



Comparative of Banking Financial Performance in ASEAN: A Study of Banking in Indonesia, Malaysia, and Singapore

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ARTICLE INFO

Keywords: Financial Performance of Banks ROA, LDR, CAR, BOPO, NPL

Received : 2 November 2025

Revised : 19 December 2025

Accepted: 22 January 2026

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ABSTRACT

ASEAN financial integration has increased interdependence among banking systems, making them more exposed to global economic shocks. Despite operating within the same regional framework, banks in Indonesia, Malaysia, and Singapore show notable differences in financial performance and resilience. This study compares the banking performance of the three countries over the 2020–2024 period using key financial indicators, including Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Operating Expenses to Operating Income (BOPO), and Non-Performing Loans (NPL). The analysis is based on a quantitative, descriptive-comparative approach, examining secondary data from the annual financial statements of the nine largest conventional banks in each country, resulting in 45 observations. Descriptive statistics and One-Way ANOVA tests were applied using IBM SPSS Statistics to identify performance differences across countries. The findings reveal statistically significant differences in all indicators. Indonesian banks recorded the highest profitability and capital strength, with average ROA of approximately 2.8 percent and CAR of 23.8 percent. However, this performance was accompanied by higher operational inefficiency and credit risk, reflected in elevated BOPO and NPL levels. In contrast, banks in Malaysia and Singapore demonstrated more stable and efficient performance, with lower BOPO ratios and smaller NPLs. These results highlight structural and managerial differences across ASEAN banking systems and provide valuable insights for bank managers, regulators, and investors in assessing performance and risk

INTRODUCTION

Economic globalization and regional financial integration have transformed the structure and dynamics of the global banking industry, including in Southeast Asia. This development has made financial systems between countries increasingly interconnected, so that banking stability is no longer purely domestic but has cross-border implications through capital flows, trade, and regional investment (Octaviani et al., 2024). In the context of ASEAN, this integration is strengthened through the establishment of the ASEAN Banking Integration Framework (ABIF), which promotes liberalization, regulatory harmonization, and increased competitiveness of banks across countries (Permatasari, 2020). This integration opens up opportunities for expansion and efficiency in the banking industry, but on the other hand, increases the financial system's vulnerability to external shocks. Global economic fluctuations, policy uncertainty, and capital flow volatility have been shown to weaken banking stability, increase credit and liquidity risks, and enlarge the potential for systemic crises in the Asian region (Chau & Vinh, 2023).

Financial integration makes it so that banking performance can no longer be analyzed solely at the national level, but needs to be placed within a regional framework. Saheruddin and Soedarmono (2019) indicate that the banking sector in ASEAN has strong systemic risk interconnections, meaning that stress on a country's banking system can spread to other countries. This situation underscores that banking stability and performance are common issues in the ASEAN region. Nevertheless, empirical reality shows that the level of banking resilience among ASEAN countries is not uniform. Countries with relatively advanced financial systems,, such as Singapore, Malaysia, and Indonesia, tend to have more stable Non-Performing Loan (NPL) ratios compared to developing countries like Laos, Myanmar, and Cambodia, which have experienced a significant increase in problematic loans. This difference reflects the gap in risk management quality, economic structure, and institutional capacity between countries.

Indonesia, Malaysia, and Singapore were chosen as the focus of the study because they represent three contrasting banking system models in ASEAN. Indonesia reflects the characteristics of an emerging market with a strong financing orientation toward the real sector and SMEs. Malaysia represents a dual banking system that integrates conventional and Islamic banking as one of the regional financial centers. Singapore reflects a developed country with a role as a global financial hub supported by advanced governance, regulation, and financial technology. Although all three are relatively stable, each faces different challenges. Indonesia shows a fairly strong recovery in profitability but is still overshadowed by credit risks and governance issues (OJK, 2024; Transparency International, 2024). Malaysia is experiencing a slower recovery due to high sensitivity to global trade and the manufacturing sector (BNM, 2024). Singapore's banking sector, despite having the best governance in the region, remains vulnerable to economic and global interest rate volatility as a consequence of its role in the international financial system (MAS, 2024; World Bank, 2024).

Various previous studies have discussed banking performance in the ASEAN region. Dura (2022) found significant differences in bank profitability, liquidity, and credit risk between countries during the pandemic. Nugroho and Mardiana (2024) showed that all RGEK indicators differed significantly between Indonesia, Malaysia, and Singapore. Meanwhile, Zuhroh et al. (2024) found that the impact of financial ratios on profitability varied across countries. Although these studies provide important contributions, they are generally partial in nature, focusing more on the relationships between variables, using a limited period, and have not provided a complete comparative picture of cross-country banking performance within a unified analytical framework. Furthermore, previous research results show diverse and not always consistent findings, particularly regarding capital ratios, liquidity, and efficiency.

Based on this gap, this study aims to analyze and compare the financial performance of banks in Indonesia, Malaysia, and Singapore during the period 2020-2024 using five key ratios: Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Operating Expense to Operating Income (BOPO). These five ratios comprehensively represent the dimensions of profitability, liquidity, capitalization, asset quality, and operational efficiency. Thus, this study is expected to provide a more complete picture of the differences in banking performance characteristics across countries, enrich the literature on the stability of the banking sector in ASEAN, and serve as a reference for regulators and industry players in formulating policies and strategies to strengthen the regional banking system.

LITERATURE REVIEW

The theory underlying this research is Signalling Theory, which was first introduced by Spence (1973) and further developed by Ross (1977). This theory explains the existence of information asymmetry between internal parties of the company, who have more complete information about the company's condition and prospects, and external parties, who have limited information. In this context, company management attempts to send signals through published financial information so that external parties, especially investors and stakeholders, can better assess the company's quality and performance (Ghozali, 2020). Companies with good performance tend to provide positive signals to distinguish themselves from companies with poorer performance.

In the banking sector, financial performance signals are clearly reflected through financial statements that contain various financial ratios as key indicators of a bank's condition. Profitability ratios such as Return on Assets (ROA) provide a signal regarding the bank's ability to generate profit from the assets it manages. Liquidity ratios represented by the Loan to Deposit Ratio (LDR) reflect the bank's ability to manage third-party funds and optimally channel them into loans. The Capital Adequacy Ratio (CAR) indicates the bank's capital strength in absorbing risks, while Non-Performing Loans (NPL) serve as a signal of asset quality and the effectiveness of credit risk management. In

addition, the Operating Expenses to Operating Income ratio (BOPO) reflects the level of operational efficiency in running the bank's business activities. Changes in these ratios become important signals for external parties in assessing banking stability and health.

Financial performance generally reflects an entity's ability to manage its financial resources effectively and efficiently to achieve organizational goals. Fahmi (2017) defines financial performance as the result of evaluating the implementation of financial management policies and practices in accordance with applicable standards and regulations. Financial performance analysis is conducted through a series of stages, starting from reviewing financial statements, calculating ratios, comparing across periods or companies, to interpreting results and formulating solutions to identified problems. In the banking context, financial performance analysis is very important because banks are institutions that operate based on public trust and are under strict regulatory supervision.

Financial ratio analysis plays a central role in assessing banking performance because these ratios reflect the effectiveness and efficiency of management in managing assets, liabilities, and capital. Fahmi (2017) emphasizes that financial ratios not only function as tools for historical evaluation but also serve as a basis for decision-making for management, investors, creditors, and regulators. In this study, the measurement of banking financial performance refers to the Risk-based Bank Rating approach according to POJK Number 4/POJK.03/2016, which emphasizes the assessment of profitability, liquidity, capital adequacy, operational efficiency, and asset quality through the ratios ROA, LDR, CAR, BOPO, and NPL.

The characteristics of the banking systems in Indonesia, Malaysia, and Singapore show quite significant differences. Indonesia positions banking as a key pillar of national development, focusing on financing the productive sector and improving financial inclusion. Malaysia implements a dual banking system that allows conventional and Islamic banks to develop side by side and has a strong orientation toward regional expansion. Meanwhile, Singapore positions its banking sector as an international financial center with a high level of digitalization and strict regulation under the supervision of the Monetary Authority of Singapore. These differences in characteristics are expected to impact the variation in banking financial performance in each country.

Several previous studies have examined the comparison of banking financial performance in the ASEAN region. Zuhroh et al. (2024) found that the NPL, CAR, and BOPO ratios significantly affect ROA in ASEAN banking, with varying impacts across countries. Nugroho and Mardiana (2024) showed significant differences in the RGEC ratios of banks in Indonesia, Malaysia, and Singapore, reflecting differences in bank health levels. Malik et al. (2020) emphasized that Indonesian banking financial performance is relatively superior compared to other ASEAN countries, particularly in the CAR and ROA ratios, and highlighted the positive role of digitalization in banking profitability.

Other research focusing on the Covid-19 pandemic period also shows varied results. Dura (2022) found significant differences in the NPL, LDR, and

ROA ratios of ASEAN banks during the pandemic, while the CAR ratio remained relatively stable. Safitri et al. (2024) and Harfina et al. (2023) indicate that the impact of the pandemic on banking performance varies between countries and is strongly influenced by each country's banking policies and system structure. However, most of these studies still focus on Islamic banking or have a limited observation period.

Based on a review of previous research, a gap can be identified both theoretically and empirically. Theoretically, there has been limited research explicitly integrating Signaling Theory in the comparative analysis of banking financial performance across ASEAN countries. Empirically, most previous studies are still limited to two countries, focus on Islamic banking, or only cover the pandemic period without considering post-pandemic conditions. In addition, the use of the BOPO ratio as an indicator of operational efficiency in cross-country comparative studies is still relatively limited.

Based on this gap, this study provides a scientific contribution by presenting a comparative analysis of the financial performance of conventional banks in Indonesia, Malaysia, and Singapore during the 2020-2024 period, which includes the pandemic and post-pandemic era. This study uses five main financial ratios as indicators of bank performance and tests the differences between countries statistically. Thus, this research is expected to address the limitations of previous studies and enrich the literature on banking stability and performance in the ASEAN region. Based on the theoretical framework and previous empirical findings, this study formulates the hypothesis that there are significant differences in the financial performance of banks in Indonesia, Malaysia, and Singapore, measured through ROA, LDR, CAR, BOPO, and NPL ratios during the 2020-2024 period.

METHODS

Research Design

This study uses a quantitative approach with a comparative descriptive design. The quantitative approach was chosen because the research focuses on measuring banking financial performance using numerical data in the form of financial ratios that are analyzed objectively through statistical techniques. The comparative descriptive design is used to describe the characteristics of banking financial performance while also comparing performance differences between countries, namely Indonesia, Malaysia, and Singapore, based on certain financial ratio indicators. This approach allows researchers to identify statistically significant differences between research object groups (Sekaran and Bougie, 2016).

Research Location and Time

This research was conducted in the banking sector in three ASEAN countries, namely Indonesia, Malaysia, and Singapore. The selection of research locations was based on differences in financial system characteristics and the level of economic development in each country. The observation period covers the years 2020-2024, representing the dynamics of banking performance during

the COVID-19 pandemic and the post-pandemic period, thus providing a relevant overview of the resilience and adaptation of the banking sector in the ASEAN region.

Population and Sample

The population in this study consists of all banking companies listed on the stock exchange of each country during the 2020-2024 period. Based on stock exchange data, the banking population in Indonesia consists of 47 banks listed on the Indonesia Stock Exchange (IDX), in Malaysia there are 10 banks listed on Bursa Malaysia, while in Singapore there are only 3 banks listed on the Singapore Exchange (SGX), namely DBS Group Holding Ltd, Oversea-Chinese Banking Corporation Ltd (OCBC), and United Overseas Bank Ltd (UOB). The banking population in Singapore is relatively small because the SGX classifies the financial sector into various subsectors, such as insurance, investment, and other financial services, so only three entities meet the criteria as commercial banks.

The determination of the sample in this study used purposive sampling, which is the selection of samples based on certain criteria relevant to the research objectives (Sekaran & Bougie, 2016). The sample was determined with the following criteria: (1) banks listed on the stock exchange of each respective country during 2020-2024, (2) having complete financial statements that include data on the research variables, and (3) among the three largest conventional banks in each country. The selection of the largest banks was based on the consideration that these banks are Domestic Systemically Important Banks (D-SIBs) that play a strategic role in the stability of the national financial system. In addition, the three countries represent different system characteristics, namely Indonesia as an emerging market, Malaysia with a dual banking system, and Singapore as a regional financial center, so the comparison among the largest banks provides strong scientific value.

Based on these criteria, a sample of 9 banks was obtained, consisting of three banks in Indonesia (BBRI, BBNI, BBCA), three banks in Malaysia (Maybank, CIMB, Public Bank), and three banks in Singapore (DBS, OCBC, UOB). With an observation period of five years (2020-2024), the total unit of analysis used in this study amounted to 45 observations (9 banks × 5 years). Although the sample size is relatively small compared to the population, the three largest banks in each country have significant asset dominance, thus systemically representing the condition of the national banking industry, in line with previous research practices such as Nugroho and Mardiana (2024) and Dura (2022).

Instruments and Data Collection Techniques

The research instruments used consisted of financial ratio indicators sourced from banks' annual financial statements. Financial performance was measured using five main ratios: Return on Assets (ROA) as a profitability indicator, Loan to Deposit Ratio (LDR) as a liquidity indicator, Capital Adequacy Ratio (CAR) as a solvency indicator, Non-Performing Loan (NPL) as an asset quality and credit risk indicator, and Operating Expenses to Operating Income (BOPO) as an operational efficiency indicator. The data used were secondary data collected through documentation techniques by tracing and downloading audited annual financial statements from the official websites of the respective banks and the capital market authorities in the relevant country. The use of

financial ratios as measurement instruments is considered to have high validity because these ratios are standard indicators widely used in banking performance analysis (Sekaran and Bougie, 2016).

Data Analysis Techniques

The data analysis technique in this study was carried out through two main stages, namely descriptive statistical analysis and comparative statistical analysis. Descriptive analysis is used to provide a general overview of the financial ratio characteristics of banks, including Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and BOPO in banks in Indonesia, Malaysia, and Singapore during the period 2020-2024. The statistics presented include minimum, maximum, average, and standard deviation values to understand the patterns and spread of the data before further testing is conducted. All data processing was carried out with the assistance of IBM SPSS Statistics and Microsoft Excel, where Excel was used for initial calculations and ratio recapitulation, while SPSS was used for systematic and standardized statistical analysis (Ghozali, 2021).

A comparative analysis was conducted to examine differences in financial performance between countries using a test for differences among more than two groups. Before testing, the data were assessed for normality using the Shapiro-Wilk test and for homogeneity of variances using Levene's Test. If the data met parametric assumptions, a One-Way ANOVA was used with a significance level of 0.05, followed by a post-hoc test such as Tukey HSD or Games-Howell, depending on the variance characteristics. Conversely, if the normality assumption was not met, the non-parametric Kruskal-Wallis test was used as an alternative, accompanied by relevant follow-up tests. This approach allows for an objective and reliable determination of differences in banking financial performance in Indonesia, Malaysia, and Singapore.

RESULTS AND DISCUSSION

Overview and Characteristics of Data

This study analyzes the financial performance of banks in Indonesia, Malaysia, and Singapore during the 2020-2024 period using five key ratios, namely Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Operating Expenses to Operating Income (BOPO), and Non-Performing Loan (NPL). The data used are secondary data sourced from banks' annual financial reports and are panel in nature, combining cross-country and time-series dimensions. This approach allows for a more comprehensive comparative analysis of financial performance by considering economic dynamics during the pandemic and the post-pandemic recovery period.

Table 1. Descriptive Analysis of Bank Indonesia

Bank Name	Indicator	Min.	Max.	Mean	Std. Dev.
BRI	ROA	1,98	3,93	3,23	0,85
	LDR	79,17	89,39	84,12	3,64
	CAR	20,61	26,63	24,21	2,34
	BOPO	64,20	81,22	70,34	7,33
	NPL	2,82	3,12	2,98	0,12
BNI	ROA	0,50	2,60	1,90	0,92
	LDR	79,70	96,10	86,62	6,02
	CAR	16,80	22,00	19,84	2,04
	BOPO	68,40	93,30	76,34	10,86
	NPL	2,00	4,30	2,98	1,00
BCA	ROA	2,70	3,90	3,24	0,48
	LDR	62,00	78,40	68,32	6,19
	CAR	25,70	29,40	27,22	1,87
	BOPO	41,70	63,50	49,84	9,36
	NPL	1,80	2,20	1,90	0,16

Source: Data Processed by Researchers, 2025

Table 2. Analisis Deskriptif Bank Malaysia

Bank Name	Indicator	Min.	Max.	Mean	Std. Dev.
Maybank	ROA	0,80	1,00	0,90	0,08
	LDR	89,50	91,70	90,72	0,93
	CAR	18,68	19,51	19,11	0,33
	BOPO	45,20	48,90	46,72	1,90
	NPL	0,46	1,10	0,70	0,25
CIMB Bank	ROA	0,20	1,40	0,83	0,46
	LDR	85,80	89,00	88,02	1,19
	CAR	17,60	18,90	18,52	0,52
	BOPO	46,70	51,70	48,14	1,91
	NPL	2,10	3,60	3,04	0,58
Public Bank	ROA	1,40	1,80	1,64	0,15
	LDR	90,10	94,30	91,78	1,63
	CAR	17,10	17,70	17,42	0,29
	BOPO	31,50	34,60	33,18	1,33
	NPL	0,31	0,59	0,44	0,11

Source: Data Processed by Researchers, 2025

Table 3. Descriptive Analysis of Singapore Bank

Bank Name	Indictor	Min.	Max.	Mean	Std. Dev.
DBS Bank	ROA	0,75	1,45	1,14	0,27
	LDR	76,70	81,50	78,90	1,79
	CAR	16,10	18,60	17,10	0,94
	BOPO	39,90	45,60	42,12	2,28
	NPL	1,10	1,60	1,24	0,21
OCBC Bank	ROA	0,85	1,53	1,24	0,27
	LDR	80,50	83,70	82,36	1,53
	CAR	17,60	19,70	18,20	0,82
	BOPO	38,70	45,00	42,02	2,42
	NPL	0,90	1,50	1,22	0,24
UOB Bank	ROA	0,69	1,16	0,97	0,18
	LDR	83,37	88,10	85,66	1,99
	CAR	16,60	18,40	17,30	0,92
	BOPO	41,50	45,60	43,40	1,62
	NPL	1,50	1,60	1,56	0,05

Source: Data Processed by Researchers, 2025

Descriptive statistical results indicate that banking performance in Indonesia, Malaysia, and Singapore has different characteristics. Indonesian banks show relatively high profitability, particularly BCA and BRI, with an average ROA above 3%, but accompanied by greater fluctuations compared to the other two countries, especially in BNI. In terms of liquidity, Indonesian banks also show a wider variation in LDR, indicating more volatile credit distribution dynamics. BCA stands out with the strongest capitalization (highest CAR) and the best efficiency (lowest BOPO), while BNI records relatively higher BOPO and NPL, reflecting challenges in efficiency and asset quality. In contrast, Malaysian banks tend to be stable across almost all ratios, with Public Bank being the most efficient bank and having the lowest NPL, although its profitability level is relatively lower compared to Indonesia and Singapore. Malaysian banks also show small variations in ratios, indicating consistent performance over the observation period.

Singapore's banking sector appears to be the most stable and overall superior. The ROA of the three banks is relatively high and consistent, with a low standard deviation reflecting sustainable profitability. The LDR, CAR, BOPO, and NPL ratios are also within a healthy and stable range, indicating strong risk management maturity and operational efficiency. Comparatively, these findings suggest that Singapore has the most stable banking system, Malaysia excels in terms of efficiency and asset quality, while Indonesia shows high profitability potential but with greater volatility. These differences underscore the variation in structure and resilience of banking systems across ASEAN countries.

Differences in Financial Performance Between Countries

Table 4. ROA Difference Test One-Way ANOVA

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
LN_ROA	Between Groups	9.484	2	4.742	31.014	<,001
	Within Groups	6.116	40	.153		
	Total	15.600	42			
LN_LDR	Between Groups	.141	2	.070	11.320	<,001
	Within Groups	.249	40	.006		
	Total	.390	42			
LN_CAR	Between Groups	.841	2	.421	53.623	<,001
	Within Groups	.314	40	.008		
	Total	1.155	42			
LN_BOPO	Between Groups	1.441	2	.721	26.540	<,001
	Within Groups	1.086	40	.027		
	Total	2.527	42			
LN_NPL	Between Groups	7.387	2	3.693	12.707	<,001
	Within Groups	11.626	40	.291		
	Total	19.013	42			

The results of the One-Way ANOVA test indicate that the Return on Assets (ROA) ratios of banks in Indonesia, Malaysia, and Singapore differ significantly during the 2020-2024 period (Sig. < 0.001). The homogeneity of variance test shows that ROA data is homogeneous, so the subsequent test used is the Tukey HSD. The Tukey test results confirm that the ROA of Indonesian banks is significantly different compared to Malaysia and Singapore, while the ROA of Malaysian and Singaporean banks does not show a significant difference. These findings indicate that the profitability performance of Indonesian banks has characteristics that differ from the other two countries. From the perspective of Signal Theory, ROA reflects the bank management's ability to manage assets to generate profit. The significant differences in ROA among Indonesian banks signal to investors that the profitability levels of banks in Indonesia are not the same as in Malaysia and Singapore. However, these differences also indicate that an increase in profit does not necessarily accompany overall performance stability. This research finding aligns with Nugroho and Mardiana (2024) as well as Malik et al. (2020), who stated that Indonesian banks tend to have varying levels of profitability, even though they still face efficiency and operational risk challenges.

The results of the One-Way ANOVA test on the Loan to Deposit Ratio (LDR) showed significant differences between countries (Sig. < 0.001). The test for homogeneity of variances indicated that the data variances were not homogeneous, so the subsequent test used was Games-Howell. The Games-Howell test results showed that Malaysia's banking LDR differed significantly compared to Indonesia and Singapore, while the LDRs of Indonesian and Singaporean banks did not differ significantly. These findings indicate that Malaysia's banking liquidity management strategy follows a pattern different

from the other two countries. From the perspective of Signal Theory, the LDR provides an overview of intermediation policies and the level of bank liquidity risk. A relatively higher LDR in Malaysian banking can be seen as a signal of more active credit allocation. However, this condition also indicates the need for caution in liquidity management to avoid future financing risks. This finding is consistent with Nugroho and Mardiana (2024), who found that Malaysian banks tend to have LDRs that differ from those of other ASEAN countries.

The results of the One-Way ANOVA test on the Capital Adequacy Ratio (CAR) indicate significant differences between countries (Sig. < 0.001). The homogeneity of variance test shows that the data are not homogeneous, so the follow-up test used is Games-Howell. The test results show that the CAR of Indonesian banks differs significantly compared to Malaysia and Singapore, whereas the CAR of Malaysian and Singaporean banks do not show significant differences. These findings indicate that the capitalization level of Indonesian banks is relatively stronger compared to the other two countries. In the framework of Signaling Theory, CAR serves as an indicator of a bank's resilience in facing the risk of losses. A higher CAR provides a security signal for investors and regulators regarding the bank's ability to absorb risk. However, a high capitalization level also needs to be balanced with the utilization of productive assets so as not to hinder intermediation performance. These results are in line with the findings of Malik et al. (2020) and Dura (2022).

The results of the One-Way ANOVA test on the ratio of Operating Expenses to Operating Income (BOPO) show significant differences between countries (Sig. < 0.001). The subsequent Games-Howell test indicates that the BOPO of Indonesian banks differs significantly compared to Malaysia and Singapore, whereas the BOPO of Malaysian and Singaporean banks does not show a significant difference. These findings suggest that the operational efficiency level of Indonesian banks has characteristics that are different from the other two countries. In Signaling Theory, BOPO reflects management efficiency in controlling operational costs. Differences in BOPO provide signals regarding the quality of a bank's operational management. A lower BOPO indicates better efficiency, whereas a higher BOPO indicates operational cost pressure. These findings support the research results of Nugroho and Mardiana (2024) as well as Dura (2022), which state that banks in countries with high operational efficiency tend to have better competitiveness.

The results of the One-Way ANOVA test on the Non-Performing Loan (NPL) ratio indicate a significant difference between countries (Sig. < 0.001). The follow-up Games-Howell test shows that Indonesia's banking NPL differs significantly compared to Malaysia and Singapore, while the banking NPLs of Malaysia and Singapore do not show a significant difference. These findings indicate that the level of credit risk in Indonesian banks still differs noticeably compared to the other two countries. From the perspective of Signaling Theory, NPL is a key indicator of asset quality and the effectiveness of credit risk management. A relatively higher NPL signals an increase in risk that needs to be addressed through stronger credit management. The results of this study are

consistent with Malik et al. (2020) and Dura (2022), who stated that banks in developing countries tend to be more vulnerable to credit risk, especially during periods of economic uncertainty.

CONCLUSIONS

This study aims to analyze and compare the financial performance of banks in Indonesia, Malaysia, and Singapore during the period 2020-2024 using indicators such as Return on Assets (ROA), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), Operating Expenses to Operating Income (BOPO), and Non-Performing Loan (NPL). Based on the results of the comparative statistical analysis, this study concludes that the financial performance of banks in these three ASEAN countries shows significant differences in all the ratios analyzed. These findings indicate that although they are within a single integrated regional area, the structural characteristics, regulatory policies, and banking management strategies in each country result in different financial performance profiles.

In terms of profitability, the test results show that the ROA of Indonesian banks differs significantly compared to Malaysia and Singapore, while Malaysia and Singapore do not show a significant difference. This indicates that Indonesian banks have a relatively higher ability to generate profit from assets. However, this high profitability is also accompanied by greater fluctuations, reflecting higher risk dynamics. In the LDR ratio, the significant difference is primarily shown by Malaysian banks, which have a different liquidity management pattern compared to Indonesia and Singapore. This finding reflects a more aggressive intermediation strategy, which has the potential to accelerate credit growth but also requires stricter liquidity risk management.

Furthermore, in terms of the CAR ratio, Indonesian banking once again shows a significant difference compared to Malaysia and Singapore, with relatively higher capitalization levels. This condition reflects strong resilience against risks and economic shocks, but it also indicates that there is efficiency potential that has not been fully utilized in converting capital into optimal profitability. In terms of the BOPO ratio, Indonesian banking also shows a significant difference, with lower efficiency compared to the other two countries. This indicates that operational costs of Indonesian banks are relatively higher in relation to the income generated, potentially reducing competitiveness at the regional level. Meanwhile, in terms of the NPL ratio, Indonesian banking has a higher credit risk level, reflecting challenges in managing asset quality and the importance of strengthening credit risk management.

Based on these findings, prospective investors are advised not to focus solely on one country when placing their funds, but to implement a cross-country diversification strategy. Indonesian banking is more suitable for investors oriented towards growth and high returns, although it comes with a higher level of risk. Malaysian banking occupies a moderate position, balancing profitability and stability, making it suitable for investors with a medium risk profile. Meanwhile, Singaporean banking tends to have stronger stability, better efficiency, and lower risk, making it more suitable for investors who prioritize safety and long-term investment sustainability.

For the banking industry in Indonesia, Malaysia, and Singapore, the results of this study emphasize the importance of strengthening liquidity management, capital, operational efficiency, and asset quality. Indonesian banks, in particular, need to reduce operational costs through the use of digital technology, improvement of cost structures, and enhancement of human resource productivity. Additionally, strengthening credit risk management is crucial to lowering the NPL level to ensure the stability of the banking system. Meanwhile, banks in Malaysia and Singapore are expected to maintain the stability they have achieved, while continuously innovating in response to global economic dynamics and regional financial integration.

Nevertheless, this study has several limitations. The research only used five financial ratios as indicators of performance, which does not fully reflect all aspects of banking risk and performance. In addition, the research subjects were limited to the largest conventional banks in three countries, so the findings cannot yet be generalized to the entire banking sector in the ASEAN region. The observation period, limited to 2020-2024, also does not fully capture the long-term dynamics of the banking industry.

Based on these limitations, future research is recommended to include other performance indicators, such as the Net Interest Margin (NIM) ratio. Future studies can also expand the scope of countries and research periods to obtain a more comprehensive picture of the development and resilience of the banking sector in the ASEAN region. Thus, comparative studies of banking financial performance are expected to continue to develop and provide a broader contribution to the development of academic literature as well as to regional banking industry practices.

FURTHER STUDY

This research still has limitations so further research is needed regarding Comparative of Banking Financial Performance in ASEAN to perfect this research and increase insight for readers and writers.

REFERENCES

- Autoriti Monetari Brunei Darussalam. (2024). Monetary & Financial Stability Report. <https://www.ambd.gov.bn/>
- Banco Central de Timor-Leste. (2024). Financial Soundness Indicators. <https://www.bancocentral.tl/>
- Bangko Sentral ng Pilipinas. (2024). Non-performing Loans Statistics. <https://www.bsp.gov.ph/>
- Bank Negara Malaysia. (2024). Financial Stability Review. <https://www.bnm.gov.my/>
- Bank of Thailand. (2024). Annual Banking Statistics. <https://www.bot.or.th/>
- Bank of the Lao PDR. (2024). Annual Economic Report. <https://www.bol.gov.la/>
- Central Bank of Myanmar. (2024). Financial Sector Performance Update. <https://www.cbm.gov.mm/>
- Chau, N. T. M., & Vinh, V. X. (2023). Economic policy uncertainty, globalization and banking stability. *International Journal of Business and Society*, 24(3), 1231–1251. <https://doi.org/10.33736/ijbs.6420.2023>
- Dura, J. (2022). Comparison analysis of ASEAN banking financial performance during the pandemic. *Jurnal Akuntansi dan Bisnis*, 8(2), 126–141. <https://doi.org/10.31289/jab.v8i2.7618>
- Fahmi, I. (2017). Analisis kinerja keuangan (Edisi keempat). Alfabeta.
- Ghozali, I. (2020). 25 grand theory. Yoga Pratama.
- Ghozali, I. (2021). Aplikasi analisis multivariate dengan program IBM SPSS 26. Badan Penerbit Universitas Diponegoro.
- Judijanto, L. (2025). Perkembangan penelitian tentang integrasi ekonomi dan stabilitas keuangan di ASEAN. *Jurnal Akuntansi dan Keuangan West Science*, 4(1), 50–59. <https://doi.org/10.58812/jakws.v4i01.1948>
- Malik, N., Oktavia, A., Suliswanto, W., Aksari, F., & Raya, M. J. (2020). Kinerja keuangan perbankan negara-negara ASEAN-5 di era digital. *Jurnal Ekonomi dan Bisnis*, 24(1), 117–130.
- Monetary Authority of Singapore. (2024). Financial stability review. <https://www.mas.gov.sg/>

- National Bank of Cambodia. (2024). Financial Stability Review.
<https://www.nbc.org.kh/>
- Nugroho, A. Y., & Mardiana, L. F. (2024). Analisis komparasi kinerja laporan keuangan sektor perbankan menggunakan metode RGEC (studi pada bank umum Indonesia, Malaysia, dan Singapura). *Jurnal Akuntansi*, 5, 1-7.
- Octaviani, W., Sihombing, T., & Sirait, J. A. (2024). Dampak globalisasi ekonomi terhadap stabilitas lembaga keuangan perbankan. *Jurnal Ekonomi dan Pembangunan*, 2(3), 97-104.
- (OJK), O. J. K. (2016). Peraturan Otoritas Jasa Keuangan Nomor 11/POJK.03/2016 Tahun 2016 tentang Kewajiban Penyediaan Modal Minimum Bank Umum. *JDIH BPK*.
<https://peraturan.bpk.go.id/Details/129768/peraturan-ojk-no-11poj032016-tahun-2016?>
- Otoritas Jasa Keuangan. (2017). Surat Edaran OJK Nomor 14/SEOJK.03/2017 tentang penilaian tingkat kesehatan bank umum.
- Otoritas Jasa Keuangan. (2024). Statistik perbankan Indonesia.
<https://www.ojk.go.id/>
- Permatasari, M. D. (2020). Upaya ASEAN menghadapi disparitas finansial dalam proses integrasi finansial regional: Studi kasus ASEAN Banking Integration Framework (ABIF). *Jurnal Hubungan Internasional*, 226-238.
- Saheruddin, H., & Soedarmono, W. (2019). Financial crisis and cointegration of systemic risk in Southeast Asian banking. *Jurnal Keuangan dan Perbankan*, 23(4), 479-488. <https://doi.org/10.26905/jkdp.v23i4.3669>
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.
- State Bank of Vietnam. (2024). Financial Stability Report.
<https://www.sbv.gov.vn/>
- Transparency International. (2024). Corruption perceptions index 2024.
<https://www.transparency.org/>

World Bank. (2024). Worldwide governance indicators.
<https://info.worldbank.org/governance/wgi/>

Zuhroh, I., & Kurniawati, E. T. (2024). Analisis perbandingan kinerja keuangan perbankan konvensional di ASEAN. *Jurnal Manajemen dan Bisnis*, 12(3), 2701-2714.