



Review Article

Financial Health Analysis of Bank Tabungan Negara Using RGEC Method: 2021–2024 Period

Anna Valensia Christianty de Fretes

Pattimura University, Indonesia ; e-mail : anna.defretes92@gmail.com

*Corresponding Author : anna.defretes92@gmail.com

Abstract. This study aims to analyze the financial health of PT Bank Tabungan Negara (Persero) Tbk for the period 2021–2024 using the RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) method. This approach complies with regulations issued by the Financial Services Authority (OJK) to comprehensively assess the performance of commercial banks. A descriptive quantitative approach was employed, utilizing secondary data from the company's official website and the Indonesia Stock Exchange in the form of annual financial reports. The results indicate that regarding the Risk Profile, the Non-Performing Loan (NPL) ratio remained in a healthy category, while the Loan to Deposit Ratio (LDR) was less healthy in the early years but improved in subsequent periods. The Good Corporate Governance (GCG) aspect consistently achieved a score of 2 (healthy) over the four-year period. Meanwhile, the Earnings aspect, measured by the Return on Assets (ROA) ratio, fell into a fairly healthy category. The Capital aspect, assessed through the Capital Adequacy Ratio (CAR), consistently demonstrated a very healthy condition. Overall, the RGEC analysis indicates that Bank BTN is in a healthy condition, although liquidity and profitability challenges still require strategic attention in the future.

Keywords: Bank BTN; Bank Financial Health; Financial Ratios; OJK Regulations; RGEC Analysis.

1. Introduction

Banking institutions play a vital role in the architecture of modern economies because they perform the financial intermediation function that connects capital owners with parties in need of financing. In executing their role as a driver of economic growth, the stability of the financial system depends heavily on the operational soundness of each individual bank. Evaluating a bank's soundness is a crucial parameter for measuring management's capability to absorb risks, comply with governance regulations, generate sustainable profitability, and maintain adequate core capital. In Indonesia, PT Bank Tabungan Negara (Persero) Tbk (Bank BTN) occupies a strategic position as a State-Owned Enterprise (BUMN) that concentrates its core business line on the national housing finance sector. This business characteristic, which is heavily concentrated in long-term property loans, makes Bank BTN vulnerable to macroeconomic fluctuations and changes in public purchasing power, particularly during the post-COVID-19 pandemic recovery period. Therefore, conducting regular and comprehensive financial performance evaluations of Bank BTN during the economic transition period of 2021–2024 is both an academic and practical necessity.

To ensure the resilience of the national banking industry, the Financial Services Authority (OJK), along with Bank Indonesia, has historically implemented various performance measurement instruments. In the past, bank soundness evaluations were regulated under Bank Indonesia Regulation No. 6/10/PBI/2004 using the CAMEL (Capital, Asset, Management, Earnings, Liquidity) framework, which was later refined into CAMELS with the addition of the sensitivity to market risk aspect. Many previous researchers utilized this financial framework due to its advantage in providing straightforward quantitative assessments based on the structure of the balance sheet and income statement. Nevertheless, the CAMELS

Received: November 20, 2025

Revised: January 25, 2026

Accepted: March 28, 2026

Published: May 31, 2026

Curr. Ver.: May 31, 2026



Copyright: © 2025 by the authors.
Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>)

method has a fundamental weakness: it places minimal explicit emphasis on qualitative risk management governance, making it less adaptive in mapping the dynamic operational complexities of modern banking. Responding to these limitations, the regulator issued a new risk-based regulation, namely the Risk-Based Bank Rating (RBBR), through OJK Circular Letter No. 10/SEOJK.03/2014, which introduced the RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) assessment standard. The integration of these four dimensions within the RGEC framework is proven to provide a three-dimensional snapshot of internal banking conditions, combining qualitative compliance metrics with quantitative financial calculations to preventively mitigate the risk of bank failure.

Despite the methodological advantages of RGEC, the majority of literature studies regarding Risk-Based Bank Rating in Indonesian banking are still dominated by evaluations of major banks with large core capital (KBMI 4) that possess universal business portfolios, such as Bank Mandiri, BRI, and BCA. In-depth and continuous studies focusing on Bank BTN—with its unique housing finance characteristics that are sensitive to long-term collateral risks—remain relatively scarce. Operational realities show that although Bank BTN recorded massive asset expansion growth, rising from IDR 371.87 trillion in 2021 to surpass IDR 469.61 trillion in 2024, its bottom-line net profit performance exhibited a fluctuating trend. The decline in net profit from IDR 3.84 trillion in 2023 to IDR 2.79 trillion in 2024 indicates heavy pressure on operational efficiency lines, as well as high allocations for provisioning expenses to cushion against tightening liquidity risks and rising non-performing loan ratios. The actual financial dynamics of Bank BTN during the 2021–2024 period are presented in Figure 1 below:

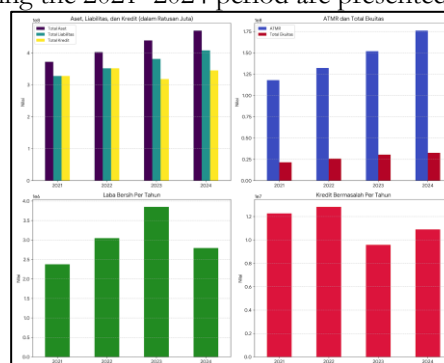


Figure 1. Financial Indicators Trend (2021–2024).

The graph is divided into four sections to accommodate the data scales: (1) Comparison of Total Assets, Liabilities, and Loans; (2) Trends in ATMR (Risk-Weighted Assets) and Total Equity; (3) Net Profit Fluctuations; and (4) Trend of Non-Performing Loans (NPL) Value. The trend shows steady asset growth, although net profit and non-performing loans have fluctuated over the past two years.

The graph above illustrates a positive growth trend in the company's macro components, where Total Assets, Liabilities, and RWA (Risk-Weighted Assets) continued to increase consistently every year from 2021 to 2024. Although business expansion remained stable—as reflected by equity growth the profitability and risk components experienced fluctuations. The company's net profit peaked in 2023 before eventually declining in 2024, while non-performing loan management showed its best performance (most notably suppressed) in 2023, despite edging up slightly the following year.

2. Literature Review

The assessment of bank soundness is a topic that continues to undergo methodological evolution alongside the increasing complexity of risks in the financial industry. To map the state-of-the-art of this topic, a number of relevant previous studies were reviewed based on their object, method, and evaluation results. Research on bank soundness using the Risk-Based Bank Rating (RBBR) method based on RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) has been widely implemented in both large-scale conventional banks and Islamic banks. Maramis (2019) conducted a soundness analysis on PT Bank Mandiri (Persero) Tbk for the 2015–2018 period using the RGEC framework. The results of the study indicated that Bank Mandiri successfully achieved a "Moderately Sound" (Cukup Sehat) rating in the risk profile aspect, "Excellent" (Sangat Baik) in compliance with GCG principles, and "Very Sound" (Sangat Sehat) for the earnings and capital pillars.

In line with those findings, Istia (2020) evaluated the performance of PT Bank Negara Indonesia (Persero) Tbk using a similar method for the 2016–2019 timeframe. The research

findings concluded that, compositely, BNI maintained a "Sound" (*Sehat*) rating across all pillars due to effective financial risk management and continuous strengthening of its capital structure. Meanwhile, within the realm of banking based on Sharia principles, Nurwijayanti (2018) examined BNI Syariah for the 2014–2017 period. By measuring Non-Performing Financing (NPF) and the Financing to Deposit Ratio (FDR), she found that the bank's stability was in the "Good" (Baik) criteria and the capital aspect was at the "Excellent" (Sangat Baik) level. An industry-wide study by Roliah (2018) on all Islamic Commercial Banks in Indonesia also reinforced the conclusion that the RGEC method is highly adaptive in testing banking resilience against external business shocks.

At the local level and in comparative studies, Paramatha (2017) assessed the soundness of PT Bank Mandiri (Persero) Tbk for the 2013–2015 period and concluded a "Very Sound" (Sangat Sehat) status, reflecting management's resilience in mitigating the negative impacts of macroeconomic dynamics. Another multidimensional study was conducted by Beby (2019), who compared the performance of Islamic banks and conventional banks. Through financial proxies such as NPL, LDR, ROA, and CAR, the study demonstrated a significant difference in average ratios between the two types of institutions due to their fundamental operational characteristics. More recently, Patipeilohy, Ferdinandus, and Christianty (2023) studied PT Bank Central Asia Tbk from 2017–2022 and found a dominance of Composite Rating 1 ("Very Sound"), with the exception of the 2021 NPL ratio, which dropped to the "Sound" level as a direct impact of the pandemic crisis. In contrast to the findings of these major banks, Matruty, de Fretes, and Seipatiseun (2025), who investigated Bank Artha Graha Internasional for the 2019–2022 period, found that a weak earnings aspect (low ROA and high BOPO/operating expenses to operating income ratio) could drag a bank's composite rating down to the "Moderately Sound" or even "Less Sound" (Kurang Sehat) categories.

Through the literature mapping above, a crucial research gap was identified. The majority of previous studies have been dominated by conventional commercial banks with universal business models (such as Mandiri, BNI, and BCA) or have focused entirely on Sharia banking. Very little literature consistently and deeply examines the financial soundness of state-owned banks that possess specific sectoral business characteristics. PT Bank Tabungan Negara (Persero) Tbk (Bank BTN) is a unique banking entity whose main portfolio is concentrated in long-term housing finance (mortgages/KPR). This single business focus gives Bank BTN a highly distinct credit risk exposure (Risk Profile) and leaves it vulnerable to fluctuations in public purchasing power in the post-COVID-19 pandemic era.

This is where the contribution of novelty (state-of-the-art) of this research lies. Unlike previous studies, this research examines Bank BTN during the crucial period of 2021–2024 to dissect how the bank's financial soundness transitioned from an era of liquidity tightening into the recovery phase of national economic stability. By integrating the pillars of Risk Profile (via NPL and LDR), Good Corporate Governance (self-assessment), Earnings (ROA), and Capital (CAR), this study provides an in-depth analysis that fills the void in the literature regarding the soundness of state-owned banks based on long-term property financing.

3. Proposed Method

Algorithm

To evaluate the soundness level of PT Bank Tabungan Negara (Persero) Tbk comprehensively, this study applies the Risk-Based Bank Rating (RBBR) framework using the RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) method.

Tabel 1. Algorithm

Algorithm 1. RGEC-Based Bank Soundness Assessment at PT Bank Tabungan Negara (Persero) Tbk

INPUT:

- Audited Annual Financial Reports of Bank BTN (2021–2024)
- Corporate Governance Implementation Reports of Bank BTN (2021–2024)
- GCG Self-Assessment Documents of PT Bank Tabungan Negara (Persero) Tbk
- Official Database of the Indonesia Stock Exchange (IDX)
- OJK Assessment Standards & Matrices (OJK Circular Letter No. 10/SEOJK.03/2014)

OUTPUT: Final Composite Rating (Rating 1 to Rating 5)

1: Data Collection & Extraction

Collecting and extracting financial statements and corporate governance reports for the 2021–2024 fiscal years from the IDX database and the official Bank BTN website.

2: Risk Profile

• 2a. Credit Risk (NPL Gross):

$$\text{Net Performing Loan} = \frac{\text{Bad Loans}}{\text{Credit Total}} \times 100\%$$

2b. Liquidity Risk (LDR):

$$\text{Loan to Deposit Ratio} = \frac{\text{Total Kredit}}{\text{Third – Party Funds}} \times 100\%$$

3: Good Corporate Governance

Conducting a qualitative descriptive analysis based on Bank BTN's self-assessment documents. Examining the TARIF principles (Transparency, Accountability, Responsibility, Independency, Fairness) across the Board of Commissioners, the Board of Directors, and functional committees. Converting the evaluation results into national GCG ratings (Rating 1 to 5).

4. Earnings

Measuring the bank's efficiency and profitability generation capacity through the Return on Assets (ROA) ratio:

$$\text{Return On Asset} = \frac{\text{Laba bersih}}{\text{Total assets}} \times 100\%$$

4: Capital

Testing the resilience of the bank's core and supplementary capital against earning assets by calculating the Capital Adequacy Ratio (CAR) using:

$$\text{CAR} = \frac{\text{Modal}}{\text{ATMR}} \times 100\%$$

5: OJK Matrix Integration

Converting all quantitative financial ratio calculation results (NPL, LDR, ROA, CAR) and GCG qualitative ratings into the Financial Services Authority's (OJK) standardized score weights based on OJK Circular Letter No. 10/SEOJK.03/2014.

6: Final Composite Rating Determination

7: Aggregating all scores compositely to determine the final soundness category of Bank BTN:

Composite Rating 1 (Very Sound)

Composite Rating 2 (Sound)

Composite Rating 3 (Moderately Sound)

Composite Rating 4 (Less Sound)

Composite Rating 5 (Unsound)

4. Results and Discussion

The empirical analysis results and in-depth discussion regarding the financial soundness level of PT Bank Tabungan Negara (Persero) Tbk (Bank BTN) for the 2021–2024 period. This assessment is based on the Risk-Based Bank Rating (RBBR) framework using the RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) method, in accordance with the mandate of the Financial Services Authority Circular Letter (SEOJK) No. 10/SEOJK.03/2014. Below are the results of Bank BTN's NPL, CAR, LDR, and Profitability (ROA) ratios.

Table 2. Discussion Results on Bank Tabungan Negara Soundness Level for the 2021–2024 Period Using the RGEC Method

Year	Component	Ratio	Level				
			1	2	3	4	5
2021	Risk Profile	NPL		√			
		LDR				√	
	Good Corporate						
	Governance (GCG)	Self-assessment		√			
	Earning	ROA			√		
	Capital	CAR	√				
Composit							
Value		25		18			
2022	Risk Profile	NPL		√			

		LDR	√
	Good Corporate		
	Governance (GCG)	Self-assessment	√
	Earning	ROA	√
	Capital	CAR	√
Composit			
Value		25	18
2023	Risk Profile	NPL	√
		LDR	√
	Good Corporate		
	Governance (GCG)	Self-assessment	√
	Earning	ROA	√
	Capital	CAR	√
Composit			
Value		25	19
2024	Risk Profile	NPL	√
		LDR	√
	Good Corporate		
	Governance (GCG)	Self-assessment	√
	Earning	ROA	√
	Capital	CAR	√
Composit			
Value		25	19

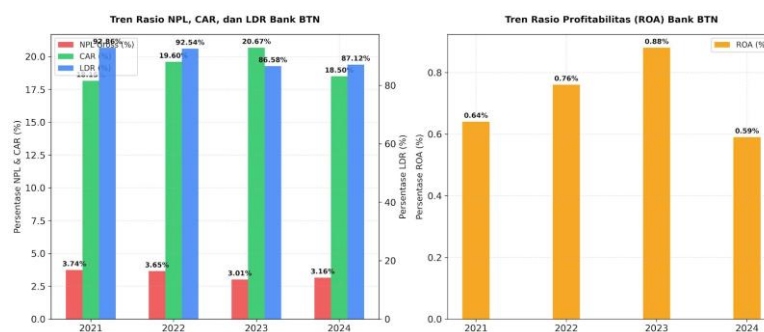


Figure 2. Bank BTN's NPL, CAR, LDR, and Profitability (ROA) Ratio Results

Overall, the financial analysis results indicate that Bank BTN experienced a solid performance growth phase during the 2021 to 2023 period. This was characterized by its success in suppressing the gross NPL ratio from 3.74% to its lowest point of 3.01%, in line with an increase in profitability (ROA) that peaked at 0.88%, as well as the strengthening of its capital foundation (CAR) to 20.67%. Liquidity management also became more flexible after 2022, during which the LDR ratio was successfully lowered from the 92% range to a safe level below 88%. Nevertheless, performance in 2024 indicates the emergence of new macroeconomic pressures that triggered a capital normalization (CAR decreased to 18.50%), a slight increase in credit risk (NPL rose to 3.16%), and a fairly significant profitability correction with ROA plunging to its lowest level of 0.59%. The following is :

Tabel 3. Bank Tabungan Negara Soundness Level Assessment for the 2021–2024 Period

Year	Value(%)	Level	Prediction
2021	72	2	Health
2022	72	2	Health
2023	76	2	Health
2024	76	2	Health

Based on Bank BTN's financial soundness data from 2021 to 2024, the interpretation results demonstrate an excellent and stable level of consistency within the "Sound" (Sehat) category, maintaining a Rating 2 consecutively. Historically, the bank's performance score was recorded as stable at 72% in 2021 and 2022, before eventually experiencing a positive increase of 4 percentage points to 76% in 2023, which was successfully maintained through 2024. The increase in value over these last two years indicates increasingly solid internal efficiency, strengthened risk management, and robust adaptability in maintaining operational stability amidst the dynamics of the national banking industry.

5. Conclusions

This study has successfully evaluated the performance and financial soundness level of Bank BTN throughout the 2021 to 2024 period. The primary analysis results show a strong growth trend during the 2021–2023 phase, during which the bank successfully suppressed the gross NPL ratio to its lowest point of 3.01%, improved liquidity efficiency (LDR below 88%), and reached its peak profitability with an ROA of 0.88%. Despite macroeconomic pressures in 2024 that corrected the ROA to 0.59% and triggered a slight increase in NPL, Bank BTN's structural stability proved to remain robust. The synthesis of these findings directly supports the research hypothesis that strengthened risk governance correlates positively with institutional resilience. This is empirically proven through the bank's soundness assessment, which consistently remained at Rating 2 with a "Sound" predicate, and even experienced a score increase from 72% (2021–2022) to 76% (2023–2024).

Implicatively, the scholarly contribution of this research provides a real-world illustration of how a housing-focused bank mitigates credit risk amidst post-pandemic economic volatility, which can serve as a literature reference for similar banking risk management studies. However, this study has limitations as it only focuses on internal financial indicators without statistically testing external variables such as inflation and reference interest rate policies. Therefore, future research is recommended to integrate these macroeconomic variables using econometric methods to obtain more comprehensive predictive projections for the national banking industry.

References

- Alamsyah, A., & Rahayu, S. (2022). Efisiensi intermediasi perbankan dan dampaknya terhadap profitabilitas: Analisis LDR dan ROA pasca-pandemi. *Jurnal Akuntansi dan Keuangan Indonesia*, 19(2), 145–162. <https://doi.org/10.21002/jaki.2022.08>
- Bank Tabungan Negara. (2024). *Laporan keuangan tahunan (annual report) PT Bank Tabungan Negara (Persero) Tbk periode 2021–2024*. Bank Tabungan Negara.
- Budiman, A., & Setiawan, B. (2023). Pengaruh risiko kredit (NPL) dan kecukupan modal (CAR) terhadap profitabilitas bank BUMN di Indonesia. *Jurnal Manajemen Risiko Perbankan*, 7(1), 34–48. <https://doi.org/10.35384/jrmp.v7i1.321>
- Committee of Sponsoring Organizations of the Treadway Commission. (2017). *Enterprise risk management: Integrating with strategy and performance*.
- Fitriani, D., & Hidayat, M. R. (2024). Analisis tingkat kesehatan bank menggunakan metode RGEC pada bank fokus pembiayaan perumahan. *Jurnal Ilmiah Manajemen Analisis*, 11(3), 201–215. <https://doi.org/10.29264/jima.v11i3.1245>
- Gunawan, I., & Lestari, S. (2023). Determinants of banking profitability in post-pandemic economic recovery: Evidence from Indonesian state-owned banks. In *Proceedings of the International Conference on Banking and Finance (ICBF 2023)* (pp. 112–125). <https://doi.org/10.2991/aebmr.k.231101.014>
- Handayani, T. (2022). Penerapan ISO 31000:2018 dalam mitigasi risiko kredit macet pada perbankan komersial. *Jurnal Tata Kelola & Akuntansi*, 6(2), 89–104. <https://doi.org/10.31264/jtk.v6i2.451>
- Harahap, S. S., & Nasution, A. H. (2024). Analisis komparatif likuiditas dan profitabilitas perbankan nasional sebelum dan setelah gejolak ekonomi global 2024. *Jurnal Riset Ekonomi dan Bisnis*, 17(1), 55–69. <https://doi.org/10.26623/jreb.v17i1.8901>

- International Organization for Standardization. (2018). *Risk management—Guidelines (ISO Standard No. 31000:2018)*. <https://www.iso.org/standard/65694.html>
- Kusuma, H., & Wijaya, A. (2023). Manajemen risiko likuiditas melalui optimalisasi loan to deposit ratio (LDR) pada bank konvensional. *Jurnal Dinamika Manajemen Perbankan*, 5(2), 112–126. <https://doi.org/10.21009/jdmp.v5i2.776>
- Mahardika, R., & Pratama, Y. (2024). Pengaruh tingkat kecukupan modal (CAR) terhadap kemampuan penyerapan risiko aset produktif perbankan. *Jurnal Keuangan dan Perbankan*, 28(2), 178–193. <https://doi.org/10.26905/jkdp.v28i2.9432>
- Nugroho, B. A. (2022). Strategi restrukturisasi kredit sebagai upaya penurunan non-performing loan (NPL) sektor properti. *Jurnal Kajian Ekonomi dan Perbankan*, 6(3), 210–225. <https://doi.org/10.32493/jkep.v6i3.2241>
- Otoritas Jasa Keuangan. (2023). *Peraturan Otoritas Jasa Keuangan Nomor 11/POJK.03/2023 tentang tingkat kesehatan bank umum*. Otoritas Jasa Keuangan.
- Permana, G., & Sari, N. (2024). Impak volatilitas net interest margin (NIM) terhadap penurunan return on assets (ROA) perbankan nasional tahun 2024. *Jurnal Akuntansi Kontemporer*, 16(1), 40–54. <https://doi.org/10.33508/jako.v16i1.5432>
- Prasetyo, E. (2023). Efektivitas enterprise risk management (ERM) berbasis COSO dalam menjaga stabilitas keuangan perbankan BUMN. *Jurnal Manajemen Kewirausahaan*, 20(2), 131–144. <https://doi.org/10.9744/jmk.20.2.131-144>
- Rahmawati, E., & Utama, S. (2022). Post-pandemic economic resilience and its impact on banking financial performance listed on IDX. *Journal of Economics and Business Studies*, 9(4), 312–327. <https://doi.org/10.31014/aior.978.v9i4.562>
- Santoso, T., & Hidayati, N. (2023). Analisis hubungan kausalitas antara kualitas aset (NPL) dan profitabilitas (ROA) perbankan di Indonesia. *Jurnal Studi Ekonomi dan Bisnis*, 10(2), 85–98. <https://doi.org/10.21107/jseb.v10i2.1672>
- Sitorus, R., & Tambunan, M. (2024). Kebijakan makroprudensial dan dampaknya terhadap ekspansi kredit serta modal perbankan (CAR). *Jurnal Perbankan dan Finansial Indonesia*, 12(1), 15–29. <https://doi.org/10.35794/jpfi.v12i1.4421>
- Wibowo, S., & Siregar, H. (2023). Risk management and banking performance: An empirical analysis using ISO 31000 framework. *International Journal of Financial Research*, 14(2), 77–89. <https://doi.org/10.5430/ijfr.v14n2p77>
- Wulandari, R., & Saputra, D. (2024). Optimalisasi loan to deposit ratio (LDR) dalam mengantisipasi risiko pengetatan likuiditas pasar. *Jurnal Riset Keuangan Terapan*, 8(2), 102–116. <https://doi.org/10.22219/jrkt.v8i2.2310>