JRSSEM 2026, Vol. 6, No. 2, September
E-ISSN: 2807 - 6311
P-ISSN: 2807 - 6494

Performance Analysis of The Banco Nacional de Comércio de Timor-Leste (BNCTL) Based on The Balanced Scorecard

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Keywords:
Balanced Scorecard; Bank Performance; BNCTL; ROA; Customer Performance; Organizational Performance.

Abstract

This study aims to analyze the performance of Banco Nacional de Comércio de Timor-Leste (BNCTL) using the Balanced Scorecard approach, which comprises four perspectives: financial, customer, internal business process, and learning and growth. This research employed a descriptive research design with a quantitative approach. The data consisted of primary data collected through questionnaires and interviews, as well as secondary data obtained from BNCTL's financial reports for the 2023–2025 period. The sample consisted of 100 respondents, including 50 BNCTL employees and 50 BNCTL customers. The sampling technique employed was simple random sampling. Data were analyzed using descriptive analysis, financial ratio analysis, scoring analysis, and validity and reliability tests assisted by SPSS. The results indicate that the financial perspective, measured using Return on Assets (ROA), decreased from 2.41% in 2023 to 2.35% in 2024 and 2.00% in 2025. The internal business process perspective achieved an average score of 79.60%, categorized as good. The learning and growth perspective obtained an average score of 85.90%, categorized as very good, while the customer perspective achieved an average score of 82.43%, categorized as good. Overall, BNCTL's performance was categorized as good to very good. The learning and growth perspective demonstrated the highest performance achievement, whereas the declining ROA trend and relatively lower customer loyalty indicate areas requiring further improvement. These findings demonstrate that the Balanced Scorecard approach can serve as a comprehensive performance evaluation framework for BNCTL by integrating both financial and non-financial performance indicators.

INTRODUCTION

Banks play a strategic role in supporting economic activities through their intermediation function, including the collection of public funds, distribution of credit, and provision of various financial services. In an increasingly competitive business environment, banks cannot be evaluated solely based on their ability to generate profits. Organizational performance is also influenced by service quality, the effectiveness of internal processes, innovation capabilities, and the quality of human resources (Chuang et al., 2015; Donate et al., 2020; Prajogo & Oke, 2016; Rajapathirana & Hui, 2018; Sirisan et al., 2020).

Performance measurement that focuses solely on financial indicators has limitations because financial indicators generally reflect the outcomes of organizational activities from previous periods. Therefore, an approach is needed that can integrate financial and non-financial measures in a balanced manner.

The Balanced Scorecard is one of the performance measurement approaches developed by Kaplan and Norton. This approach evaluates organizational performance through four perspectives: financial, customer, internal business process, and learning and growth. These four perspectives are interconnected through a cause-and-effect relationship. An organization's ability to develop human resources is expected to improve the quality of internal processes, which subsequently enhances customer satisfaction and ultimately contributes to improved financial performance (Chuang et al., 2015; Elrehail et al., 2020; Rosyafah & Pudjowati, 2024; Schiemann et al., 2018; Taamneh et al., 2018).

Banco Nacional de Comércio de Timor-Leste (BNCTL) is one of the important banking institutions in Timor-Leste. As a commercial bank owned by the Government of Timor-Leste, BNCTL plays a role in collecting public funds, redistributing them through credit activities, and providing various banking services (Amaral, 2021; Cofitalan, 2022; Courvisanos & Boavida, 2017; de Jesus, 2022; Noviaristanti, 2020).

Based on the research data, BNCTL demonstrated growth in business activities during the 2023–2025 period. Total loans increased from approximately US$277.99 million in 2023 to US$416.22 million in 2024 and US$497.70 million in 2025. Third-party funds also increased, reaching approximately US$819.83 million in 2025, while total assets increased from around US$738.16 million in 2023 to more than US$1.03 billion in 2025.

This growth indicates positive developments in terms of business scale. However, the increase in assets has not been fully accompanied by a proportionate increase in profitability. This is reflected in the trend of Return on Assets (ROA), which decreased from 2.41% in 2023 to 2.35% in 2024 and 2.00% in 2025.

This condition highlights the need for performance measurement that does not focus solely on financial aspects. Service quality, customer loyalty, internal process effectiveness, employee competence, motivation, and human resource development are important aspects that should be considered when evaluating BNCTL's overall performance.

This study aims to analyze BNCTL's performance based on the four Balanced Scorecard perspectives and identify the perspectives that demonstrate relatively high performance, as well as aspects that still require improvement. By providing a comprehensive evaluation across both financial and non-financial dimensions, this research seeks to contribute to the development of banking performance measurement studies in Timor-Leste while providing practical insights for BNCTL management. The findings are expected to support evidence-based decision-making regarding resource allocation, strategic planning, and performance improvement initiatives. Furthermore, this study contributes to the limited literature on banking performance in Timor-Leste and provides a methodological framework that can be applied to other financial institutions operating in similar developing contexts.

Balanced Scorecard

The Balanced Scorecard is a strategic measurement and management approach that connects an organization's vision and strategy with a set of performance measures. Kaplan and Norton developed the Balanced Scorecard to overcome the limitations of performance measurement systems that are overly focused on financial dimensions.

The Balanced Scorecard consists of four main perspectives. First, the financial perspective describes the ultimate outcomes of an organization's strategy. Second, the customer perspective measures the organization's ability to create value for customers. Third, the internal business process perspective evaluates the effectiveness of the processes used by the organization to create value. Fourth, the learning and growth perspective relates to the ability of human resources and the organization to enhance capabilities and achieve sustainable improvement.

The four perspectives do not operate independently but instead form an interconnected and mutually supportive relationship. Improvements in employee competence and motivation can enhance internal processes, effective internal processes can improve service quality, and high-quality services are expected to increase customer satisfaction and loyalty, which ultimately support the achievement of improved financial performance.

Financial Performance

Financial performance indicates the company's ability to manage financial resources to achieve organizational goals. In this study, the financial perspective was measured using Return on Assets (ROA).

ROA is used to determine the company's ability to generate profits by utilizing the total assets it owns. In general, ROA can be calculated by the formula:

$$ROA = (\text{Net Profit} / \text{Total Assets}) \times 100\%$$

The higher the ROA, the greater the ability of the company's assets to generate profits.

Customer Perspective

Customer perspective measures an organization's ability to meet customer needs and expectations. In this study, customer perspectives are measured through customer satisfaction, service quality, customer trust, and customer loyalty.

Internal Business Process Perspective

The perspective of internal business processes describes the organization's ability to carry out operational activities effectively and efficiently. This research uses indicators of work process efficiency, internal service quality, and process innovation.

Learning and Growth Perspectives

The perspective of learning and growth is the foundation for improving organizational performance. This study measures these perspectives through employee competencies, training and development, job satisfaction, and motivation and commitment.

METHOD

This study employed a descriptive research design with a quantitative approach. The research was conducted at Banco Nacional de Comércio de Timor-Leste (BNCTL).

The research population consisted of BNCTL customers and employees. Based on the research data, the number of Third-Party Fund customers in 2025 reached 535,867 customers. The sample size was determined using the Slovin formula with a 10% margin of error, resulting in 100 respondents consisting of 50 customers and 50 employees.

The research data consisted of primary and secondary data. Primary data were collected through questionnaires distributed to BNCTL customers and employees, as well as interviews. Secondary data were obtained from BNCTL's financial statements and relevant documents.

Data collection was conducted through documentation, interviews, questionnaires, and observations. The questionnaire was measured using a five-point Likert scale.

The research instruments were tested for validity and reliability. Validity testing was conducted using Pearson's Product–Moment correlation, while reliability testing was performed using Cronbach's Alpha.

Data analysis was conducted using descriptive analysis through score calculations and percentage achievement of each indicator. The financial perspective was assessed using Return on Assets (ROA) based on BNCTL's financial statements for the 2023–2025 period, while the customer, internal business process, and learning and growth perspectives were analyzed based on questionnaire results.

RESULT AND DISCUSSION

Respondent Characteristics

The study involved 100 respondents consisting of 50 employees and 50 BNCTL customers.

In the employee group, 32 respondents or 64% were male and 18 respondents or 36% were female. Based on the service period, 27 respondents or 54% have worked for more than 10 years, 10 respondents or 20% have a working period of 1–3 years, 8 respondents or 16% have a working period of 5–10 years, and 5 respondents or 10% have a working period of 3–5 years.

In the customer group, the filled in gender data showed 36 respondents or 72% men and 14 respondents or 28% women. There were four respondents who did not fill in gender information. Based on the length of being a customer, 34 respondents or 68% have been a customer for more than five years, 6 respondents or 12% for 1–3 years, 4 respondents or 8% for less than one year, 4 respondents or 8% for 3–5 years, and 2 respondents or 4% provide other/inconsistent answers.

These characteristics show that most respondents have relatively long experience in working or using BNCTL services.

Validity and Reliability Tests

The results of the validity test showed that all 18 items of the employee questionnaire had a significance value of less than 0.05 so that all items were declared valid. Similarly, all 12 items of the customer questionnaire had a significance value of less than 0.05 so they were declared valid.

The results of the reliability test showed that all indicators on the employee questionnaire had a Cronbach's Alpha value above 0.60. These values include work process efficiency of 0.823, internal service quality of 0.726, process innovation 0.721, employee competence 0.788, training and development 0.717, job satisfaction 0.894, and motivation and commitment 0.869.

In the customer questionnaire, Cronbach's Alpha for customer satisfaction was 0.959, service quality 0.858, customer trust 0.964, and customer loyalty 0.929. Thus, all indicators meet the reliability criteria.

These results show that the instruments used have sufficient internal consistency so that they can be used in BNCTL performance analysis.

Financial Perspective

The financial perspective is analyzed using Return on Assets (ROA). The calculation results show that BNCTL's net profit increased from US$17,825,263.71 in 2023 to US$20,464,290.16 in 2024 and US$20,634,446.90 in 2025.

However, total assets are increasing faster, from US$738,157,904.60 in 2023 to US$871,880,293.98 in 2024 and US$1,032,969,852.81 in 2025.

Table 1. Financial Performance Measurement Based on Return on Assets (ROA) of BNCTL (2023–2025)

Year	Net Profit (US$)	Total Assets (US$)	LONG
2023	17.825.263,71	738.157.904,60	2,41%
2024	20.464.290,16	871.880.293,98	2,35%
2025	20.634.446,90	1.032.969.852,81	2,00%

ROA decreased from 2.41% to 2.00%. The decline shows that the increase in assets has not resulted in a comparable increase in profit. Thus, BNCTL needs to increase asset productivity and ensure that asset growth is directed to assets that are able to generate income optimally.

These findings are important from the perspective of the Balanced Scorecard because financial indicators are the end result of an organization's strategy. Performance improvement from a non-financial perspective needs to be directed to ultimately lead to increased productivity and profitability.

Internal Business Process Perspective

The results of measuring the perspective of internal business processes are as follows:

Table 2. Internal Business Process Perspective Performance Measurement Results

Indicator	Reach	Categories
Work process efficiency	81,47%	Good
Quality of in-house service	77,33%	Good
Process innovation	80,00%	Good
Average	79,60%	Good

The average achievement of the internal business process perspective is 79.60% and is included in the good category. The efficiency of the work process obtained the highest score of 81.47%. These results show that the procedures and work systems implemented have supported employees in carrying out their duties.

Process innovation achieved an achievement of 80.00%, which shows that BNCTL has made efforts to update processes and utilize technology in supporting operational activities.

Meanwhile, the quality of internal services obtained the lowest score of 77.33%. Although still in the good category, this aspect needs attention because coordination between parts, timeliness, and reduction of operational errors can affect the quality of service to customers.

These results show that BNCTL's internal processes have been running quite well, but increased integration between units and the use of technology are still needed to create faster, more accurate, and more efficient processes.

Learning and Growth Perspectives

The results of the measurement of learning and growth perspectives are:

Table 3. Learning and Growth Perspective Performance Measurement Results

Indicator	Reach	Categories
Employee competencies	86,00%	Excellent
Training and development	82,40%	Good
Job satisfaction	86,00%	Excellent
Motivation and commitment	89,20%	Excellent
Average	85,90%	Excellent

The learning and growth perspective obtained an average score of 85.90% and was the perspective with the highest achievement in the research.

Motivation and commitment obtained the highest score of 89.20%. This condition shows a strong level of motivation and commitment from employees to the organization. Employee competence and job satisfaction also showed high achievements, each of 86.00%.

Training and development obtained a score of 82.40%, which is the lowest score in this perspective. Although still in the good category, the results show the need to improve the quality and relevance of training programs, especially in the face of technological changes and the development of the banking industry.

These findings support the Balanced Scorecard concept that learning and growth are one of the main drivers of organizational performance. Employees who have good competence, motivation, and job satisfaction will be better able to support the improvement of internal processes and service quality to customers.

Customer Perspective

The results of the customer perspective measurement are:

Table 4. Customer Perspective Performance Measurement Results

Indicator	Reach	Categories
Customer satisfaction	84,27%	Excellent
Quality of service	82,93%	Good
Customer trust	82,13%	Good
Customer loyalty	80,40%	Good
Average	82,43%	Good

The customer's perspective obtained an average achievement of 82.43% and was in the good category. Customer satisfaction was the indicator with the highest score of 84.27%. This shows that in general, customers give a positive assessment of BNCTL services.

The quality of service obtained a score of 82.93%, while customer trust obtained 82.13%. Both indicators show that customers have a good assessment of BNCTL's service and credibility.

Customer loyalty obtained the lowest score of 80.40%. Although still in the good category, these results show that BNCTL needs to strengthen its customer retention strategy. Loyalty can be increased through improving service quality, ease of transactions, developing products according to needs, and improving customer experience.

Overall Balanced Scorecard Discussion

The results of the study show that BNCTL has a relatively good performance in three non-financial perspectives. The perspective of learning and growth was the perspective with the highest achievement, which was 85.90%, followed by the customer perspective of 82.43% and internal business processes of 79.60%.

This condition gives an idea that BNCTL has a fairly strong human resource foundation. High motivation, commitment, competence, and job satisfaction are capital for banks to improve internal processes and service quality.

However, the achievement of a good non-financial perspective needs to be translated into improved financial results. The decrease in ROA from 2.41% to 2.00% shows that the increase in business and asset scale has not fully resulted in proportionate profit growth.

In the perspective of the Balanced Scorecard, it shows the importance of strengthening the relationship between the perspectives of learning and growth, internal processes, customers, and finances. Improving employee competencies must be directed at improving work processes; improvement of work processes must improve the quality of service; improving service quality must strengthen customer satisfaction and loyalty; And in the end, increased satisfaction and loyalty are expected to contribute to the growth of the bank's revenue and profitability.

Thus, the Balanced Scorecard can be used as an evaluation framework that not only assesses whether BNCTL is generating profits, but also sheds light on the non-financial factors that support the achievement of long-term performance.

CONCLUSION

Based on the research findings, it can be concluded that BNCTL's performance based on the Balanced Scorecard approach was categorized as good to very good. First, the financial perspective showed that BNCTL was still able to generate profits; however, the Return on Assets (ROA) decreased from 2.41% in 2023 to 2.35% in 2024 and 2.00% in 2025. This condition indicates that asset growth was not fully accompanied by a proportional increase in profitability. Second, the internal business process perspective achieved an average score of 79.60% and was categorized as good. Work process efficiency was the highest-rated indicator, while internal service quality was the lowest-rated indicator. Third, the learning and growth perspective achieved an average score of 85.90% and was categorized as very good. Motivation and commitment were the highest-rated indicators, whereas training and development required further attention. Fourth, the customer perspective achieved an average score of 82.43% and was categorized as good. Customer satisfaction was the highest-rated indicator, while customer loyalty received the lowest score. Overall, the findings indicate that BNCTL has strong human resource capabilities and good service quality. However, improvements in non-financial performance need to be accompanied by increased asset productivity and profitability to achieve a more optimal balance among the four Balanced Scorecard perspectives.

Based on the research findings, several recommendations can be provided for BNCTL. BNCTL should improve asset productivity by optimizing productive assets, strengthening the quality of credit distribution, increasing operating income, and controlling costs so that asset growth can contribute more significantly to profitability. Since internal service quality obtained the lowest score within the internal business process perspective, BNCTL should improve coordination among units, strengthen operational standards, minimize process errors, and accelerate transaction and service completion. Customer loyalty was the lowest-rated indicator within the customer perspective; therefore, BNCTL should enhance customer experience through consistent service delivery, product development based on customer needs, transaction accessibility, and improved digital service quality. Although the learning and growth perspective was categorized as very good, training and development remained the lowest-performing indicator. Training programs should focus on information technology, digital services, information security, data analysis, customer service, and banking innovation. BNCTL should also develop a digital transformation strategy aligned with its business strategy. Digitalization initiatives can focus on automating internal processes, developing digital banking services, integrating information systems, and improving service quality. The

Balanced Scorecard should not only be applied as a research instrument but also developed as an internal performance management system. Each perspective can be translated into Key Performance Indicators (KPIs) with annual targets to support periodic performance evaluation by management.

Theoretically, this research contributes to the development of organizational performance measurement studies using the Balanced Scorecard approach, particularly within the banking industry context in Timor-Leste. The findings demonstrate that organizational performance measurement should consider both financial and non-financial aspects simultaneously. Practically, this study provides BNCTL management with information regarding its performance conditions based on the four Balanced Scorecard perspectives. The findings can be used as evaluation material to improve asset productivity, internal process quality, customer service, employee competence, and digital transformation strategies. This research has several limitations. First, the study was conducted only at BNCTL; therefore, the findings cannot be generalized to all banks operating in Timor-Leste. Second, the assessment focused on the four Balanced Scorecard perspectives, meaning that other factors outside this framework were not examined in depth. Third, the financial data period was limited to 2023–2025 and therefore does not represent long-term performance development. Fourth, some non-financial data were collected based on respondents' perceptions, which may introduce subjectivity into the responses.

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