: A nonparametric and dynamic model based on data envelopment analysis. *Annals of Operations Research*, 315 (1), 279–315.

Linh, D.H., Phuong, N.T.H., Xuan, N.T., Duc, L.A., Diep, N.T.N., & Trang, N.H. (2020). Determinants influencing capital adequacy ratio of Vietnamese

commercial banks. *International Journal of Business, Economics, and Law*, 18(5), 2289–1552.

Majeed, M.T., & Zainab, A. (2021). A comparative analysis of financial performance of Islamic banks vis-à-vis conventional banks: Evidence from Pakistan. *ISRA International Journal of Islamic Finance*, 13(3), 331–346.

Majumdar, S.K., Moussawi, R., & Yaylacicegi, U. (2020). Merger motives and technology deployment: A retrospective evaluation. *Antitrust Bulletin*, 65(1), 120–147.

Mamun, A., Tannous, G., & Zhang, S. (2021). Do regulatory bank mergers improve operating performance? *International Review of Economics and Finance*, 73 (December 2020), 152–174.

Mardiansyah, D., & Perwitasari, A.S. (2022). *Ini cara Bank Syariah Indonesia (BSI) perkuat modal*. Diakses dari https://keuangan.kontan.co.id/

Marques, B.P., & Alves, C.F. (2021). *Business model diversity and banking sector resilience*.

Minarni, Abidin, M., & Ekowati, V.M. (2023). The influence of financial performance on profitability of Sharia commercial banks in Indonesia using the CAMEL method. *Journal of Islamic Economics Lariba*, 9(2), 329–352.

Mutmainah, Sukmadilaga, C., & Sari, P.Y. (2022). Indonesia Islamic bank merger: Stages, challenges, and strategies. *Jurnal Riset Akuntansi Dan Bisnis Airlangga*, 7(1), 1245–1262.

Nafi'ah, E.A., & Widyianingsih, B. (2021). Strategi restrukturisasi pembiayaan bermasalah untuk menjaga fortofolio keuangan Bank Syariah Indonesia (BSI) Kantor Cabang Jombang. *Jurnal Ekonomi Syariah Teori dan Terapan*, 8(4), 474.

Narawish, C., Sharma, D.K., Suman R.S., & Regin, R. (2022). Importance of cost efficiency in critical aspect of influences the decision-making process in banks. *Turkish Journal of Physiotherapy and Rehabilitation*, 32 (3), 47184–47212.

Nguyen, P.A., & Pham, L.D. (2020). Non-parametric analysis of bank merger gains: The case of Vietnam. *Cogent Business and Management*, 7(1).

Oktaviony, N., Taufik, & Saputri, N.D.M. (2024). Analysis of the soundness of government-owned Islamic banks before and after a merger. *KnE Social Sciences*, 460–473.

Oloye, M.I., & Osuma, G. (2015). Impacts of mergers and acquisition on the performance of Nigerian banks (A case study of selected banks). *Pyrex Journal of Business and Finance Management Research*, 1(4), 23–40.

Omoye, A.S., & Aniefor, S.J. (2016). Mergers and acquisitions: The trend in business environment in Nigeria. Accounting and Finance Research, 5 (2), 10–19.

Popita, M.S.A. (2013). Analisis penyebab terjadinya non performing financing pada bank umum Syariah di Indonesia. *Accounting Analysis Journal*, 2(4), 404–412.

Prakoso, R.B., Andreas, F., & Firmansyah, A. (2023). The impact of mergers on company performances in the banking sector. *Jurnal Pajak dan Keuangan Negara (PKN)*, 4(2), 483–491.

Pratito, D.W., & Puspitasari, D. (2016). Analysis financial performance bank before and after merger and acquisition (Studies in banking companies listed on the Stock Exchange period 2009–2014). *International Conference on Business, Economics, Socio-Culture & Tourism*, 411–419.

Puri, H., & Saxena, S. (2013). Impact of M&A on bank's performance and its shareholders wealth: A study of merger of BOR with ICICI Bank. *Abhigyan*, 31(1), 35–47.

Rani, N., Yadav, S., & Jain, P. (2013). Post-M&A operating performance of Indian acquiring firms: A Du Pont Analysis. *International Journal of Economics and Finance*, 5(8), 1–6.

Reuters. (2018). *Fintech, a global boost for Islamic finance?* Diakses dari https://www.reuters.com/

Rini, D.P., Lestari, S.S., & Sapta, A.E. (2023). Analyzing the financial performance of PT Bank Syariah Indonesia Tbk: Before and after merger. *Jurnal REKSA: Rekayasa Keuangan, Syariah, dan Audit*, 10(2), 121–131.

Roberts, A., & Wallace, W. (2016). *Mergers and acquisitions*. HeriotWatt University.

Ross, S.A., Westerfield, R., Jordan, B.D., & Biktimirov, E.N. (2022). *Essentials of Corporate Finance*. McGraw-Hill/ Irwin.

Rusli, M., & Fitriana, A. (2022). The analysis of financial performance in merger

activity: The case of Sharia banking merger in Indonesia. *Proceedings of the 1st International Seminar on Sharia, Law and Muslim Society*, (1).

Saputri, D., & Kaharti, E. (2022). Analisis perbandingan dampak sebelum dan sesudah merger horizontal terhadap kinerja keuangan perusahaan di Indonesia yang terdaftar di BEI Periode 2014–2019. *Jurnal Ilmiah Mahasiswa Manajemen, Bisnis dan Akuntansi*, 4(2), 181–189.

Sawitri, N.N. (2022). *Differences in banking financial performance before and after merger (Case study of domestic banks in Indonesia)*, 1(2), 163–175.

Sengar, N., Badhotiya, G. K., Dobriyal, R., & Singh, D. B. (2021). Study of post-merger effect on performance of banks in India. *Materials Today: Proceedings*, 46, 1076–10770.

Septian, S., & Dharmastuti, C.F. (2019). Synergy, diversification and firm performance in mergers and acquisitions. *Advances in Economics, Business, and Management Research*, 100 (International Conference of Organizational Innovation), 1–5.

Setiawan, C., Hasan, T., Hassan, K., & Mohamad, S. (2017). Non-performing loans and bank efficiency of conventional and Islamic banks in the Organization of Islamic Cooperation (OIC) countries. *Journal of Islamic Economics, Banking and Finance*, 13 (4), 19–44.

Sheidu, A.D., & Yusuf, H. (2015). Impact of forced bank consolidation on return on assets (ROA) in Nigeria : *Journal of Business & Economic Policy*, 2(3), 111 –118.

Sidaoui, M., Ben Bouheni, F., Arslankhuyag, Z., & Mian, S. (2022). Fintech and Islamic banking growth: New evidence. *Journal of Risk Finance*, 23 (5), 535–557.

Sucipto, R.H. (2023). Menguji efek merger terhadap kinerja saham PT Bank Syariah Indonesia Tbk. *Journal of Management Smart and Medium Enterprises (SME's)*, 16(2), 1–7.

Sufian, F., Muhamad, J., Bany-Ariffin, A.N., Yahya, M.H., & Kamarudin, F. (2012). Assessing the effect of mergers and acquisitions on revenue efficiency: Evidence from Malaysian Banking Sector. *Vision: The Journal of Business Perspective*, 16(1), 1–11.

Sufyati, Handayani, T., Maulida, S., & Melati, M. (2022). Financial performance and health analysis of Islamic banking pre -mega merger. *Equilibrium: Jurnal Ekonomi Syariah*, 10(1), 91.

Sumitha, S., & Valarmathi, B. (2024). Impact of consolidation on the financial performance of Indian public banks. *Educational Administration: Theory and Practice*, 30(5), 9774–9784.

Susy M.A.S. (2021). Factor affecting the capital adequacy ratio of banks listed in Indonesia Stock Exchange. *Jurnal Ekonomi*, 26(1), 153.

Tristiningtyas, V., & Mutaher, O. (2016). Analisis faktor-faktor yang mempengaruhi kinerja keuangan pada bank umum Syariah di Indonesia. *Jurnal Akuntansi Indonesia*, 2(2), 131.

Ullah, N., Nor, F.M., & Seman, J.A. (2021). Impact of mergers and acquisitions on operational performance of Islamic banking sector. *Journal of South Asian Studies*, 9(1), 25–36.

Victoria, A.O. (2022). *BSI giatkan pembiayaan berkelanjutan untuk dukung ekonomi hijau RI*. Diakses dari https://news.detik.com/

Wahyudi, S., Sari, S.P., Hersugondo, H., & Udin, U. (2019). Capital adequacy ratio, profit-sharing and return on asset: Case study of Indonesian sharia banks. *WSEAS Transactions on Business and Economics*, 16, 138–144.

Walakandou, R.J.R., Lambey, L., & Tulung, J. (2018). Analyzing PT Bank Keb Hana Indonesia health before and after merger using RBBR approach. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 6 (4), 3388–3397.

Wasiaturrahma, Rohmatul, S., Sukmana, R., Novita, T., & Hudaifah, A. (2020). Heliyon breadth and depth outreach of Islamic cooperatives: Do size, non-performing finance, and grant matter? *Heliyon*, 6(November 2019), e04472.

Wayastaff. (2020). *Dubai Islamic bank completes merger with Noor Bank, cutting at least half the workforce*. Diakses dari https://waya.media/

Widyakto, A., Santoso, A., Hanifah, R.U., & Taruna, M.S. (2023). Effect of ROA, CAR, NPF, and BOPO on Mudharabah Financing (Empirical study of Indonesian Sharia Commercial Banks in 2018–2020). *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship*, 12(2), 383.

Widyaningrum, L., & Septiarani, D.F. (2015). Pengaruh CAR, NPF, FDR, dan OER

terhadap ROA pada Bank Pembiayaan Rakyat Syariah di Indonesia periode Januari 2009 hingga Mei 2014. *JESTT*, 2(12), 970–985.

Wulandari, A.G., Setiawan, I., & Nurdin, A.A. (2022). Pengaruh DPK, FDR, NPF, dan SBIS terhadap pembiayaan UMKM pada BUS di Indonesia. *Journal of Applied Islamic Economics and Finance*, 3(1), 194–202.

Yadav, S., & Jang, J. (2021). Impact of merger on HDFC Bank financial performance: A CAMEL analysis approach. *International Journal of Economics and Finance*, 13(8), 31.

Yazar Soyadı, E. (2019). How merger and acquisition affect firm performance and its quality. *Journal of Accounting Finance and Auditing Studies*, 5(3), 42–53.

Yolandha, F., & Puspaningtyas, L. (2022). *BSI anggarkan sekitar Rp 900 miliar untuk biaya IT*.

Yuliawati, T., Adirestuty, F., Miftahuddin, A., & Hardiansyah, K. (2022). Kebijakan merger bank pada perbankan Syariah: Studi bibliometrik dan perspektif kritis. *Jurnal Inspirasi*, 13(01), 70.

Yunistiyani, V., & Harto, P. (2022). Kinerja PT Bank Syariah Indonesia, Tbk setelah merger: Apakah lebih baik? *Reviu Akuntansi dan Bisnis Indonesia*, 6(2), 67–84.

Yusuf, M., & Ichsan, R.N. (2021). Analysis of banking performance in the aftermath of the merger of Bank Syariah Indonesia in Covid 19. *International Journal of Science, Technology & Management*, 2(2), 472–478.

Yuwannita, A., Mulyany, R., & Fahlevi, H. (2022). What causes non-performance financing? Insights from Islamic commercial banks in Indonesia and Malaysia. Muqtasid*: Jurnal Ekonomi dan Perbankan Syariah*, 13(1), 77–94.