

Financial Soundness Analysis of Indonesian Regional Development Banks: A Comparative Case Study Based on the RGEC Framework

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ABSTRACT

Regional Development Banks (RDBs) support regional economic growth through financial intermediation, fund management, and MSME financing. This study examines the financial soundness and governance performance of Bank BJB and Bank Jatim using the RGEC framework during 2021–2025. Using a descriptive quantitative approach, Risk Profile is measured by NPL and LDR, Earnings by ROA and NIM, Capital by CAR, and governance by GCG self-assessment ratings. The findings show that both banks maintained generally sound conditions but had different strengths. Bank BJB performed better in credit quality and governance, while Bank Jatim showed stronger profitability and capital adequacy. Overall, the RGEC framework effectively captures differences in bank soundness across risk, governance, earnings, and capital dimensions. The study highlights the need for RDBs to strengthen risk management, governance, profitability, and capital resilience to support sustainable banking performance.

Keywords: Bank Performance, Corporate Governance, Regional Development Banks, Financial Soundness, RGEC Framework.

JEL Code: G21, G28, G34, G32

I. Introduction

Banks play an essential role in the economy by performing financial intermediation functions that facilitate the transfer of funds from surplus economic units to those requiring financing. Through this function, banks support the efficient allocation of capital to productive sectors, encourage investment activities, facilitate business development, and contribute to economic growth. Gorton and Winton (2002) explain that financial intermediaries, including banks, act as institutions that connect saving and investment activities within an economy. Consistent with this perspective, Levine (2005) argues that the financial sector reduces financing constraints and serves as a critical driver of economic growth. Therefore, the existence of sound and stable banking institutions is essential, as banking performance is closely associated with the continuity and effectiveness of economic activities. Assessing bank soundness is crucial for evaluating a bank's ability to maintain stability, manage risks, and sustain financial performance. Bank soundness is not determined solely by profitability but also by the effectiveness of risk management practices, the quality of corporate governance, and the adequacy of capital in absorbing potential losses. Saleh and Abu Afifa (2020) highlight that credit risk, liquidity risk, and capital adequacy are important factors influencing banking profitability.



Similarly, Hakimi et al. (2022) emphasize that credit risk significantly affects banking performance and stability. Beyond risk management, corporate governance plays an important role in strengthening internal control mechanisms and limiting excessive risk-taking behavior. Therefore, bank health assessment should incorporate multiple dimensions, including risk profile, governance, profitability, and capital, to provide a comprehensive evaluation of a bank's condition. Recent studies also indicate that RGEC-based indicators provide an effective framework for assessing bank soundness by reflecting liquidity conditions, governance quality, capital adequacy, and potential banking risks (Rizki & Gunarsih, 2024). Likewise, Oppusunggu and Simbolon (2021) demonstrate that bank soundness is closely associated with risk management, liquidity, profitability, and corporate governance.

Bank soundness is influenced not only by profitability but also by a bank's ability to maintain stability and manage risks arising from operational activities. Within the banking sector, credit risk and liquidity risk represent critical factors because they are directly related to asset quality, the ability to meet short-term obligations, and resilience during periods of financial pressure. High credit risk may indicate weaknesses in lending quality, while ineffective liquidity management may reduce a bank's ability to fulfill funding obligations. Ghenimi et al. (2017) explain that credit risk and liquidity risk significantly influence banking stability, emphasizing that interactions between these risks may increase vulnerability when they are not properly managed. Consequently, evaluating the risk profile is an essential component of bank soundness assessment because it provides insights into a bank's ability to control risks and maintain sustainable operations. Afandi and Purnamasari (2025) further identify credit risk and operational efficiency as key determinants of financial performance in conventional banks. In addition to risk management, bank soundness should also be evaluated through profitability and capital adequacy indicators. Profitability reflects a bank's ability to generate sustainable income from its operational activities, while capital adequacy demonstrates its capacity to absorb potential losses and maintain business continuity. Dietrich and Wanzenried (2011) suggest that bank profitability is influenced by internal factors, including financial structure, operational efficiency, and capital position. Therefore, earnings and capital represent important components of bank soundness evaluation, as they illustrate how banks maintain financial performance, strengthen resilience, and ensure long-term stability. Good Corporate Governance (GCG) is another important factor in maintaining bank soundness and ensuring business sustainability. In banking practices, the board of commissioners performs a supervisory function to ensure that GCG principles are effectively implemented across business activities and organizational levels.

The board of commissioners also oversees the responsibilities of the board of directors and provides strategic guidance to support effective governance implementation. Within banking institutions, supervisory and executive boards serve as key internal mechanisms for strengthening governance practices. Accordingly, elements such as independent commissioners and audit committees play a significant role in improving oversight quality, transparency, and accountability in bank management (Fitrianingsih & Sulistiana, 2024). This governance structure is increasingly important because mechanisms for controlling risk-taking behavior have become a major concern among academics and regulators. Effective corporate governance can reduce risk exposure, whereas weak governance practices may increase banking risks (Srivastav & Hagendorff, 2016). Furthermore, as one of the main pillars of the Indonesian economy, the banking industry contributes significantly to financial stability and sustainable economic development. Within this sector, Regional Development Banks (RDBs) have an important role in supporting regional financial intermediation and promoting local economic growth. To ensure banking soundness, the Financial Services Authority (Otoritas Jasa Keuangan/OJK) issued POJK No. 4/POJK.03/2016, which establishes a risk-based approach for evaluating bank health. This regulation adopts the RGEC framework, consisting of Risk Profile, Good Corporate Governance, Earnings, and Capital components. The regulation serves not only as an evaluation framework but also as a supervisory instrument to ensure that banks are capable of managing risks, implementing effective governance, maintaining profitability, and preserving adequate capital levels. The relevance of the RGEC framework is also supported by empirical studies on Indonesian Regional Development Banks. Mulatsih et al. (2025) applied the RGEC framework to Bank Jatim by analyzing indicators including NPL, LDR, GCG self-

assessment, ROA, NIM, and CAR to evaluate bank soundness. These findings support the suitability of RGEC as a comprehensive framework for assessing Regional Development Bank performance. Furthermore, RGEC helps identify areas requiring improvement, including credit risk management, governance effectiveness, profitability enhancement, and capital planning.

Based on their institutional mandate, Regional Development Banks (RDBs) play a strategic role in promoting regional economic development, particularly by expanding financial access for rural communities and underserved groups. RDBs are expected to function as drivers of local economic growth by providing financing support for Micro, Small, and Medium Enterprises (MSMEs), encouraging economic expansion, accelerating regional development, and improving community welfare. In addition, RDBs contribute to regional financial management and serve as a source of revenue for local governments. Despite their strategic role, the performance of Regional Development Banks has not been fully optimized. This limitation is reflected in the relatively low utilization of third-party funds for lending activities, limited productive financing, and stagnant performance improvements (Sugiarto et al., 2024). Satyagraha et al. (2022) further indicate that the intermediation function of RDBs, measured through the intermediation ratio, remains below the national banking industry average. Moreover, RDBs tend to experience higher levels of non-performing loans compared with the overall banking sector. Although their Capital Adequacy Ratio (CAR) indicates sufficient capital strength, their ability to expand business activities and improve competitiveness within the national financial system remains limited. These conditions demonstrate the need for structural transformation within Regional Development Banks. RDBs continue to face several fundamental challenges, including limited contribution to regional development, low productive lending, inadequate governance practices, limited human resource capacity, weak risk management systems, and insufficient technological infrastructure. The relatively small proportion of productive loans, which accounts for only 26%, indicates that RDBs have not yet fully optimized their role in supporting regional economic development. These weaknesses may increase exposure to problem loans, particularly in productive lending segments. Furthermore, limited competitiveness is reflected in banking products and services that have not fully addressed the needs of local communities and business sectors. Therefore, transformation is required to strengthen institutional capacity, overcome structural weaknesses, and enhance the ability of RDBs to compete and contribute more effectively to regional economic development (Otoritas Jasa Keuangan, 2015).

Beyond internal reforms, the stability of Regional Development Banks is also influenced by the regulatory and supervisory framework. Effective banking regulation and supervision support financial stability by enabling banks to manage credit risks, maintain responsible business practices, and preserve asset quality. Fraccaroli et al. (2025) demonstrate that reductions in non-performing loans are associated with stronger independence in banking regulation and supervision. This finding suggests that adequate regulatory frameworks can improve banking stability without significantly reducing profitability and operational efficiency. Therefore, regulation in the banking sector serves not only as a compliance mechanism but also as an instrument for strengthening institutional resilience and maintaining financial system stability. These challenges indicate that the financial soundness of RDBs should be evaluated not only through profitability indicators but also through risk profile, governance quality, and capital adequacy. A systematic assessment is therefore necessary to identify the strengths and weaknesses of RDBs and provide a stronger foundation for managerial and regulatory decision-making. Based on this perspective, this study aims to examine and compare the financial soundness and governance performance of Bank BJB and Bank Jatim using the RGEC framework. This topic is relevant because Regional Development Banks play a strategic role in supporting regional economic growth but continue to face challenges related to intermediation effectiveness, risk management, governance quality, profitability, and capital strength. Bank BJB and Bank Jatim were selected because both institutions are publicly listed on the Indonesia Stock Exchange, resulting in greater demands for transparency, accountability, and performance evaluation from regulators, investors, and stakeholders. Therefore, this study seeks to assess and compare the soundness level of both banks through the RGEC framework. The findings are expected to provide a comprehensive overview of their financial conditions and offer practical implications for bank management, regulators, investors, and stakeholders in strengthening

risk management, improving governance practices, enhancing financial performance, and supporting sustainable banking development.

II. Literature Review and Hypothesis Development

2.1. Regional Development Banks

As regional financial institutions, Regional Development Banks (RDBs) play a strategic role in supporting local economic development. Their existence contributes to regional economic growth by providing financial products and services that are aligned with the social and economic characteristics of their respective regions. In addition, their role in providing financial advisory services and managing regional government funds further strengthens their contribution to regional economic development (Satyagraha et al., 2022). Previous experiences indicate that weak implementation of good governance practices in banking institutions is one of the major factors contributing to business failure and reduced competitiveness. At a broader level, governance failures may trigger instability in the banking sector and negatively affect overall economic conditions. Therefore, Regional Development Banks must continuously strengthen governance mechanisms, risk management systems, and compliance practices in an integrated and sustainable manner. Through effective governance implementation, RDBs can fulfill regulatory requirements, uphold ethical standards, create institutional value, improve sustainable performance, manage stakeholder responsibilities, and maintain a balance between shareholder and stakeholder interests. Furthermore, bank soundness assessment has evolved in response to increasing business complexity, changing risk characteristics, and the implementation of risk-based supervisory approaches. In accordance with Bank Indonesia Regulation No. 13/1/PBI/2011 concerning risk-based bank rating, the assessment framework was developed into the RGEC method, which evaluates bank soundness through four main components: Risk Profile, Good Corporate Governance, Earnings, and Capital. Within this framework, Risk Profile assesses inherent risks and the effectiveness of risk management practices, Good Corporate Governance evaluates governance quality and implementation, Earnings measures the ability to generate sustainable profitability, and Capital assesses capital adequacy and capital management capability.

The RGEC components should be understood as interconnected dimensions rather than separate assessment indicators. The Risk Profile reflects the level of credit and liquidity risks faced by banks, while Good Corporate Governance functions as a mechanism to control excessive risk-taking behavior and strengthen managerial accountability. Earnings represent the bank's ability to generate sustainable profits and support internal capital formation, whereas Capital provides protection against potential losses and supports future business expansion. Therefore, the interaction among risk management, governance quality, profitability, and capital adequacy determines the overall soundness and performance of Regional Development Banks. Governance quality is closely associated with the risk profile of Regional Development Banks within the RGEC framework. Effective governance can reduce risk exposure through stronger supervision, appropriate risk limits, effective internal control systems, and more accountable decision-making processes. Conversely, weak governance practices may increase credit risk, liquidity pressures, and excessive risk-taking behavior, which can negatively affect profitability and earnings quality. A declining risk profile may also increase potential losses and place additional pressure on capital adequacy. Therefore, Good Corporate Governance plays an important role in supporting financial performance and institutional stability by strengthening risk control, earnings sustainability, and capital resilience. Accordingly, the RGEC framework is relevant for evaluating bank soundness because it integrates risk, governance, profitability, and capital dimensions into a comprehensive assessment model. Given the increasing complexity of banking activities, the soundness of Regional Development Banks should be evaluated through a holistic approach. This framework is particularly important for RDBs because it enables the assessment of their ability to manage risks arising from financial intermediation activities, implement effective governance practices, generate sustainable profits, and maintain sufficient capital to support business development. Thus, RGEC provides a comprehensive

perspective on bank soundness, particularly for regional financial institutions expected to support local economic development in a prudent and sustainable manner.

2.2. Risk Profile

As a key component of banking risk governance, the board of directors is responsible for overseeing the development and implementation of an effective risk management framework. This framework should be supported by a strong risk culture, a clearly defined risk appetite through the Risk Appetite Statement (RAS), and well-established roles and responsibilities among risk management and control functions. Clear responsibility allocation is essential to ensure that risk oversight operates effectively across all levels of the banking organization (Committee on Banking Supervision, 2015). The formulation and communication of a bank's risk appetite are critical in strengthening risk culture and ensuring effective risk management practices. A comprehensive risk governance framework should establish procedures for managing risk limit breaches, including escalation mechanisms, notification processes to the board, and corrective actions for excessive risk-taking behavior. Therefore, the board of directors is responsible for defining the bank's risk appetite and ensuring its alignment with strategic objectives, capital planning, financial planning, and remuneration policies. Furthermore, the Risk Appetite Statement should be effectively communicated to ensure that it is understood and implemented by the board, senior management, employees, and supervisory authorities.

2.3. Good Corporate Governance

Corporate governance has become an important issue in modern business practices, particularly within the banking sector. The board of directors generally serves as the primary governing body responsible for ensuring that organizational activities are conducted in accordance with shareholders' interests, strategic objectives, and regulatory requirements (Basuony et al., 2014). The Committee on Banking Supervision (2015) emphasizes that effective corporate governance is essential for maintaining banking sector stability and supporting broader economic resilience. As financial intermediaries, banks require governance frameworks based on transparency, accountability, responsibility, independence, and fairness. These principles support prudent decision-making, protect stakeholder interests, and enhance sustainable institutional performance. Within the RGEC framework, Good Corporate Governance is not merely considered a regulatory requirement but also represents an essential dimension reflecting internal control quality, transparency, accountability, and risk supervision effectiveness. Effective governance mechanisms enable banks to manage risk-taking behavior, improve managerial decision-making, and maintain stakeholder confidence. Srivastav and Hagendorff (2016) highlight that banking risk is closely related to corporate governance, as strong governance structures contribute to reducing risk exposure. Therefore, Good Corporate Governance contributes to bank soundness by strengthening the relationship between governance quality, risk management effectiveness, and long-term business sustainability.

2.4. Earnings

A bank's ability to generate profits represents an important indicator of its financial health and long-term sustainability. Stable earnings reflect effective management of assets, revenue sources, operating expenses, and financial intermediation activities. Menicucci and Paolucci (2016) explain that bank profitability can be measured using indicators such as Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM), which are influenced by internal bank characteristics, including bank size, capitalization, and asset quality. Within the RGEC framework, Earnings are not only used to evaluate profitability but also to assess a bank's ability to generate sustainable income, maintain operational efficiency, support business continuity, and strengthen financial resilience during periods of economic uncertainty. Regarding specific indicators, ROA measures the effectiveness of a bank in utilizing its assets to generate profits, while NIM reflects the ability of

a bank to generate net interest income from its productive assets. Singh et al. (2024) state that ROA represents management effectiveness in converting assets into operating profits, whereas NIM reflects a bank's capacity to generate net interest income through its financial intermediation activities.

2.5. Capital

Capital adequacy represents an important indicator of long-term solvency and overall financial soundness. A higher Capital Adequacy Ratio (CAR) indicates a stronger capacity to absorb potential losses and maintain financial stability when facing financial risks (Sun et al., 2017). From a regulatory perspective, CAR measures the proportion of available bank capital relative to risk-weighted assets (RWA), ensuring that banks maintain sufficient capital buffers to absorb unexpected losses arising from credit, market, and operational risks. Maintaining an adequate CAR not only reflects compliance with regulatory requirements, including Basel standards, but also demonstrates a bank's ability to withstand economic uncertainty, preserve financial resilience, and support sustainable business growth. Therefore, capital adequacy serves as a critical component in evaluating the overall soundness and stability of banking institutions.

2.6. Research Proposition Development

This study develops its research proposition based on the RGEC framework and previous empirical studies related to bank soundness assessment. The RGEC framework emphasizes that bank soundness should be evaluated through four interconnected dimensions: Risk Profile, Good Corporate Governance, Earnings, and Capital. Risk Profile represents the level of exposure to credit and liquidity risks, while Good Corporate Governance reflects the effectiveness of internal control mechanisms, supervision, and governance practices. Earnings indicate the bank's ability to generate sustainable profitability, whereas Capital reflects the bank's capacity to absorb potential losses and maintain operational continuity. Previous studies provide theoretical and empirical support for the use of these components in assessing bank soundness. Ghenimi et al. (2017) highlight that credit risk and liquidity risk are closely associated with banking stability. Srivastav and Hagendorff (2016) demonstrate that corporate governance is strongly related to bank risk management, where effective governance mechanisms contribute to reducing risk exposure. Menicucci and Paolucci (2016) explain that profitability indicators, including ROA and NIM, represent important measures of bank financial performance. Meanwhile, Sun et al. (2017) emphasize that capital adequacy strengthens a bank's ability to withstand financial shocks and maintain stability. Based on this theoretical foundation, this study compares Bank BJB and Bank Jatim using selected RGEC indicators to identify differences in their financial soundness and governance performance. The comparative approach is expected to provide insights into the relative strengths and weaknesses of each bank in managing risks, maintaining profitability, implementing governance practices, and ensuring capital resilience.

III. Research Method

3.1. Research Design

This study adopts a descriptive quantitative approach to assess and compare the financial soundness of Bank BJB and Bank Jatim using the RGEC framework. The RGEC framework is considered appropriate because it provides a risk-based and comprehensive approach for evaluating bank soundness through four main components: Risk Profile, Good Corporate Governance, Earnings, and Capital. Previously, bank soundness assessments were commonly conducted using the CAMEL framework, which evaluated five components: Capital, Asset Quality, Management, Earnings, and Liquidity (Avelani & Astuti, 2022). However, as banking activities became increasingly complex, the assessment approach evolved toward the risk-based RGEC framework, as regulated under POJK No. 4/POJK.03/2016. Conceptually, CAMEL places greater emphasis

on financial conditions and management aspects, whereas RGEC incorporates risk profile and governance quality as essential components of bank soundness evaluation. Therefore, RGEC is considered more suitable for assessing Regional Development Banks (RDBs), as these institutions face various challenges related to credit risk management, liquidity management, governance effectiveness, profitability sustainability, and capital adequacy. Accordingly, the RGEC framework provides a stronger analytical foundation for evaluating the financial soundness of Bank BJB and Bank Jatim.

3.2. Object and Period of Study

The objects of this study are Bank BJB and Bank Jatim, which are publicly listed Regional Development Banks on the Indonesia Stock Exchange. These banks were selected because of their important role in supporting regional economic development and the availability of publicly disclosed financial and governance information. The study covers the period from 2021 to 2025 and uses bank-year observations as the basis of analysis. Therefore, this research is designed as a comparative case study using RGEC-based indicators to evaluate differences in bank soundness between the two institutions.

3.3. Data Type, Sources, and Collection Procedure

The data used in this study are secondary data obtained from official reports published by Bank BJB and Bank Jatim during the 2021–2025 period. The data include annual reports, financial statements, and Good Corporate Governance (GCG) reports. These reports were collected from the official websites of each bank, particularly from investor relations, financial reporting, annual report, and corporate governance disclosure sections. Both banks were selected as research objects because they are publicly listed companies on the Indonesia Stock Exchange, allowing access to transparent, reliable, and publicly available financial and governance information. The reports were selected based on several criteria. First, the reports had to cover the observation period from 2021 to 2025. Second, the reports had to provide the required RGEC indicators, including Non-Performing Loans (NPL), Loan-to-Deposit Ratio (LDR), Return on Assets (ROA), Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and GCG self-assessment ratings. Third, the reports had to be officially published by each bank and provide comparable information across the same observation period. The 2021–2025 period was selected to provide a five-year observation period for analyzing changes in bank soundness conditions, risk exposure, and financial performance during the post-pandemic economic recovery period. To ensure data validity, reliability, consistency, and completeness, this study only utilized officially published reports from Bank BJB and Bank Jatim. Financial ratio data were cross-verified between annual reports and financial statements, while governance data were obtained from GCG reports or governance disclosures presented in annual reports. To address differences in reporting formats between the two banks, the collected data were standardized using consistent RGEC indicators, observation periods, and measurement formulas. Each financial ratio and governance rating was verified based on the same reporting period and indicator definitions before being organized into a comparative analysis table. This procedure was implemented to ensure that the comparison between Bank BJB and Bank Jatim was valid, consistent, and comparable.

3.4. Risk Profile

Bank lending plays an important role in supporting economic growth and maintaining financial system stability. Changes in financial conditions and monetary policies can significantly influence economic activity through credit transmission channels (Aikman et al., 2020). Credit risk and liquidity risk are key components in evaluating a bank's risk profile. The Non-Performing Loan (NPL) ratio is commonly used to measure credit risk because it represents the proportion of non-performing loans relative to total loans. Meanwhile, liquidity risk is generally assessed using the Loan-to-Deposit Ratio (LDR), which indicates the

extent to which collected deposits are utilized for lending activities. A higher NPL ratio indicates greater exposure to potential losses resulting from borrower default, whereas an excessively high LDR may indicate liquidity pressure when loan distribution exceeds available funding sources. Ghenimi et al. (2017) emphasize that credit risk is strongly associated with banking stability, making NPL and LDR relevant indicators for evaluating bank risk profiles and overall soundness. Therefore, NPL is used to measure the proportion of problem loans compared with total loans, while LDR assesses the extent to which third-party funds are allocated to lending activities. The formulas used are presented as follows:

$$NPL = \frac{\text{Non - Performing Loans}}{\text{Total Gross Loans}}$$

$$LDR = \frac{\text{Total Loans}}{\text{Total Deposits}}$$

3.5. Good Corporate Governance

The Financial Services Authority requires banks to implement Good Corporate Governance (GCG) based on five fundamental principles: transparency, accountability, responsibility, independence, and fairness. Transparency refers to the clear and open disclosure of relevant information, while accountability relates to the clarity of roles, responsibilities, and organizational accountability mechanisms. Responsibility reflects compliance with applicable regulations and the implementation of sound management practices. Independence requires management to perform its duties objectively and free from conflicts of interest, while fairness emphasizes equal and balanced treatment of all stakeholders. In this study, the GCG component is assessed using GCG self-assessment ratings disclosed in the governance reports or annual reports of Bank BJB and Bank Jatim. These ratings represent the banks' internal evaluations of governance implementation based on applicable regulatory standards. The use of self-assessment ratings is appropriate because banks are required to conduct periodic evaluations of governance practices, which are reviewed and approved by the board of directors before being submitted to the board of commissioners as part of the supervisory process. Previous empirical evidence supports the importance of governance assessment in banking performance. Maharani et al. (2024) demonstrate that effective GCG implementation contributes positively to financial performance by strengthening transparency, accountability, internal supervision, and institutional stability in banking organizations.

3.6. Earnings

Earnings reflect a bank's ability to generate income from its core operational activities and represent an important indicator in evaluating bank soundness. This component demonstrates how effectively a bank maintains financial performance, manages revenue sources, and controls operating costs. Banks with strong earnings capacity generally have greater resilience in maintaining business continuity and adapting to changing economic conditions. Athanasoglou et al. (2008) explain that bank profitability is influenced by internal factors, industry characteristics, and macroeconomic conditions. Therefore, earnings remain a crucial component in evaluating overall bank performance and financial sustainability. In this study, profitability is assessed quantitatively using financial ratios, including Return on Assets (ROA). ROA measures the efficiency of asset utilization in generating profits and is widely used as an indicator of overall financial performance (Ross et al., 2013). The ROA formula is presented as follows:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

Another profitability indicator examined in this study is Net Interest Margin (NIM). This ratio measures the effectiveness of earning asset management in generating net interest income and reflects the efficiency of banking intermediation activities by comparing interest income with interest expenses. A higher NIM indicates a stronger ability to generate net interest income from productive assets, making it an important indicator of profitability and operational performance in the banking sector (Sugiarto et al., 2024). The NIM formula is presented as follows:

$$NIM = \frac{\text{Net Interest Income}}{\text{Average Earning Assets}}$$

3.7. Capital

The capital component is evaluated through capital adequacy, which is measured using the Minimum Capital Requirement or Kewajiban Penyediaan Modal Minimum (KPMM). Referring to POJK No. 11/POJK.03/2016 issued by the Financial Services Authority regarding minimum capital requirements for commercial banks, banks are required to maintain capital levels that are adequate relative to the risks they face. This ratio indicates the ability of a bank to absorb potential losses arising from risk-weighted assets, including credit risk, market risk, and operational risk. Therefore, capital adequacy represents an important indicator of financial resilience and overall bank soundness. The Capital Adequacy Ratio (CAR) formula is presented as follows:

$$CAR = \frac{\text{Capital}}{\text{Risk - Weighted Assets}}$$

IV. Results and Discussion

This section presents and discusses the empirical findings regarding the assessment of the financial soundness of Bank BJB and Bank Jatim during the 2021–2025 period using the RGEC framework. The analysis focuses on four main components: Risk Profile, Good Corporate Governance, Earnings, and Capital. The presented tables provide the empirical basis for comparing the performance of both banks. Each table is analyzed by linking the reported indicators with the relevant RGEC dimensions, including credit risk and liquidity risk under the Risk Profile component, governance ratings under Good Corporate Governance, profitability indicators under Earnings, and capital adequacy under Capital. Therefore, the discussion does not merely present numerical results but also explains their implications for evaluating financial soundness and comparing the overall performance of Bank BJB and Bank Jatim.

4.1. Risk Profile

Table 1. Risk Profile Assessment of Bank BJB and Bank Jatim

Year	Non-Performing Loan Ratio (NPL) (%)		Loan-to-Deposit Ratio (LDR) (%)	
	Bank BJB	Bank Jatim	Bank BJB	Bank Jatim
2021	1.24	4.48	81.68	51.35
2022	1.16	2.83	85.03	56.50
2023	1.21	2.49	87.84	70.03
2024	2.22	3.45	89.49	82.05
2025	2.91	3.88	88.13	85.39

Based on the Non-Performing Loan (NPL) indicator, Bank BJB demonstrated relatively better credit quality compared with Bank Jatim during the 2021–2025 period. Bank BJB’s NPL ratio ranged from 1.16% to

2.91%, whereas Bank Jatim's NPL ratio ranged from 2.49% to 4.48%. These results indicate that Bank BJB experienced lower credit risk exposure compared with Bank Jatim. However, Bank BJB's NPL ratio increased significantly starting in 2024, rising from 2.22% to 2.91% in 2025. This trend indicates an increase in non-performing loans that requires further improvement in credit risk management. Meanwhile, Bank Jatim's NPL ratio decreased from 4.48% in 2021 to 2.49% in 2023 but increased again to 3.45% in 2024 and 3.88% in 2025. This condition suggests that Bank Jatim still needs to strengthen its credit risk management practices, particularly in maintaining loan quality and controlling problem loans. Maulida and Wahyuningsih (2021) demonstrate that the Non-Performing Loan (NPL) ratio is an important indicator for assessing credit quality and risk conditions in Regional Development Banks. The findings of this study support their argument, as differences in NPL values between Bank BJB and Bank Jatim reflect differences in credit risk exposure and financial soundness. Bank BJB's lower NPL ratio indicates stronger credit quality, whereas Bank Jatim's higher NPL ratio reflects greater exposure to problem loans. The increase in NPL ratios experienced by both banks during 2024–2025 highlights the importance of strengthening credit risk management through improved lending quality, loan monitoring, and problem loan resolution strategies.

4.2. Good Corporate Governance

Table 2. Assessment of the Good Corporate Governance (GCG) Aspect of Bank BJB and Bank Jatim

Year	Bank BJB	Bank Jatim
2021	Rating 2	Rating 3
2022		
2023		
2024		
2025		

The GCG assessment rating is categorized into five levels, ranging from Rating 1 to Rating 5. A lower rating indicates stronger governance implementation within the bank. A Rating 2 reflects that the bank has generally implemented good governance practices, with adequate fulfillment of governance principles. Any weaknesses identified at this level are considered less significant and can typically be addressed through normal managerial actions. Meanwhile, a Rating 3 indicates that governance implementation is considered fairly good; however, several weaknesses remain and require greater attention from management. During the observation period, Bank BJB consistently obtained a GCG rating of 2, while Bank Jatim consistently received a rating of 3. These results indicate that Bank BJB demonstrated stronger and more stable governance performance compared with Bank Jatim. The Rating 2 achieved by Bank BJB suggests that governance principles were implemented effectively, with only minor weaknesses requiring improvement. In contrast, Bank Jatim's Rating 3 indicates that although governance practices were fairly adequate, further improvements are required, particularly in strengthening supervision, internal control, risk management, compliance systems, and the effectiveness of governance functions. Within the RGEC framework, these findings demonstrate that governance quality is not only related to regulatory compliance but also contributes to risk management effectiveness, accountability, financial performance, and institutional stability.

Therefore, improving governance quality is essential for Regional Development Banks to strengthen internal oversight mechanisms and enhance sustainable performance. The GCG ratings indicate that both banks still have opportunities to improve their governance practices. Bank BJB's Rating 2 reflects relatively strong governance implementation, while Bank Jatim's Rating 3 suggests the need for greater managerial attention in improving governance effectiveness. This finding is consistent with the RGEC perspective, which emphasizes that governance quality plays an important role in supporting bank soundness through effective supervision, internal control, risk management, regulatory compliance, and the optimal functioning of governance structures. Love and Rachinsky (2015) found that stronger corporate governance practices are associated with improved banking performance. Effective governance mechanisms are linked to higher

profitability indicators, including ROA, ROE, and net interest income, while also contributing to lower levels of non-performing loans. These findings indicate that sound corporate governance practices can enhance financial performance, strengthen institutional resilience, and reduce credit-related risks in banking institutions.

4.3. Earnings

Table 3. Earnings Assessment of Bank BJB and Bank Jatim

Year	Return on Assets (ROA) (%)		Net Interest Margin (NIM) (%)	
	Bank BJB	Bank Jatim	Bank BJB	Bank Jatim
2021	1.73	2.05	5.84	5.11
2022	1.75	1.95	5.86	5.11
2023	1.33	1.87	5.18	5.57
2024	0.86	1.60	3.83	5.86
2025	0.70	1.90	3.84	6.15

Based on the Return on Assets (ROA) indicator, Bank Jatim demonstrated stronger profitability performance compared with Bank BJB during the 2021–2025 period. Bank Jatim’s ROA ranged from 1.60% to 2.05%, whereas Bank BJB’s ROA ranged from 0.70% to 1.75%. Bank BJB experienced a significant declining trend in ROA, particularly during 2023–2025, decreasing from 1.33% to 0.86% and further declining to 0.70%. This trend indicates a reduction in Bank BJB’s ability to generate profits from its asset base. Meanwhile, Bank Jatim’s ROA declined to 1.60% in 2024 but increased again to 1.90% in 2025. This recovery indicates that Bank Jatim was relatively more capable of maintaining profitability compared with Bank BJB. Therefore, based on the ROA indicator, Bank Jatim demonstrated stronger asset utilization efficiency and profitability performance. Based on the Net Interest Margin (NIM) indicator, Bank BJB showed a declining trend, whereas Bank Jatim demonstrated continuous improvement during the observation period. Bank BJB’s NIM decreased from 5.86% in 2022 to 5.18% in 2023, followed by a significant decline to 3.83% in 2024 and remaining relatively stable at 3.84% in 2025. This condition indicates reduced effectiveness in generating net interest income from earning assets. In contrast, Bank Jatim’s NIM increased from 5.11% in 2021 and 2022 to 6.15% in 2025, reflecting stronger intermediation performance and improved earnings quality. Overall, Bank Jatim demonstrated better earnings performance than Bank BJB, as reflected in its higher ROA and increasing NIM trend. These findings support the RGEC framework, which considers earnings as a critical component of bank soundness because profitability reflects operational efficiency, income-generating capacity, and financial sustainability. The results are also consistent with Nasrallah and El Khoury (2022), who explain that stronger financial performance can contribute to improved governance outcomes. Therefore, Bank Jatim should maintain its earnings performance through effective supervision, transparency, and accountability, while Bank BJB needs to improve asset productivity and optimize interest income management to strengthen profitability.

4.4. Capital

Table 4. Capital Assessment of Bank BJB and Bank Jatim

Year	Capital Adequacy Ratio (CAR) (%)	
	Bank BJB	Bank Jatim
2021	17.78	23.52
2022	19.19	24.74
2023	20.12	25.71
2024	19.70	23.49
2025	21.20	25.38

Based on the Capital Adequacy Ratio (CAR) indicator, both Bank BJB and Bank Jatim demonstrated strong capital conditions during the 2021–2025 period. Bank BJB's CAR ranged from 17.78% to 21.20%, while Bank Jatim's CAR ranged from 23.49% to 25.71%. These figures indicate that both banks maintained sufficient capital levels to absorb potential risks and support sustainable business operations. However, a comparison between the two banks shows that Bank Jatim consistently maintained a higher CAR level than Bank BJB throughout the observation period. This indicates that Bank Jatim had stronger capital resilience and greater capacity to absorb unexpected losses. During the observation period, Bank BJB's CAR increased from 17.78% in 2021 to 20.12% in 2023, declined slightly to 19.70% in 2024, and increased again to 21.20% in 2025. This pattern reflects an overall strengthening of Bank BJB's capital position despite temporary fluctuations. Similarly, Bank Jatim maintained a strong capital position, with CAR increasing from 23.52% in 2021 to 25.71% in 2023, declining to 23.49% in 2024, and rising again to 25.38% in 2025. Overall, Bank Jatim demonstrated stronger capital adequacy compared with Bank BJB. Nevertheless, both banks remained within a healthy capital condition and possessed sufficient capital capacity to support banking resilience and business continuity. These findings are consistent with Al Humam and Sihotang (2019), who state that the Capital Adequacy Ratio (CAR) reflects a bank's ability to provide sufficient capital to cover potential risks. In this study, the relatively high CAR values of both banks indicate adequate capital strength to support operational continuity and absorb financial risks.

However, Bank Jatim's consistently higher CAR demonstrates stronger capital resilience compared with Bank BJB. Within the RGEC framework, these findings confirm that capital is a fundamental component of bank soundness because it supports financial stability, risk absorption capacity, and sustainable business expansion. The findings should also be interpreted by considering external factors influencing banking performance during the 2021–2025 period. Macroeconomic conditions, inflation trends, interest rate fluctuations, regulatory developments, government policies, and changes in banking industry dynamics may have influenced credit risk, liquidity conditions, profitability, and capital management. For instance, interest rate movements may affect loan demand, funding costs, NIM, and credit quality, while regulatory changes may influence capital planning, governance implementation, and risk management strategies. Therefore, differences between Bank BJB and Bank Jatim should not be interpreted solely as differences in internal performance but also as outcomes influenced by broader economic, regulatory, and industry conditions.

4.5. Research Limitations

This study has several limitations related to its research scope. The analysis relies on publicly available secondary data obtained from annual reports, financial statements, and governance reports published by Bank BJB and Bank Jatim during the 2021–2025 period. However, this study is limited to a descriptive quantitative comparative analysis and does not examine causal relationships among RGEC components. Furthermore, the assessment is restricted to selected RGEC indicators, including Non-Performing Loans (NPL), Loan-to-Deposit Ratio (LDR), Good Corporate Governance (GCG) self-assessment ratings, Return on Assets (ROA), Net Interest Margin (NIM), and Capital Adequacy Ratio (CAR). Therefore, the findings should be interpreted within the context of the selected banks, observation period, and indicators applied in this research. The results are not intended to represent the overall condition of all Regional Development Banks in Indonesia.

V. Conclusion

This study evaluated the financial soundness of Bank BJB and Bank Jatim during the 2021–2025 period using the RGEC framework, which consists of four main components: Risk Profile, Good Corporate Governance, Earnings, and Capital. The findings indicate that both banks generally maintained sound financial conditions, although each institution demonstrated different areas of strength and weakness. In terms of the Risk Profile component, Bank BJB demonstrated better credit quality, as reflected in its lower NPL ratio

compared with Bank Jatim. However, the increasing NPL ratios experienced by both banks during 2024–2025 indicate the need for further improvement in credit risk management practices. Regarding liquidity performance, Bank BJB maintained a relatively stable LDR level, while Bank Jatim experienced a significant increase in LDR, reflecting stronger intermediation activities but also requiring careful management of liquidity and credit risks. Regarding Good Corporate Governance, Bank BJB consistently achieved a GCG rating of 2, indicating stronger and more stable governance implementation compared with Bank Jatim, which consistently obtained a rating of 3. This suggests that Bank Jatim still requires improvements in governance effectiveness, particularly in strengthening supervision, internal control, and risk management practices. From the Earnings perspective, Bank Jatim demonstrated better profitability performance than Bank BJB, as reflected in its higher ROA and increasing NIM trend. Meanwhile, Bank BJB experienced profitability pressure due to declining ROA and NIM during the observation period. In terms of Capital, both banks maintained strong capital adequacy levels; however, Bank Jatim consistently recorded a higher CAR, indicating stronger capital resilience and greater capacity to absorb potential risks.

Overall, the findings show that Bank BJB demonstrated stronger performance in credit quality and governance implementation, whereas Bank Jatim showed stronger performance in profitability and capital adequacy. These results highlight the importance for both Regional Development Banks to continuously strengthen risk management practices, improve governance quality, maintain adequate capital levels, and enhance profitability to support sustainable financial performance and long-term institutional resilience. This study provides a foundation for future research on the financial soundness of Regional Development Banks. Future studies may extend the observation period to capture long-term trends in banking performance and financial stability. Further research may also include a broader sample of Indonesian Regional Development Banks to improve the generalizability of findings. In addition, future studies may adopt longitudinal research approaches and incorporate other relevant variables, such as operational efficiency, asset quality, bank size, macroeconomic conditions, digital banking transformation, and ownership structure, to provide a more comprehensive understanding of factors influencing bank soundness.

References

- Afandi, F. N., & Purnamasari, P. E. (2025). The Influence of Green Banking, Credit Risk, and Operational Efficiency on The Financial Performance of Conventional Banks in 2020-2023. *Golden Ratio of Auditing Research*, 6(1), 43–56. <https://doi.org/10.52970/grar.v6i1.1391>
- Aikman, D., Lenhart, A., Liang, N., & Modugno, M. (2020). Credit, Financial Conditions, and Monetary Policy Transmission. *International Journal of Central Banking*, 16(3), 141–179.
- Al Humam, A. Y., & Sihotang, E. T. (2019). Risiko Usaha Terhadap Rasio Kecukupan Modal Bank Umum Swasta Nasional Devisa Go Public. *Journal of Business & Banking*, 8(2), 255. <https://doi.org/10.14414/jbb.v8i2.1639>
- Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money*, 18(2), 121–136. <https://doi.org/10.1016/j.intfin.2006.07.001>
- Basuony, M. A., Mohamed, E. K. A., & Al-Baidhani, A. M. (2014). The Effect Of Corporate Governance on Bank Financial Performance: Evidence From The Arabian Peninsula. *Corporate Ownership & Control*, 11(2), 178–191.
- Committee on Banking Supervision, B. (2015). Basel Committee on Banking Supervision Guidelines Corporate governance principles for banks. www.bis.org
- Dietrich, A., & Wanzenried, G. (2011). Determinants of bank profitability before and during the crisis: Evidence from Switzerland. *Journal of International Financial Markets, Institutions and Money*, 21(3), 307–327. <https://doi.org/10.1016/j.intfin.2010.11.002>
- Fitrianiingsih, D., & Sulistiana, I. (2024). Good corporate governance improves banking financial performance. In *IJAFIBS* (Vol. 11, Number 4). www.ijafibs.pelnus.ac.id



- Fraccaroli, N., Sowerbutts, R., & Whitworth, A. (2025). Does regulatory and supervisory independence affect financial stability? *Journal of Banking & Finance*, 170, 107318. <https://doi.org/10.1016/j.jbankfin.2024.107318>
- Ghenimi, A., Chaibi, H., & Omri, M. A. B. (2017). The effects of liquidity risk and credit risk on bank stability: Evidence from the MENA region. *Borsa Istanbul Review*, 17(4), 238–248. <https://doi.org/10.1016/j.bir.2017.05.002>
- Gorton, G., & Winton, A. (2002). Financial Intermediation.
- Hakimi, A., Boussaada, & Hamdi, H. (2022). The Interactional Relationships Between Credit Risk, Liquidity Risk and Bank Profitability in MENA Region. *Global Business Review*, 23(3), 561–583. <https://doi.org/10.1177/0972150919879304>
- Levine, R. (2005). Chapter 12 Finance and Growth: Theory and Evidence. In *Handbook of Economic Growth* (Vol. 1, pp. 865–934). [https://doi.org/10.1016/S1574-0684\(05\)01012-9](https://doi.org/10.1016/S1574-0684(05)01012-9)
- Love, I., & Rachinsky, A. (2015). Corporate Governance and Bank Performance in Emerging Markets: Evidence from Russia and Ukraine. *Emerging Markets Finance and Trade*, 51(sup2), S101–S121. <https://doi.org/10.1080/1540496X.2014.998945>
- Maharani, S. P., Wahyu, N., & Kirana, I. (2024). Pengaruh Self Assesment Good Corporate Governance dan Manajemen Risiko Terhadap Kinerja Keuangan: Studi Kasus pada Perusahaan Perbankan yang Terdaftar di BE Tahun 2018-2020. *Jurnal Kajian Ekonomi Dan Bisnis Islam*, 5(12), 4529–4538.
- Maulida, V. I., & Wahyuningsih, D. (2021). Determinan Faktor Spesifik Bank Terhadap Non-Performing Loan Gross dan Non-Performing Loan Net Pada Bank Pembangunan Daerah. *Journal of Applied Business and Economics*, 8(1), 102–115.
- Menicucci, E., & Paolucci, G. (2016). The determinants of bank profitability: empirical evidence from European banking sector. *Journal of Financial Reporting and Accounting*, 14(1), 86–115. <https://doi.org/10.1108/JFRA-05-2015-0060>
- Mulatsih, I. A. Y., Suryani Sri Lestari, & Moh. Muslikh. (2025). Analysis of Bank Soundness Level using RGEC Method (Risk Profile, Good Corporate Governance, Earnings, Capital) At PT. Bank Pembangunan Daerah Jawa Timur Tbk For The Period of 2020-2024. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 9(3). <https://doi.org/10.29040/ijebar.v9i3.18050>
- Nasrallah, N., & El Khoury, R. (2022). Is corporate governance a good predictor of SMEs financial performance? Evidence from developing countries (the case of Lebanon). *Journal of Sustainable Finance and Investment*, 12(1), 13–43. <https://doi.org/10.1080/20430795.2021.1874213>
- Oppusunggu, L. S., & Simbolon, I. P. (2021). The Bank Soundness in Indonesia: Risk and Corporate Governance. *Golden Ratio of Finance Management*, 1(1), 01–12. <https://doi.org/10.52970/grfm.v1i1.96>
- Otoritas Jasa Keuangan. (2015). Program Transformasi BPD: Menjadi Bank yang Kompetitif, Kuat, dan Kontributif bagi Pembangunan Daerah.
- Rizki, A. S., & Gunarsih, T. (2024). Effectiveness of RGEC-Bank Soundness Level and Inflation rate in Predicting Potential Bankruptcy of Banks: Evidence from Indonesia. *International Journal of Business and Society*, 25(1), 223–241. <https://doi.org/10.33736/ijbs.6908.2024>
- Ross, S. A., Westerfield, Randolph., & Jaffe, J. F. . (2013). *Corporate finance*. McGraw-Hill/Irwin.
- Saleh, I., & Abu Afifa, M. (2020). The effect of credit risk, liquidity risk and bank capital on bank profitability: Evidence from an emerging market. *Cogent Economics and Finance*, 8(1). <https://doi.org/10.1080/23322039.2020.1814509>
- Satyagraha, F. T., Purwono, R., & Sari, D. W. (2022). An Analysis of the Performance of Regional Development Banks (RDB) in Indonesia: Stochastic Frontier Analysis Approach. *Economies*, 10(9). <https://doi.org/10.3390/economies10090228>
- Singh, R., Gupta, C. P., & Chaudhary, P. (2024). Defining Return on Assets (ROA) in Empirical Corporate Finance Research: A Critical Review. *Empirical Economics Letters*, 23(1), 25–36. <https://doi.org/10.5281/zenodo.10901886>

- Srivastav, A., & Hagendorff, J. (2016). Corporate Governance and Bank Risk-taking. *Corporate Governance: An International Review*, 24(3), 334–345. <https://doi.org/10.1111/corg.12133>
- Sugiarto, A., Puspani, N. N., & Sulistyoningsih. (2024). Menanti Signifikansi Peran BPD dalam Pengembangan Perekonomian Daerah.
- Sun, P. H., Mohamad, S., & Ariff, M. (2017). Determinants driving bank performance: A comparison of two types of banks in the OIC. *Pacific-Basin Finance Journal*, 42, 193–203. <https://doi.org/10.1016/j.pacfin.2016.02.007>

