Comparative Analysis of the Health Level of State-owned Banks and Private Banks Using the RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital) Method in 2019-2023

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Abstract. This study compares the health levels of state-owned and private banks in Indonesia from 2019 to 2023 using a quantitative descriptive approach based on the RGEC method (Risk Profile, Good Corporate Governance, Earnings, and Capital). The indicators analyzed include Non-Performing Loan (NPL), Good Corporate Governance (GCG), Return on Assets (ROA), and Capital Adequacy Ratio (CAR). Data were collected from the financial reports of four state-owned banks (Mandiri, BRI, BNI, BTN) and four private banks (BCA, CIMB Niaga, Danamon, Permata) listed on the Indonesia Stock Exchange. Descriptive statistics and Independent Samples T-Test were used for analysis. Results show a significant difference in NPL (Sig. < 0.05), with private banks having lower NPLs, indicating better credit quality. However, GCG, ROA, and CAR show no significant differences (Sig. > 0.05), meaning both types of banks have similar performance in governance, profitability, and capital adequacy.

Keywords: Bank Health, NPL, GCG, ROA, CAR

1 INTRODUCTION

Banks are financial institutions that play an important role in collecting and distributing funds and providing various financial services. As a company engaged in the financial sector, banks function to manage funds from the public and redistribute them through credit or other forms to support the economy. Law of the Republic of Indonesia No.10/1998, banks are business entities that aim to improve people's living standards by managing deposits and credit. In its development, banks were known not only in urban areas but also in rural areas, becoming an important part of daily financial transactions (Andrianto, 2019:2)

Banking is increasingly needed by the government and the public, especially in Indonesia, to support economic stability, provide efficient financial services, and encourage in facing challenges such as fierce competition in the banking sector, technological disruptions, regulatory changes, and the impact of the economic crisis and the COVID-19 pandemic. This increasingly fierce competition encourages banks to continue to innovate and improve efficiency in delivering their products and services (Ferozi Ramdana, 2024).

Impact of the pandemic *COVID-19* pose a major challenge to banking performance in Indonesia, especially in asset quality and profit. Many banks are facing liquidity difficulties due to declining revenues from interest and administrative fees, while credit ratios are in trouble *Non Performing Loan* (NPL) also increased in line with the difficulty of debtors in meeting payment obligations (Raden Saparinda, 2021)

Credit risk occurs when the debtor defaults on debt as agreed, and is measured through the ratio *Non-Performing Loan* (NPL). High NPLs indicate that banks are not precise in distributing credit and risk causing losses. Therefore, banks seek to keep NPLs low through rigorous selection and financial education to minimize the risk of default(OCBC NISP, 2022).

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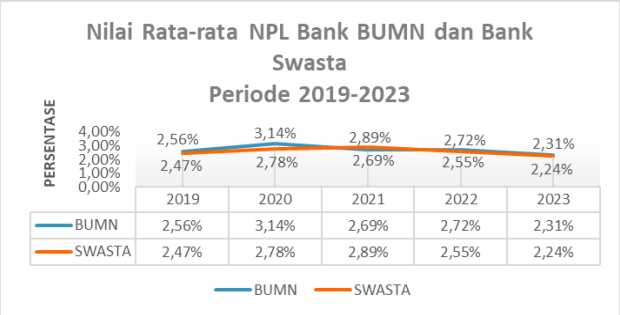

Figure 1. Average NPL of State-Owned Banks and Private Banks
Source: *Secondary data processed idx.co.id 2019-2023*

Based on Figure 1, the average *Non-Performing Loan* (NPL) ratio of four state-owned banks (Mandiri, BRI, BNI, BTN) and four private banks (BCA, CIMB, Danamon, Permata) during 2019–2023 is in the "Healthy" category. Private Banks recorded NPLs of 2.24%, slightly lower than State-Owned Banks of 2.31%, indicating more stable credit quality. In 2021, state-owned banks such as BNI, BRI, and Mandiri reduced NPLs through restructuring and increasing reserves. On the other hand, BCA's NPLs increased due to post-pandemic economic pressures. The increase in NPLs has a negative impact because it increases the reserve burden, which has the potential to lower *the Capital Adequacy Ratio* (CAR) and *Return on Assets* (ROA).

In the digital age, the banking sector faces serious challenges in cybersecurity. As the use of digital services increases, the risk of attacks rises sharply. BCA reported 4 billion cyberattacks throughout 2024, up sharply from 1.9 billion in 2023, showing that criminals continue to look for loopholes in the banking system (Antaranews.com, 2025). Meanwhile, state-owned banks such as BRI also face major challenges, with 15 cases of corruption related to the misuse of customer funds and credit disbursement (Indonesia Corruption Watch, 2022). BRI was also the target of a ransomware attack by the Bashe group on its 129th birthday, with a deadline of December 23, 2024 at 16.00 WIB (Tempo.com, 2024). Transparency and accountability in state-owned banks are still considered weak due to the low implementation of SMAP, ISO 37001 standards, and the lack of comprehensive anti-corruption policies (TI Indonesia, 2024).

These problems emphasize the importance of implementing *Good Corporate Governance* (GCG) in state-owned and private banks. GCG that prioritizes transparency, accountability, responsibility, independence, and fairness aims to strengthen governance, reduce the risk of corruption, and protect customer funds (Financial Services Authority, 2017). Strong GCG implementation will increase public trust and strengthen banking security, especially amid high interbank competition and increasing digital threats.

Analyzing the comparison of financial performance between state-owned and private banks is important to do by referring to relevant previous research. (Kannapadang, 2023) analyzed the health of Bank BNI for the 2019–2020 period and found that the Return On Assets (ROA) ratio decreased from 2.3% to 0.5%, reflecting a decrease in efficiency in generating profits. Return On Equity (ROE) has also decreased, indicating the difficulty of delivering returns to shareholders. Although the Net Profit Margin (NPM) is still positive, it is lower than before. Overall, PT Bank Negara Indonesia (Persero) Tbk remained categorized as healthy, but experienced a significant decline in performance.

Meanwhile, research from (Filka Maftikha et al., 2024) revealed that there are significant differences in financial performance between state-owned banks and private banks, especially in the ratio of Market Value Added, liquidity, solvency, and activity, while in the profitability ratio there is no significant difference. Using the *Mann-Whitney Test,* This study shows that the difference in financial performance depends on the type of ratio used, where SOE Banks generally show better performance than BUMS Banks. These findings are reinforced by research (Supit et al., 2019) which analyzes the ratio of ROA, ROE, NIM, CAR, and NPL in the period 2013–2017. The results of the t-test showed that there was no significant difference in the four ratios, except in the NPL ratio, which showed a difference between state-owned banks and National Private Banks.

Problem phenomena such as high corruption cases, cybersecurity risks, and weak governance in state-owned banks, and on the other hand the increasing financial performance of private banks, show the importance of an in-depth analysis of the level of banking health in the midst of competition between the two types of banks. Although several studies have discussed profitability and efficiency, there are still few that specifically compare the health of state-owned and private banks using the RGEC method according to SEOJK No.14/SEOJK.03/2017.

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Aspects such as Risk Profile (NPL), *Good Corporate Governance* (GCG), Profitability (ROA), and Capital (CAR) need to be thoroughly examined to assess the performance and stability of each bank. Therefore, this study is titled: "Comparative Analysis of the Health Level of State-Owned Banks and Private Banks with the RGEC Method in 2019–2023", with the aim of identifying and analyzing differences in the performance of the two types of banks based on the NPL, GCG, ROA, and CAR ratios during the period.

The first theory in this study is *Resource-Based View* (RBV) *Theory*, explaining that a company's competitive advantage depends on its ability to manage unique and strategically valuable internal resources to support the achievement of maximum financial performance (Widagdo et al., 2019:148). (Barney, 1991) states that resources that can create a competitive advantage must have strategic value, high complexity, exclusivity, difficult to replicate, and can be widely applied (Widagdo et al., 2019:95), so that effective management of NPLs reflects the use of resources to strengthen the bank's financial performance.

The second theory used is *Signaling Theory* developed by Michael Spence (1973), explains that the party who has the information will give a signal to other parties, such as investors, about the condition of the company. In this context, financial information such as ROA and CAR serves as a signal that reflects the condition and outlook of the bank's health (Yusri, 2020:34). The third theory is the Agency Theory of (Jensen & Meckling, 1976), which discusses the relationship between the owner (principal) and the manager (agent), where there is often a conflict of interest due to differences in objectives, so the application of the principle is necessary *Good Corporate Governance* (GCG) to ensure managers act in accordance with the interests of the owner.

3 RESEARCH METHODS

This study uses a quantitative approach with a descriptive method, which aims to describe and compare the level of health between state-owned banks and private banks based on financial data. The data used is secondary data obtained from the bank's annual financial statements that have been published through the Indonesia Stock Exchange (IDX) and the official website of each bank for the 2019–2023 period. Data collection is carried out online by accessing these reports directly from official sources. In addition, literature studies are also conducted to obtain theoretical references and supporting information from literature, scientific journals, and articles relevant to the research topic. The data analysis techniques used include descriptive statistics to describe the characteristics of the data, and *the independent sample t-test* to determine the significant difference in financial performance between state-owned banks and private banks, especially in the ratios of NPL, GCG, ROA, and CAR. Data processing is carried out using SPSS software version 26, so that the results of the analysis can be presented in the form of tables, graphs, and statistical summaries that facilitate interpretation.

4 RESULTS AND DISCUSSION

4.1 Results

4.1.1 Descriptive Statictical Analysis

Table 1. Descriptive Statistical Analysis Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
NPL	40	.010	.077	.02887	.012480
GCG	40	1.000	2.000	1.75000	.438529
ROA	40	.001	.043	.02025	.010611
CAR	40	.010	.387	.20825	.087483
Valid N (listwise)	40				

Source : *secondary data processed 2025*

The results of the descriptive statistical test showed that NPLs had an average of 0.02887 with a standard deviation of 0.012480, reflecting a fairly high variation in non-performing loans. GCG has an average of 1.75 with a standard deviation of 0.438529, indicating the stability of interbank governance. ROA recorded an average of 0.02025 with a standard deviation of 0.010611, indicating a noticeable difference in profitability. The CAR has an average of 0.20825 with a standard deviation of 0.087483, indicating a variation in capital adequacy. These findings provide an initial overview of the differences in financial performance between state-owned and private banks.

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4.1.2 Normality Test

Table 2. Normality Test

Tests of Normality

	Kolmogorov-Smirnov[a]			
	Statistic	df	Sig.	Statistic
NPL	.088	40	.200*	.967
GCG	.101	40	.200*	.946
ROA	.128	40	.098	.966
CAR	.117	40	.179	.958

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source : *secondary data processed 2025*

The results of the normality test using *the Kolmogorov-Smirnov* method (K-S) showed the significance values for each variable as follows:

a. *Non-Performing Loans* (NPLs) have a significance value of 0.200 > 0.05, so the data is distributed normally.
b. *Good Corporate Governance* (GCG) has a significance value of 0.200 > 0.05, so the data is distributed normally.
c. *Return on Assets* (ROA) has a significance value of 0.098 > 0.05, so the data is distributed normally.
d. *The Capital Adequacy Ratio* (CAR) has a significance value of 0.179 > 0.05, so the data is distributed normally.

4.1.3 Uji Independent Samples T-Test

Table 3. Test *Independent Samples T-Test*

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
NPL	Equal variances assumed	.548	.464	3.325	38	.002	96.100	28.898	37.598	154.602
	Equal variances not assumed			3.325	37.173	.002	96.100	28.898	37.555	154.645
GCG	Equal variances assumed	.001	.976	1.275	38	.210	19.450	15.249	-11.421	50.321
	Equal variances not assumed			1.275	37.645	.210	19.450	15.249	-11.431	50.331
ROA	Equal variances assumed	.008	.929	-.324	38	.748	-11.000	33.945	-79.719	57.719
	Equal variances not assumed			-.324	37.965	.748	-11.000	33.945	-79.721	57.721
CAR	Equal variances assumed	.247	.622	.562	38	.578	219.250	390.338	-570.948	1009.448
	Equal variances not assumed			.562	37.961	.578	219.250	390.338	-570.975	1009.475

Source : *secondary data processed 2025*

a. *Non-Performing Loan*: Significance value of 0.002 (< 0.05) → H0 is rejected. There are significant differences between state-owned banks and private banks, possibly due to differences in credit distribution and management strategies.
b. *Good Corporate Governance*: Significance value of 0.210 (> 0.05) → H0 accepted. There are no significant differences, allegedly due to uniform governance regulations.
c. *Return on Assets*: Significance value of 0.748 (> 0.05) → H0 is accepted. There is no significant difference in profitability between banks.
d. *Capital Adequacy Ratio*: Significance value of 0.578 (> 0.05) → H0 is accepted. There was no significant difference in capital adequacy, likely due to the minimum standards set by regulators.

4.2 Discussion

This study aims to compare the financial performance of State-Owned Banks and Private Banks listed on the IDX during 2019–2023, focusing on *Non-Performing Loan* (NPL), *Good Corporate Governance* (GCG), *Return on Assets* (ROA), and *Capital Adequacy Ratio* (CAR) ratios, using SPSS version 26.

. **Differences in Financial Performance from *Non-Performing Loans***

The hypothesis states that there is an alleged difference in the NPL ratio between State-Owned Banks and Private Banks during 2019–2023. The results of *the Independent Samples T-Test* showed a significance value of 0.002 < 0.05, so the hypothesis was accepted. This is in line with Supit et al. (2019) who found significant differences in NPL ratios between the two types of banks. In the perspective *of the Resource-Based View*

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(RBV), this difference reflects the ability to manage strategic resources, especially human resources. State-owned banks' NPLs are higher due to wider market coverage and government policies, such as credit restructuring programs during the pandemic (CNN Indonesia, 2024). On the other hand, Private Banks show more stable and effective credit risk management.

b. **Differences in Financial Performance in Good *Corporate Governance***

The hypothesis states that there is an alleged difference in the implementation of GCG between state-owned and private banks. However, the test results showed a significance value of 0.210 > 0.05, so the hypothesis was rejected. Both of them implement GCG consistently due to strict regulations from the OJK and BI (PBI No. 11/33/PBI/2009). This is supported by *Agency Theory*, which emphasizes the importance of oversight of management to minimize conflicts of interest. Although Private Banks tend to be more flexible in decision-making, there is generally no significant difference in the implementation of GCG.

c. **Differences in Financial Performance in Return *on Assets***

The hypothesis tests the difference in ROA between state-owned and private banks. The *results of the T-Test* showed a significance value of 0.748 > 0.05, so the hypothesis was rejected. These results are consistent with the findings of Filka Maftikha et al. (2024) and Supit et al. (2019), who concluded there was no significant difference in ROA. Based on *Signaling Theory,* although ROA is relatively the same, Private Banks signal better efficiency and stability through more consistent ROA. State-owned banks experienced fluctuations in ROA, especially in 2020 due to the pandemic, while private banks recovered faster, showing efficiency in asset management.

d. **Differences in Financial Performance in Capital *Adequacy Ratio***

The hypothesis states that there is an alleged difference in CAR between state-owned and private banks. The test results showed a significance value of 0.578 > 0.05, so the hypothesis was rejected. This is in line with Supit et al. (2019) who also found no significant differences in CAR. Based on *Signaling Theory,* the high CAR in both types of banks gives a positive signal to investors about the ability to deal with risk. OJK Regulation No. 26/SEOJK.03/2016 requires all banks to maintain a capital adequacy ratio at a certain limit, thus causing the value of CAR to be relatively equal. Both banks have strong capitalization above 12% and show healthy financial conditions.

5 CONCLUSION

5.1 Conclusion

1. The results of the analysis indicate that there is a significant difference in the *ratio of Non-Performing Loans* (NPLs) between State-Owned Banks and Private Banks. Private Banks show lower and consistent NPL rates, while State-Owned Banks experience higher rates of fluctuations in the ratio.
2. Based on the results of the analysis, no significant differences were found in the application of *the principles of Good Corporate Governance* (GCG) between state-owned banks and private banks. Both have carried out good governance practices in accordance with the provisions set by the Financial Services Authority (OJK) and Bank Indonesia.
3. The results of the analysis showed that there was no significant difference in the *Return on Assets* (ROA) ratio between state-owned and private banks. Although the ROA of Private Banks tends to be higher and more consistent, the difference is not statistically strong enough to be considered significant.
4. Based on the results of the analysis, no significant difference was found in the *Capital Adequacy Ratio* (CAR) ratio between state-owned banks and private banks. Both groups of banks show high CAR values and fall into the very healthy category, indicating capital adequacy to deal with potential financial risks. However, CAR in Private Banks is slightly superior compared to State-Owned Banks.

5.2 Suggestion

The recommendations of this study are aimed at three parties. For banks, especially state-owned banks, it is necessary to improve credit risk management and operational efficiency to reduce the *Non-Performing Loan* (NPL) and maintain profitability, with the support of digital technology as a strategic solution. For investors, it is advisable to consider financial ratios such as NPL, GCG, ROA, and CAR in decision-making, where Private Banks offer long-term stability and profitability, while State-Owned Banks offer security with government support. For further research, it is recommended to add internal and external variables to obtain a more comprehensive understanding of banking financial performance.

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