



## **Comparative Analysis of the Financial Performance of State-Owned Banks and National Private Banks in Companies Listed on the Indonesian Stock Exchange (BEI) for the 2020-2024 Period**

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### **Article History:**

Received : 04-09-2026

Revised : 28-10-2026

Accepted : 29-10-2026

**Keywords:** *Financial Performance; CAMEL; CAR; NPL; BOPO; NIM; LDR; State-Owned Banks; National Private Banks*

**Abstract:** This study aims to compare the financial performance of state-owned banks and national private banks listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. Using a comparative descriptive approach, the study examines four state-owned banks and four national private banks based on secondary financial data obtained from their annual reports. The financial performance indicators comprise the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Operating Costs to Operating Income (BOPO), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR). Data were analyzed using descriptive statistics, normality tests, the Independent Samples t-test, and the Mann-Whitney U test with IBM SPSS Statistics 27. The results indicate statistically significant differences between the two banking groups in CAR ( $p < 0.001$ ), NPL ( $p = 0.047$ ), and LDR ( $p < 0.001$ ), whereas the differences in BOPO ( $p = 0.787$ ) and NIM ( $p = 0.326$ ) were not statistically significant. National private banks recorded higher average CAR and lower average NPL and BOPO, while state-owned banks recorded higher average NIM and LDR. These findings indicate that the relative financial performance of the two groups varies across indicators. The results provide a comparative overview of capital adequacy, credit quality, operational efficiency, profitability, and liquidity among the selected banks during the observation period.

**How to Cite:** Ariadi Prasetyo., Yeti Kusmawati (2026). *Comparative Analysis of Financial Performance of State-Owned Banks and National Private Banks in Companies Listed on the Indonesian Stock Exchange for the 2020-2024 Period*. *Escalate: Economics and Business Journal*. 4(4). pp.932-939. <https://doi.org/10.61536/escalate.v4i4.832>



<https://doi.org/10.61536/escalate.v4i4.832>

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### **Introduction**

The banking sector plays an important role in Indonesia's economic development by functioning as a financial intermediary that channels funds from surplus units to deficit units and supports investment and business activities. During the COVID-19 pandemic and the subsequent recovery period, Indonesian banks faced challenges related to credit quality, liquidity management,

capital adequacy, and operational efficiency. Various policy responses from the Financial Services Authority (Otoritas Jasa Keuangan or OJK) and Bank Indonesia were implemented to maintain financial stability and support banking activities. Although the banking sector entered a recovery phase during 2022–2024, differences in banks' financial conditions and strategic priorities remained relevant issues for evaluating their resilience and performance. Therefore, a comparative assessment of banking performance during the 2020–2024 period is important for understanding how banks managed financial risks and maintained their intermediary functions during and after the pandemic.

State-owned banks and national private banks represent two important groups in Indonesia's banking industry, with potentially different strategic priorities and operational characteristics. State-owned banks, including Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Negara Indonesia (BNI), and Bank Tabungan Negara (BTN), have roles in supporting government programs and financing economic development. In comparison, national private banks, such as Bank Central Asia (BCA), CIMB Niaga, OCBC NISP, and Bank Permata, operate within a competitive environment that encourages them to maintain efficiency, develop services, and manage risks. These differences may be reflected in their capital adequacy, credit quality, operating efficiency, profitability, and liquidity. However, differences in strategic orientation do not automatically indicate that one group consistently performs better than the other. A comparison based on financial indicators is therefore necessary to determine whether measurable differences exist between state-owned and national private banks.

Previous studies have examined differences in financial performance between state-owned and private banks, but their findings indicate that the relative advantages of each group may vary across indicators. Estafeti (2023) reported that state-owned banks performed better in capitalization and profitability, while private banks showed stronger asset quality based on the NPL ratio. In contrast, Astuti et al. (2022) found that private banks performed better in selected indicators and identified significant differences in CAR and NPL, while differences in ROA, BOPO, and NIM were not statistically significant. Lestari (2020), which compared Islamic banking in Indonesia and Malaysia, also reported varying results across financial ratios. Although this study examined a different comparison, its findings illustrate that conclusions about banking performance depend on the indicators and institutional settings being analyzed. Taken together, these studies provide a basis for further comparison but do not establish a uniform pattern of financial performance across banking groups.

The research gap addressed in this study concerns the need to reassess the differences between state-owned and national private banks using a consistent set of financial indicators over the 2020–2024 period. Previous findings differ regarding which group performs better, while the studies cited above do not collectively resolve how the two groups compare across capital adequacy, asset quality, operating efficiency, net interest profitability, and liquidity during this specific observation period. Examining five consecutive years that include the pandemic and the subsequent recovery period provides a defined timeframe for comparing the financial ratios of the selected banks under a shared set of criteria. The present study contributes by comparing four state-owned banks and four national private banks listed on the Indonesia Stock Exchange (IDX), using financial data from their annual reports for 2020–2024. Its contribution is specific to the selected banks, indicators, and observation period rather than a claim that the comparison represents all banks or establishes the causes of differences in performance.

This study uses five financial ratios associated with the CAMEL framework to evaluate different dimensions of banking performance. The Capital Adequacy Ratio (CAR) represents capital adequacy and the capacity to absorb potential losses. Non-Performing Loans (NPL) indicate credit quality and the level of problem loans. Operating Costs to Operating Income (BOPO) reflects operational efficiency, while Net Interest Margin (NIM) measures the margin generated from interest-earning activities. The Loan to Deposit Ratio (LDR) represents the relationship between lending and third-party funds and is used to assess the bank's intermediation and liquidity position. These indicators were selected because they cover complementary aspects of financial performance and can be calculated from publicly available financial reports, allowing a consistent comparison between the two groups. The study therefore uses these ratios to examine differences in financial performance rather than to infer that any



single indicator fully captures overall bank health.

Based on this background, this study aims to compare the financial performance of state-owned banks and national private banks listed on the Indonesia Stock Exchange during the 2020–2024 period using CAR, NPL, BOPO, NIM, and LDR. Specifically, it examines whether statistically significant differences exist between the two groups for each indicator. The findings are expected to provide evidence-based insights into the comparative financial conditions of the selected banks and contribute to the literature on banking performance in Indonesia during the pandemic and post-pandemic period.

## Literature Review

Estafeti (2023) demonstrated a performance difference between state-owned and private banks. State-owned banks demonstrated superiority in capitalization and profitability, reflected in CAR, NPM, and ROA ratios, while private banks excelled only in asset quality management, as reflected in the NPL ratio.

Astuti et al. (2022) concluded that private banks demonstrated superior performance compared to state-owned banks. Specifically, significant differences were found in the capital adequacy ratio (CAR) and asset quality (NPL) indicators. Conversely, no significant differences were detected between the two groups of banks in terms of profitability and operational efficiency, as reflected by the ROA, BOPO, and NIM ratios.

Lestari (2020) used an independent t-test to compare Indonesian and Malaysian banking. The results showed significant differences in the NPF (equivalent to NPL), NPM, and BOPO variables. However, no significant differences were found in CAR, ROA, and FDR (equivalent to LDR) between the two countries.

## Research Methods

This study uses a comparative quantitative approach to analyze and compare the financial performance of State-Owned Enterprises (BUMN) and national private banks listed on the Indonesia Stock Exchange (IDX) during the 2020-2024 period. The financial performance evaluation is based on the CAMEL framework which includes five core financial ratios as research variables: Capital measured by the Capital Adequacy Ratio (CAR), Asset Quality measured by Non-Performing Loans (NPL), Management Efficiency measured by Operating Costs to Operating Income (BOPO), Earning Capacity measured by Net Interest Margin (NIM), Liquidity measured by the Loan to Deposit Ratio (LDR).

The study population included all conventional commercial banks listed on the Indonesia Stock Exchange (IDX) for the 2020-2024 period. The sampling technique used purposive sampling with the largest total assets in 2024 as the criterion, resulting in the selection of eight sample banks. The sample consisted of four state-owned banks (Bank Mandiri, Bank BRI, Bank BNI, and Bank BTN) and four national private banks (Bank BCA, Bank CIMB Niaga, Bank OCBC NISP, and Bank Permata). Data collection was conducted from September to November 2025 using secondary data through documentation and literature studies. Financial data were sourced from annual financial reports (2020-2024) obtained from each bank's official website.

Data analysis was processed using the IBM SPSS Statistics program version 27 through several systematic stages. The first stage is a descriptive statistical analysis to present the average (mean), minimum, maximum, and standard deviation values to provide an overview of the financial condition of the two groups of banks. Next, a normality test was conducted using the Shapiro-Wilk Test due to the relatively small sample size, where the data is declared normally distributed if the significance value (Sig.) > 0.05. After that, a homogeneity test was applied using Levene's Test for Equality of Variances to test the equality of variances between groups with a decision criterion of Sig. > 0.05. As a final stage, a difference test or hypothesis test was conducted; if the data meets the assumptions of normal and homogeneous distribution, the test uses the parametric Independent Sample T-Test, but if the normality assumption is not met, the test switches to the non-parametric Mann-Whitney U Test. The difference in financial performance between bank groups is declared statistically significant if the Sig. (2-tailed) value < 0.05.



## Results and Discussion

### Data Results

#### 1. Testing the Differences in Financial Performance of State-Owned Banks and Private Banks

This section analyzes the financial health of state-owned and private banks based on the CAMEL ratios, namely CAR, NPL, BOPO, NIM, and LDR. This analysis aims to determine which bank group had the better health during the study period.

**Table 1. Comparison of Financial Ratios of State-Owned Bank Groups 2020-2024**

| STATE-OWNED BANKS | CAR    | NPL   | BOPO   | NIM   | LDR    |
|-------------------|--------|-------|--------|-------|--------|
| BRI               | 23.77% | 2.98% | 70.34% | 6.60% | 84.12% |
| MANDIRI           | 20.11% | 1.99% | 62.60% | 4.91% | 85.08% |
| BTN               | 19.46% | 3.52% | 88.34% | 3.61% | 93.57% |
| BNI               | 19.84% | 2.98% | 76.30% | 4.56% | 86.62% |
| Average           | 20.79% | 2.87% | 74.39% | 4.92% | 87.35% |

The average financial ratios of state-owned banks for the 2020–2024 period indicate healthy capital conditions (CAR 20.79%), controlled credit risk (NPL 2.87%), fairly efficient operations (BOPO 74.39%), strong net interest profitability (NIM 4.92%), and optimal liquidity intermediation function (LDR 87.35%).

**Table 2. Comparison of Financial Ratios of National Private Bank Groups 2020-2024**

| NATIONAL PRIVATE BANKS | CAR    | NPL   | BOPO   | NIM   | LDR    |
|------------------------|--------|-------|--------|-------|--------|
| BCA                    | 27.22% | 1.88% | 49.94% | 5.48% | 68.32% |
| CIMB NIAGA             | 22.83% | 2.72% | 77.47% | 4.58% | 83.69% |
| OCBC NISP              | 22.78% | 1.98% | 74.14% | 4.08% | 77.33% |
| PERMATA                | 35.62% | 2.84% | 83.82% | 4.36% | 74.82% |
| Average                | 27.11% | 2.36% | 71.34% | 4.63% | 76.04% |

The average financial ratio of national private banks for the 2020–2024 period shows very thick capital (CAR 27.11%), safe asset quality with low non-performing loans (NPL 2.36%), efficient cost management (BOPO 71.34%), stable net interest income (NIM 4.63%), and liquidity management that tends to be safe and loose (LDR 76.04%).

**Table 3. Comparison of Average Financial Ratios Between State-Owned Banks and National Private Banks in 2020-2024**

|                        | CAR    | NPL   | BOPO   | NIM   | LDR    |
|------------------------|--------|-------|--------|-------|--------|
| State-Owned Banks      | 20.79% | 2.87% | 74.39% | 4.92% | 87.35% |
| National Private Banks | 27.11% | 2.36% | 71.34% | 4.63% | 76.04% |

In general, the comparison results indicate that the evaluation results indicate that the ranks of national private banks recorded financial performance stability that tended to be more optimal than the category of state-owned banks during the 2020-2024 research period.

#### 2. Descriptive statistical test

Descriptive analysis is carried out to describe or explain in general terms the data that has been collected, such as the highest value (Max), lowest value (Min), and average value (Mean).

**Table 4. Descriptive Statistics**

| Descriptive Statistics |    |         |         |         |                    |
|------------------------|----|---------|---------|---------|--------------------|
|                        | N  | Minimum | Maximum | Mean    | Standard Deviation |
| CAR                    | 40 | 16.80   | 38.70   | 23.9535 | 5.25869            |
| NPL                    | 40 | .97     | 4.37    | 2.6123  | .82318             |
| BOPO                   | 40 | 41.70   | 93.30   | 72.8685 | 13.50167           |
| NIM                    | 40 | 2.86    | 6.89    | 4.7733  | .93192             |
| LDR                    | 40 | 62.00   | 98.04   | 81.6943 | 9.02663            |
| Valid N (listwise)     | 40 |         |         |         |                    |

Based on the table, the CAR ratio shows a minimum value of 16.80 and a maximum value of 38.70, with an average value of 23.95 and a standard deviation of 5.258. The NPL ratio shows a minimum value of 0.97 and a maximum value of 4.37 with an average value of 2.61 and a standard deviation of 0.823. The BOPO ratio shows a minimum value of 41.70 and a maximum value of 93.30 with an average value of 72.86 and a standard deviation of 13.501. The NIM ratio shows a minimum value of 2.86 and a maximum value of 6.89, with an average value of 4.77 and a standard deviation of 0.931. The LDR ratio shows a minimum value of 62.00 and a maximum value of 98.04 with an average value of 81.69 and a standard deviation of 9.026.

### 3. Normality Test

**Table 5. Normality Test**

|      |                        | Kolmogorov-Smirnova |    |       | Shapiro-Wilk |    |      |
|------|------------------------|---------------------|----|-------|--------------|----|------|
|      |                        | Statistics          | df | Sig.  | Statistics   | df | Sig. |
| CAR  | State-Owned Banks      | .209                | 20 | .022  | .906         | 20 | .053 |
|      | National Private Banks | .244                | 20 | .003  | .839         | 20 | .003 |
| NPL  | State-Owned Banks      | .220                | 20 | .013  | .934         | 20 | .183 |
|      | National Private Banks | .178                | 20 | .098  | .906         | 20 | .053 |
| BOPO | State-Owned Banks      | .137                | 20 | .200* | .948         | 20 | .331 |
|      | National Private Banks | .240                | 20 | .004  | .894         | 20 | .031 |
| NIM  | State-Owned Banks      | .147                | 20 | .200* | .936         | 20 | .201 |
|      | National Private Banks | .146                | 20 | .200* | .940         | 20 | .241 |
| LDR  | State-Owned Banks      | .153                | 20 | .200* | .947         | 20 | .322 |
|      | National Private Banks | .122                | 20 | .200* | .969         | 20 | .726 |

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

#### a. Lilliefors Significance Correction

In the table, the Shapiro-Wilk Test normality value of Sig. is above 0.05, indicating a normal distribution. It is concluded that the NPL, NIM, and LDR ratio data are normally distributed because the significance value is more than 0.05. Meanwhile, the CAR and BOPO ratios are not normally distributed because there is a significance value of less than 0.05 in one of the groups. Therefore, the difference test for normally distributed data uses the Independent Sample T-Test, while for non-normally distributed data, the Mann-Whitney U Test is used.



#### 4. Difference Test

##### A. Independent Sample T-Test

**Table 6. Independent Sample T-Test**  
Independent Samples Test

|     |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                           |                                           |          |
|-----|-----------------------------|-----------------------------------------|------|------------------------------|--------|-----------------|-----------------|---------------------------|-------------------------------------------|----------|
|     |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Standard Error Difference | 95% Confidence Interval of the Difference |          |
| NPL | Equal variances assumed     | .415                                    | .523 | 2,057                        | 38     | .047            | .51450          | .25016                    | .00808                                    | 1.02092  |
|     | Equal variances not assumed |                                         |      | 2,057                        | 34,457 | .047            | .51450          | .25016                    | .00636                                    | 1.02264  |
| NIM | Equal variances assumed     | 5,230                                   | .028 | .999                         | 38     | .324            | .29450          | .29471                    | -.30210                                   | .89110   |
|     | Equal variances not assumed |                                         |      | .999                         | 28,343 | .326            | .29450          | .29471                    | -.30885                                   | .89785   |
| LDR | Equal variances assumed     | 1,568                                   | .218 | 5,058                        | 38     | .000            | 11.30750        | 2.23555                   | 6.78186                                   | 15.83314 |
|     | Equal variances not assumed |                                         |      | 5,058                        | 36,121 | .000            | 11.30750        | 2.23555                   | 6.77412                                   | 15.84088 |

Based on the results of the Independent Sample T-Test, the NPL ratio test shows a Levene's Test significance value of 0.523 ( $> 0.05$ ) with the assumption of equal variances assumed which produces a Sig. (2-tailed) value of 0.047 ( $< 0.05$ ), so it is concluded that there is a significant difference in asset quality between state-owned banks and national private banks. Meanwhile, the analysis of the NIM ratio produces a Levene's Test significance value of 0.028 ( $< 0.05$ ) with the assumption of equal variances not assumed and a Sig. (2-tailed) value of 0.326 ( $> 0.05$ ), which indicates that there is no significant difference in net interest profitability between the two banking groups. Finally, the LDR ratio test shows a Levene's Test significance value of 0.218 ( $> 0.05$ ) with the assumption of equal variances assumed and records a Sig. (2-tailed) of 0.000 ( $< 0.05$ ), which proves that there is a very significant difference in the level of liquidity and intermediation function between state-owned banks and national private banks.

**B. Mann-Whitney U Test****Table 7. Mann-Whitney U Test  
Test Statistics**

|                                | CAR     | BOPO    |
|--------------------------------|---------|---------|
| Mann-Whitney University        | 38,000  | 190,000 |
| Wilcoxon W                     | 248,000 | 400,000 |
| Z                              | -4,383  | -.271   |
| Asymp. Sig. (2-tailed)         | .000    | .787    |
| Exact Sig. [2*(1-tailed Sig.)] | .000b   | .799b   |

a. Grouping Variable: TYPE\_BANK\_CODE

b. Not corrected for ties.

Based on the results of the non-parametric Mann-Whitney U Test, the CAR ratio test produced an Asymp. Sig. (2-tailed) value of 0.000 ( $<0.05$ ), which proves that there is a very significant difference in the level of capital adequacy between state-owned banks and national private banks. On the other hand, the BOPO ratio test results recorded an Asymp. Sig. (2-tailed) value of 0.787 ( $>0.05$ ), so it can be concluded that there is no significant difference in operational management efficiency between the two banking groups during the observation period.

**Discussion**

Comparison of financial performance for the 2020-2024 period shows that the national private bank group recorded a generally more optimal financial performance stability compared to state-owned banks because they were significantly superior in capital adequacy with an average CAR of 27.11% (State-owned: 20.79%), had better non-performing loan management with an average NPL of 2.36% (State-owned: 2.87%), and were slightly more efficient with a BOPO ratio of 71.34% (State-owned: 74.39%), although on the other hand, state-owned banks were superior in generating net interest profit margins with an average NIM of 4.92% (Private: 4.63%) and were more aggressive in carrying out their liquidity intermediation function with an average LDR of 87.35% (Private: 76.04%), where the results of statistical tests proved that only the CAR, NPL, and LDR ratios had significant differences, while the BOPO and NIM ratios did not show significant differences between the two banking groups.

**Conclusion**

1. Based on the analysis of the financial performance of state-owned banks sampled in the 2020-2024 study period, based on the CAMEL ratio, the CAR (Capital Adequacy Ratio) of 20.79% is categorized as very healthy. In terms of asset quality, the NPL (Non-Performing Loan) of 2.87% is categorized as healthy. In terms of operational efficiency, the BOPO (Operating Costs to Operating Income) of 74.39% is categorized as very healthy. In terms of profitability, the NIM (Net Interest Margin) of 4.92% is categorized as very healthy. In terms of liquidity, the LDR (Loan to Deposit Ratio) of 87.35% is categorized as appropriate for its intermediary role.
2. Based on the analysis of the financial performance of national private banks sampled in the 2020-2024 study period, based on the CAMEL ratio, the CAR (Capital Adequacy Ratio) of 27.11% is categorized as very healthy. In terms of asset quality, the NPL (Non-Performing Loan) of 2.36% is categorized as healthy. In terms of operational efficiency, the BOPO (Operating Costs to Operating Income) of 71.34% is categorized as very healthy. In terms of profitability, the NIM (Net Interest Margin) of 4.63% is categorized as very healthy. In terms of liquidity, the LDR (Loan to Deposit Ratio) of 76.04% is categorized as inadequate in performing its intermediary role.
3. Based on the results of a comparative analysis of the state-owned bank group and the national private bank group using the CAMEL method for the 2020–2024 period, the comparison shows that the national private bank group had more optimal financial performance than the state-owned bank group during the study period.
4. The results of the SPSS test show that there are significant differences between state-owned banks and national private banks in the CAR, NPL and LDR ratios, while there are no significant differences in the BOPO and NIM ratios during the study period.



## **Bibliography**

- Astuti, N. P., Bakri R., & Nurjakia (2022). PERBANDINGAN KINERJA KEUANGAN PERBANKAN BUMN DAN PERBANKAN SWASTA. *Equilibrium* 11(2). 59-66.
- Estafeti, M. (2023). Analisis Perbandingan Kinerja Keuangan Bank Pemerintah dan Bank Swasta yang Terdaftar di BEI Tahun 2017-2020. *ECONOMIE* 5(2), 128-238.
- Lestari, P. (2020). Analisis Komparatif Kinerja Keuangan Perbankan Syariah Di Indonesia Dan Malaysia Dengan Pendekatan Metode CAMEL Periode 2014-2018. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, 5(2).
- PT Bank Central Asia Tbk. (2020-2024). Annual Report. <https://www.bca.co.id/id/tentang-bca/Hubungan-Investor/laporan-presentasi/Laporan-Tahunan>
- PT Bank CIMB Niaga Tbk. (2020-2024). Annual Report. <https://investor.cimbniaga.co.id/ar.html>
- PT Bank Mandiri (Persero) Tbk. (2020-2024). Annual Report. <https://www.bankmandiri.co.id/web/ir/annual-reports>
- PT Bank Negara Indonesia (Persero) Tbk. (2020-2024). Annual Report. <https://www.bni.co.id/id-id/investor/laporan-keuangan>
- PT Bank OCBC NISP Tbk. (2020-2024). Annual Report. <https://www.ocbc.id/id/tentang-ocbc/hubungan-investor/laporan-tahunan>
- PT Bank Permata Tbk. (2020-2024). Annual Report. <https://www.permatabank.com/id/tentang-kami/hubungan-investor#!/Laporan-Tahunan>
- PT Bank Rakyat Indonesia (Persero) Tbk. (2020-2024). Annual Report. <https://bri.co.id/web/guest/id/report>
- PT Bank Tabungan Negara (Persero) Tbk. (2020-2024). Annual Report. <https://www.btn.co.id/id/About/Investor-Relation/Company-Report/Annual-Report>

