

## Financial Performance Analysis Using the CAMEL Method at PT. Bank Mandiri (Persero) Tbk for the 2015–2025 Period

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### ABSTRACT

This research aims to analyze the financial performance of PT Bank Mandiri (Persero) Tbk for the 2015–2025 period using the CAMEL method, which includes the aspects of Capital, Asset, Management, Earnings, and Liquidity. This research is important because banks have a strategic role as financial intermediary institutions, so their soundness needs to be assessed comprehensively, not only in terms of profitability, but also from the aspects of capital, asset quality, management efficiency, profitability, and liquidity. This research uses a quantitative descriptive approach with secondary data obtained from annual reports, audited financial statements, and the results of Bank Mandiri's financial ratio processing. The ratios used include CAR for the capital aspect, CEAR for asset quality, NPM for the management aspect, ROA and OEOI for profitability, and LDR for liquidity. The results show that Bank Mandiri's CAMEL score during the 2015–2025 period was in the range of 87,23 to 93,40, with an average of 90,48. All observation years received a healthy rating. These findings indicate that Bank Mandiri was able to maintain capital adequacy, improve productive asset quality, maintain profitability, and manage liquidity relatively stably despite facing economic pressure, especially during the pandemic period and the economic recovery period. Thus, Bank Mandiri's financial performance during the research period can be assessed as being in a healthy and sustainable condition.

**Keywords:** Financial Performance, Bank Mandiri, CAR, ROA, OEOI, LDR, NPM, CAMEL

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### INTRODUCTION

The banking sector has a strategic position in the economy because it performs the intermediation function by collecting public funds, extending credit, supporting the payment system, and maintaining the smooth flow of economic activity. Good banking performance not only reflects a bank's ability to generate profits but also demonstrates its capacity to maintain public trust and manage financial risks (Nisa and Murwanti, 2026). Therefore, assessing bank financial performance is essential for understanding the resilience of financial institutions in responding to changes in economic conditions, industry competition, and the evolving needs of customers (Hari, Pangkey and Bacilius, 2021).

Assessment of bank soundness is necessary to obtain a comprehensive evaluation of a bank's financial condition. Therefore, evaluating financial performance using the CAMEL framework provides a comprehensive perspective on a bank's financial resilience across different economic conditions. A sound bank should maintain adequate capital, high-quality assets, effective management, sustainable profitability, and sufficient liquidity to meet its short-term obligations. The CAMEL method remains one of the most widely used approaches for evaluating bank soundness because it assesses five fundamental aspects: Capital, Asset Quality, Management, Earnings, and Liquidity. Consequently, the CAMEL method provides a comprehensive assessment of a bank's financial performance by considering both profitability and financial stability (Panggabean, 2023).

Although the Financial Services Authority (OJK) currently applies the Risk-Based Bank Rating (RGEC) approach in supervising commercial banks, this study employs the CAMEL method for several reasons. Therefore, although RGEC is currently used for regulatory supervision, CAMEL remains appropriate for longitudinal

financial performance analysis because all required indicators are consistently available in publicly disclosed financial statements. First, the financial ratios required under the CAMEL framework are publicly available in annual reports, allowing consistent measurement over a long observation period. Second, CAMEL remains one of the most frequently applied approaches in banking research, facilitating comparison with previous empirical studies. Third, several RGEC components, particularly governance and risk profile assessments, are not fully disclosed in publicly available financial reports. Therefore, the CAMEL method is considered more appropriate for achieving the objectives of this study.

PT Bank Mandiri (Persero) Tbk was selected as the research object because it is one of Indonesia's largest state-owned commercial banks and plays an important role in the national banking industry. As a state-owned bank, Bank Mandiri supports productive sector financing, financial transactions, and various national economic development programs. Consequently, its financial performance is frequently used as one indicator of the strength and stability of Indonesia's banking industry (Setiani and Ardiana, 2025).

During the 2015–2025 period, Bank Mandiri experienced various economic conditions, including pressure on credit quality, the COVID-19 pandemic, the economic recovery period, and the rapid digital transformation of the banking industry (Rakhmat *et al.*, 2024). These changing conditions influenced the bank's financial performance and caused fluctuations in several financial ratios. Therefore, evaluating financial performance using only a single financial ratio is insufficient; instead, a comprehensive approach capable of assessing capital, asset quality, management, earnings, and liquidity is required. Previous studies have shown that the CAMEL framework provides a systematic and periodic evaluation of bank financial performance and produces an overall bank soundness rating (Maharani *et al.*, 2025).

Previous studies have widely employed the CAMEL method to evaluate bank soundness across different banking institutions. Gaffar (2021) analyzed the financial health of PT Bank Mandiri and concluded that the bank maintained a healthy financial condition based on key financial ratios. Harsono and Kodrat (2024) examined several KBMI 4 commercial banks and found that the CAMEL method effectively measures banking performance through capital, asset quality, management, earnings, and liquidity indicators. Similarly, Maharani *et al.* (2025) reported healthy financial performance at Bank Rakyat Indonesia during the 2019–2023 period, while Alfarda, Fauzi and Sholihah (2023) demonstrated that the CAMEL approach is also applicable to Islamic banking institutions. Overall, these studies confirm that the CAMEL method is a reliable framework for evaluating bank financial performance. However, most previous studies examined relatively short observation periods or compared several banks simultaneously, leaving limited evidence regarding the long-term financial performance of a single bank across different macroeconomic conditions.

This study addresses the identified research gap by evaluating the financial performance of PT Bank Mandiri (Persero) Tbk over an eleven-year period (2015–2025), covering the pre-pandemic, pandemic, economic recovery, and post-recovery phases. The novelty of this study lies not only in its longer observation period but also in its longitudinal evaluation of Bank Mandiri's financial resilience across these distinct economic conditions. This approach provides a more comprehensive understanding of how each CAMEL component evolved in response to changing macroeconomic environments. Therefore, this study aims to analyze the financial performance of PT Bank Mandiri (Persero) Tbk during the 2015–2025 period using the CAMEL method by examining trends in capital, asset quality, management, earnings, and liquidity.

## METHOD

This research uses a quantitative descriptive approach. The descriptive approach is used to describe the financial performance condition of PT Bank Mandiri (Persero) Tbk based on the results of CAMEL ratio calculations, while the quantitative approach is used because the data analyzed consist of financial figures. This research model is in line with CAMEL research on state-owned banks that uses financial statements as the basis for measuring bank soundness (Indrafana KH, 2022).

The data used are secondary data obtained from PT Bank Mandiri (Persero) Tbk's annual reports and audited consolidated financial statements for each fiscal year from 2015 to 2025. The annual reports were used to obtain published financial ratios and annual financial performance information, while the audited financial statements were used to verify the accuracy and consistency of the reported financial data (Alfandia, 2024).

The data analysis technique uses the CAMEL method. The Capital aspect is measured using the Capital Adequacy Ratio or Minimum Capital Adequacy Requirement (CAR). The Asset aspect is measured using CEAR, namely the ratio of problematic productive assets to total productive assets. The Management aspect is measured using Net Profit Margin (NPM) (Purnama, 2022). The Earnings aspect is measured through Return on Assets (ROA) and Operating Expenses to Operating Income (OEIOI). The Liquidity aspect is measured using the Loan to

Deposit Ratio (LDR). In several years, the terminology follows the Loan to Funding Ratio (LFR) as presented in Bank Mandiri's annual reports; however, both ratios represent the bank's liquidity performance and are treated consistently in this study. The selection of these ratios follows the practice of CAMEL research that assesses banks through the aspects of capital, asset quality, management, profitability, and liquidity (Hidayati and Purnama, 2022).

The CEAR in this research is proxied by the ratio of problematic productive assets to total productive assets because the presentation of APYD is not consistently available in Bank Mandiri's published reports throughout the research period. This adjustment ensures consistency and comparability of the data across the entire observation period (Murtadho and Ridwansyah, 2021).

The analysis stage was carried out through four steps. First, collecting Bank Mandiri's financial ratio data for 2015–2025. Second, calculating or adjusting the CAMEL ratios according to the needs of the research. Third, calculating the credit score for each ratio based on the CAMEL assessment criteria stipulated in Bank Indonesia Circular Letter No. 26/5/BPPP and supported by previous CAMEL studies. Fourth, multiplying the credit score by the weight of each ratio to obtain the final CAMEL score and determine the bank soundness rating. The final assessment was conducted to determine whether Bank Mandiri was in the healthy, fairly healthy, less healthy, or unhealthy category during the research period (Wardhani, Maulana and Rahmat, 2026).

The weighting system used in this study follows the CAMEL assessment framework stipulated in Bank Indonesia Circular Letter No. 26/5/BPPP concerning the Assessment of Commercial Bank Soundness. Under this framework, the Capital aspect receives a weight of 25%, Asset Quality 30%, Management 25%, Earnings 10% (represented by ROA and OEI), and Liquidity 10%. These weights have also been adopted in numerous previous CAMEL studies, allowing consistency and comparability of the assessment results.

The CAMEL formulas are presented individually using equation format to improve readability. The assessment weight for each indicator is presented immediately after the corresponding equation.

#### 1. Capital (CAR)

Capital Adequacy Ratio (CAR) measures a bank's capital adequacy in relation to its risk-weighted assets. A higher CAR indicates a stronger ability to absorb potential losses and maintain financial stability.

$$CAR = \frac{\text{Capital}}{\text{Risk - Weighted Assets (RWA)}} \times 100\%$$

Assessment weight: 25%.

#### 2. Asset (CEAR)

The asset aspect is used to evaluate the quality of the bank's productive assets. In this study, asset quality is measured using the Classified Earnings Assets Ratio (CEAR), which is calculated as the ratio of classified productive assets to total productive assets. This ratio indicates the proportion of productive assets classified as problematic. A lower CEAR value reflects better asset quality because it indicates a smaller proportion of classified productive assets.

$$CEAR = \frac{\text{Problematic productive assets}}{\text{Total productive assets}} \times 100\%$$

Assessment weight: 30%.

#### 3. Management (NPM)

Net Profit Margin (NPM) is used as a proxy to assess the management aspect. This ratio shows the bank's ability to generate net income from the operating income obtained. The higher the NPM, the better management's ability to manage income, expenses, and the final results of bank operations.

$$NPM = \frac{\text{Net income}}{\text{Operating income}} \times 100\%$$

Assessment weight: 25%.

#### 4. Earnings (ROA)

Return on Assets (ROA) is used to measure the bank's ability to generate profit from the assets it owns. ROA shows the effectiveness of the use of bank assets in creating profit. The higher the ROA, the better the bank's ability to generate profit. The ROA formula in banking indicators is generally calculated from profit before tax compared with total assets in the same period.

$$ROA = \frac{\text{Profit before tax}}{\text{Total assets}} \times 100\%$$

Assessment weight: 5%.

#### 5. Earnings (OEOI)

OEOI is the ratio of operating expenses to operating income. This ratio is used to assess the efficiency of the bank's operational activities. The lower the OEOI, the more efficient the bank is in managing operating costs to generate income. The OEOI formula in banking indicators is calculated from operating expenses compared with operating income.

$$OEOI = \frac{\text{Operating expenses}}{\text{Operating income}} \times 100\%$$

Assessment weight: 5%.

#### 6. Liquidity (LDR)

Loan to Deposit Ratio (LDR) is used to assess the bank's ability to channel the funds it collects into credit. This ratio reflects the intermediation function and the bank's ability to maintain a balance between credit distribution and fund availability. In general, LDR is calculated by comparing loans with funds received by the bank.

$$LDR = \frac{\text{Total loans}}{\text{Third party funds}} \times 100\%$$

Assessment weight: 10%.

The credit score for each financial ratio was determined according to the CAMEL assessment guidelines issued by Bank Indonesia. The conversion of each financial ratio into a credit score followed the threshold values specified in Bank Indonesia Circular Letter No. 26/5/BPPP, ensuring consistency in determining the weighted CAMEL score. The resulting score was then multiplied by the respective assessment weight to obtain the weighted score. Finally, all weighted scores were summed to determine the composite CAMEL score. The composite CAMEL score was then interpreted according to the bank soundness classification presented in Table 1. The overall CAMEL score was subsequently used to evaluate the financial performance and soundness level of PT Bank Mandiri (Persero) Tbk for each year during the 2015–2025 observation period.

**Table 1. Classification of Bank Soundness Based on CAMEL Composite Scores**

| CAMEL Score | Category       |
|-------------|----------------|
| 81–100      | Healthy        |
| 66–<81      | Fairly Healthy |
| 51–<66      | Less Healthy   |
| 0–<51       | Unhealthy      |

Source: Adapted from Bank Indonesia Circular Letter No. 26/5/BPPP concerning the Assessment of Commercial Bank Soundness.

## RESULTS

The research results are presented in greater detail by following the CAMEL assessment sequence. The presentation begins with the basic data used in calculating the ratios, then continues with the calculation of each CAMEL aspect, credit score, weight, and final bank soundness score. With this arrangement, the relationship between ratios, credit scores, weighted scores, and final ratings can be seen sequentially.

**Table 2. Net Income and Operating Income Data of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | Net Income (Rp Million) | Operating Income (Rp Million) | NPM (%) |
|------|-------------------------|-------------------------------|---------|
| 2015 | 20.334.968              | 26.338.972                    | 77,20   |
| 2016 | 13.806.565              | 18.612.727                    | 74,18   |
| 2017 | 20.639.683              | 27.169.751                    | 75,97   |
| 2018 | 25.015.021              | 33.905.797                    | 73,78   |
| 2019 | 27.482.133              | 36.451.514                    | 75,39   |
| 2020 | 16.799.515              | 24.255.487                    | 69,26   |
| 2021 | 28.028.155              | 38.440.203                    | 72,91   |
| 2022 | 41.170.637              | 56.168.089                    | 73,30   |
| 2023 | 55.060.057              | 74.641.563                    | 73,77   |
| 2024 | 55.782.742              | 76.059.595                    | 73,34   |
| 2025 | 56.293.950              | 76.310.739                    | 73,77   |

Source: Researcher's processed data from Bank Mandiri's annual reports and financial statements.

Table 2. shows that Bank Mandiri's net income fluctuated during the research period. Net income declined in 2016 and weakened again in 2020 in line with economic pressure during the pandemic. After 2020, net income increased again and remained at a relatively high level from 2022 to 2025. These data serve as the basis for calculating the NPM ratio as an indicator of the management aspect in the CAMEL method.

### 1. Capital (Capitalization)

The capital aspect is measured using CAR. The CAR credit score is calculated based on the ratio of capital to risk-weighted assets and is limited to a maximum of 100. Because all of Bank Mandiri's CAR values are far above the minimum threshold, the CAR credit score in all years reaches the maximum value.

**Table 3. CAR Calculation of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | CAR (%) | Credit Score | Weight | Weighted Score | Category     |
|------|---------|--------------|--------|----------------|--------------|
| 2015 | 18,60   | 100,00       | 25%    | 25,00          | Very healthy |
| 2016 | 21,36   | 100,00       | 25%    | 25,00          | Very healthy |
| 2017 | 21,64   | 100,00       | 25%    | 25,00          | Very healthy |
| 2018 | 20,96   | 100,00       | 25%    | 25,00          | Very healthy |
| 2019 | 21,39   | 100,00       | 25%    | 25,00          | Very healthy |
| 2020 | 19,90   | 100,00       | 25%    | 25,00          | Very healthy |
| 2021 | 19,60   | 100,00       | 25%    | 25,00          | Very healthy |
| 2022 | 19,46   | 100,00       | 25%    | 25,00          | Very healthy |
| 2023 | 21,48   | 100,00       | 25%    | 25,00          | Very healthy |
| 2024 | 20,10   | 100,00       | 25%    | 25,00          | Very healthy |
| 2025 | 19,36   | 100,00       | 25%    | 25,00          | Very healthy |

Source: Researcher's processed data.

Based on Table 3., Bank Mandiri's CAR is in the range of 18,60% to 21,64%. This condition indicates that the capital aspect is in a strong position because all years receive the maximum credit score and produce a weighted score of 25. This capital stability is one of the main supports for Bank Mandiri's healthy rating throughout the research period.

**2. Asset (Asset Quality)**

The asset aspect in this research is measured using CEAR as a proxy for productive asset quality. The lower the CEAR ratio, the smaller the proportion of problematic productive assets to total productive assets. Therefore, a decrease in this ratio is viewed as an improvement in asset quality.

**Table 4. CEAR Calculation of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | CEAR (%) | Credit Score | Weight | Weighted Score | Category       |
|------|----------|--------------|--------|----------------|----------------|
| 2015 | 1,96     | 91,27        | 30%    | 27,38          | Very healthy   |
| 2016 | 3,07     | 83,87        | 30%    | 25,16          | Fairly healthy |
| 2017 | 2,73     | 86,13        | 30%    | 25,84          | Healthy        |
| 2018 | 2,42     | 88,20        | 30%    | 26,46          | Healthy        |
| 2019 | 2,15     | 90,00        | 30%    | 27,00          | Healthy        |
| 2020 | 2,36     | 88,60        | 30%    | 26,58          | Healthy        |
| 2021 | 1,60     | 93,67        | 30%    | 28,10          | Very healthy   |
| 2022 | 1,09     | 97,07        | 30%    | 29,12          | Very healthy   |
| 2023 | 0,68     | 99,80        | 30%    | 29,94          | Very healthy   |
| 2024 | 0,67     | 99,87        | 30%    | 29,96          | Very healthy   |
| 2025 | 0,67     | 99,87        | 30%    | 29,96          | Very healthy   |

Source: Researcher's processed data.

Table 4. shows that Bank Mandiri's asset quality improved gradually. The highest CEAR occurred in 2016 at 3,07%, while the lowest ratio occurred in 2024 and 2025 at 0,67%. The decline in this ratio had an impact on the increase in the CEAR credit score, especially after 2021. With a weight of 30%, the asset quality aspect is one of the components that has a major influence on the final CAMEL score.

**3. Management (Management)**

The management aspect is proxied using NPM. This ratio shows the bank's ability to generate net income from operating income. In the CAMEL assessment, the NPM credit score is equal to the NPM ratio value, so changes in NPM directly affect the weighted score of the management aspect.

**Table 5. NPM Calculation of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | NPM (%) | Credit Score | Weight | Weighted Score | Category       |
|------|---------|--------------|--------|----------------|----------------|
| 2015 | 77,20   | 77,20        | 25%    | 19,30          | Fairly healthy |
| 2016 | 74,18   | 74,18        | 25%    | 18,54          | Fairly healthy |
| 2017 | 75,97   | 75,97        | 25%    | 18,99          | Fairly healthy |
| 2018 | 73,78   | 73,78        | 25%    | 18,44          | Fairly healthy |
| 2019 | 75,39   | 75,39        | 25%    | 18,85          | Fairly healthy |
| 2020 | 69,26   | 69,26        | 25%    | 17,32          | Fairly healthy |
| 2021 | 72,91   | 72,91        | 25%    | 18,23          | Fairly healthy |
| 2022 | 73,30   | 73,30        | 25%    | 18,32          | Fairly healthy |
| 2023 | 73,77   | 73,77        | 25%    | 18,44          | Fairly healthy |
| 2024 | 73,34   | 73,34        | 25%    | 18,34          | Fairly healthy |
| 2025 | 73,77   | 73,77        | 25%    | 18,44          | Fairly healthy |

Source: Researcher's processed data.

Based on Table 5., Bank Mandiri's NPM is in the range of 69,26% to 77,20%. The highest NPM occurred in 2015, while the lowest NPM occurred in 2020. Although it declined in certain years, NPM stabilized again after 2021. Because the NPM weight is 25%, the management aspect has a major influence on the final CAMEL score after the asset quality and capital aspects.

#### 4. Earnings (Profitability)

The earnings aspect is assessed through ROA and OEOI. ROA describes the bank's ability to generate profit from the assets used, while OEOI describes the level of operational cost efficiency relative to operating income. A high ROA and a low OEOI indicate better profitability.

**Table 6. ROA Calculation of PT Bank Mandiri (Persero) Tbk for 2015–2025**

|      | ROA (%) | Credit Score | Weight | Weighted | Category     |
|------|---------|--------------|--------|----------|--------------|
| 2015 | 3,15    | 100,00       | 5%     | 5,00     | Very healthy |
| 2016 | 1,95    | 100,00       | 5%     | 5,00     | Very healthy |
| 2017 | 2,72    | 100,00       | 5%     | 5,00     | Very healthy |
| 2018 | 3,17    | 100,00       | 5%     | 5,00     | Very healthy |
| 2019 | 3,03    | 100,00       | 5%     | 5,00     | Very healthy |
| 2020 | 1,64    | 100,00       | 5%     | 5,00     | Very healthy |
| 2021 | 2,53    | 100,00       | 5%     | 5,00     | Very healthy |
| 2022 | 3,30    | 100,00       | 5%     | 5,00     | Very healthy |
| 2023 | 4,03    | 100,00       | 5%     | 5,00     | Very healthy |
| 2024 | 3,59    | 100,00       | 5%     | 5,00     | Very healthy |
| 2025 | 3,19    | 100,00       | 5%     | 5,00     | Very healthy |

Source: Researcher's processed data.

Table 6. shows that Bank Mandiri's ROA always produced the maximum credit score. The lowest ROA occurred in 2020 at 1,64%, while the highest ROA occurred in 2023 at 4,03%. Although it weakened during the pandemic, the bank's ability to generate profit from assets improved again in the period after 2020.

**Table 7. OEOI Calculation of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | OEOI (%) | Credit Score | Weight | Weighted Score | Category     |
|------|----------|--------------|--------|----------------|--------------|
| 2015 | 69,67    | 100,00       | 5%     | 5,00           | Very healthy |
| 2016 | 80,94    | 100,00       | 5%     | 5,00           | Very healthy |
| 2017 | 71,17    | 100,00       | 5%     | 5,00           | Very healthy |
| 2018 | 66,48    | 100,00       | 5%     | 5,00           | Very healthy |
| 2019 | 67,44    | 100,00       | 5%     | 5,00           | Very healthy |
| 2020 | 80,03    | 100,00       | 5%     | 5,00           | Very healthy |
| 2021 | 67,26    | 100,00       | 5%     | 5,00           | Very healthy |
| 2022 | 57,35    | 100,00       | 5%     | 5,00           | Very healthy |
| 2023 | 51,88    | 100,00       | 5%     | 5,00           | Very healthy |
| 2024 | 56,46    | 100,00       | 5%     | 5,00           | Very healthy |
| 2025 | 60,23    | 100,00       | 5%     | 5,00           | Very healthy |

Source: Researcher's processed data.

Based on Table 7., Bank Mandiri's OEOI is in the range of 51,88% to 80,94%. The highest ratio occurred in 2016, while the lowest ratio occurred in 2023. All OEOI values still provide the maximum credit score, so the operational efficiency aspect continues to support the healthy rating. Nevertheless, the increase in OEOI in 2016, 2020, and 2025 still needs attention because it indicates an increase in operating expenses relative to operating income.

#### 5. Liquidity (Liquidity)

The liquidity aspect is measured using LDR. In several early years, the ratio available in the annual reports was presented using the term LFR, so it was used as an equivalent proxy to describe the intermediation function and liquidity capability. The LDR credit score is calculated by considering the maximum credit score limit of 100.

**Table 8. LDR Calculation of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | LDR (%) | Credit Score | Weight | Weighted Score | Note | Category       |
|------|---------|--------------|--------|----------------|------|----------------|
| 2015 | 87,05   | 100,00       | 10%    | 10,00          | LFR  | Fairly healthy |
| 2016 | 85,41   | 100,00       | 10%    | 10,00          | LFR  | Fairly healthy |
| 2017 | 87,16   | 100,00       | 10%    | 10,00          | LFR  | Fairly healthy |
| 2018 | 96,69   | 73,24        | 10%    | 7,32           | LFR  | Fairly healthy |
| 2019 | 96,37   | 74,52        | 10%    | 7,45           | LDR  | Fairly healthy |
| 2020 | 82,95   | 100,00       | 10%    | 10,00          | LDR  | Healthy        |
| 2021 | 80,04   | 100,00       | 10%    | 10,00          | LDR  | Healthy        |
| 2022 | 77,61   | 100,00       | 10%    | 10,00          | LDR  | Healthy        |
| 2023 | 86,75   | 100,00       | 10%    | 10,00          | LDR  | Fairly healthy |
| 2024 | 98,04   | 67,84        | 10%    | 6,78           | LDR  | Fairly healthy |
| 2025 | 88,92   | 100,00       | 10%    | 10,00          | LDR  | Fairly healthy |

Source: Researcher's processed data.

Table 8. shows that LDR moved fluctuatively. The lowest ratio occurred in 2022 at 77,61%, while the highest ratio occurred in 2024 at 98,04%. The LDR weighted score decreased in 2018, 2019, and 2024 because the liquidity ratio was at a higher level. Nevertheless, the decrease in the weighted score did not cause the final CAMEL score to fall outside the healthy rating.

## 6. Bank Soundness Assessment

After all ratio credit scores were obtained, each credit score was multiplied by the weight of the respective CAMEL ratio. The weighted scores from all aspects were then summed to obtain the final CAMEL score. The results of this calculation became the basis for determining Bank Mandiri's soundness rating during the research period.

**Table 9. Calculation Results Using the CAMEL Method**

| Year | CAR 25% | CEAR 30% | NPM 25% | ROA 5% | OEOI 5% | LDR 10% | CAMEL Score |
|------|---------|----------|---------|--------|---------|---------|-------------|
| 2015 | 25,00   | 27,38    | 19,30   | 5,00   | 5,00    | 10,00   | 91,68       |
| 2016 | 25,00   | 25,16    | 18,54   | 5,00   | 5,00    | 10,00   | 88,70       |
| 2017 | 25,00   | 25,84    | 18,99   | 5,00   | 5,00    | 10,00   | 89,83       |
| 2018 | 25,00   | 26,46    | 18,44   | 5,00   | 5,00    | 7,32    | 87,23       |
| 2019 | 25,00   | 27,00    | 18,85   | 5,00   | 5,00    | 7,45    | 88,30       |
| 2020 | 25,00   | 26,58    | 17,32   | 5,00   | 5,00    | 10,00   | 88,90       |
| 2021 | 25,00   | 28,10    | 18,23   | 5,00   | 5,00    | 10,00   | 91,33       |
| 2022 | 25,00   | 29,12    | 18,32   | 5,00   | 5,00    | 10,00   | 92,44       |
| 2023 | 25,00   | 29,94    | 18,44   | 5,00   | 5,00    | 10,00   | 93,38       |
| 2024 | 25,00   | 29,96    | 18,34   | 5,00   | 5,00    | 6,78    | 90,08       |
| 2025 | 25,00   | 29,96    | 18,44   | 5,00   | 5,00    | 10,00   | 93,40       |

Source: Researcher's processed data.



**Table 10. Soundness Assessment Results of PT Bank Mandiri (Persero) Tbk for 2015–2025**

| Year | CAMEL Score | Health Rating |
|------|-------------|---------------|
| 2015 | 91,68       | Healthy       |
| 2016 | 88,70       | Healthy       |
| 2017 | 89,83       | Healthy       |
| 2018 | 87,23       | Healthy       |
| 2019 | 88,30       | Healthy       |
| 2020 | 88,90       | Healthy       |
| 2021 | 91,33       | Healthy       |
| 2022 | 92,44       | Healthy       |
| 2023 | 93,38       | Healthy       |
| 2024 | 90,08       | Healthy       |
| 2025 | 93,40       | Healthy       |

Source: Researcher's processed data.

Based on Table 9. and Table 10., Bank Mandiri's CAMEL score during 2015–2025 is in the range of 87,23 to 93,40, with an average of 90,48. The lowest score occurred in 2018 at 87,23, while the highest score occurred in 2025 at 93,40. All CAMEL scores are within the range of 81 to 100, so Bank Mandiri's financial performance during the research period is declared to be in the healthy rating.

## DISCUSSION

### 1. Development of profit and the basis for assessing the management aspect

Based on Table 2., Bank Mandiri's net income and operating income fluctuated during the 2015–2025 period. A decrease in net income was seen in 2016 and 2020, while a strong increase occurred after 2021. The decline in 2020 can be understood as the impact of economic pressure during the pandemic, when business activities and banking credit quality experienced pressure. However, the increase in profit after 2021 shows that Bank Mandiri was able to carry out a gradual performance recovery. This profit development is directly related to the NPM ratio in Table 5. Bank Mandiri's NPM is in the range of 69,26% to 77,20%. The lowest value occurred in 2020, while after 2021 NPM stabilized again in the range of 72% to 74%. This condition shows that although the bank had experienced profitability pressure, management's ability to generate net income from operating income was still maintained. Thus, the management aspect can be assessed as fairly stable, although it did not reach the very healthy category during the entire observation period (Yuriani and Agustianto, 2024).

### 2. Strength of the capital aspect as a support for bank soundness

Based on Table 3., Bank Mandiri's CAR during 2015–2025 was in the range of 18,60% to 21,64%. All CAR values produced a maximum credit score of 100 with a weighted score of 25. This indicates that Bank Mandiri's capital aspect was in a very strong condition throughout the research period (Harsono, 2024). Capital strength is an important factor because capital functions as a buffer against the risk of losses, especially credit risk, market risk, and operational risk. With a consistently high CAR, Bank Mandiri has adequate capacity to maintain business expansion, absorb potential losses, and preserve public trust. Therefore, the capital aspect is one of the main components supporting Bank Mandiri's healthy rating during the 2015–2025 period (Setiani and Ardiana, 2025).

### 3. Improvement in productive asset quality

Based on Table 4., Bank Mandiri's CEAR ratio showed an improving trend. The highest ratio occurred in 2016 at 3,07%, while the lowest ratio occurred in 2024 and 2025 at 0,67%. The decrease in the CEAR ratio shows that the proportion of problematic productive assets to total productive assets became smaller (Rizal and Mustapita, 2022). This improvement in asset quality is one of the important findings in the research because the asset aspect has the largest weight, namely 30%. The lower the problematic productive assets, the lower the risk of losses that can disrupt bank profitability. The improvement in CEAR after 2021 shows

that Bank Mandiri was able to strengthen the management of credit quality and productive assets, so that the risk of asset deterioration could be suppressed. This condition contributed greatly to the increase in the CAMEL score, especially in the 2022–2025 period.

**4. Profitability remained strong despite having been under pressure**

The earnings aspect is assessed through ROA and OEOI. Based on Table 6., Bank Mandiri's ROA always obtained the maximum credit score throughout the research period. The lowest ROA occurred in 2020 at 1,64%, while the highest ROA occurred in 2023 at 4,03%. This shows that Bank Mandiri was still able to generate profit from the assets it owned, even though it had experienced pressure during the pandemic (Amanillah, Ghofur and Maulidiyah, 2024). Meanwhile, Table 6 shows that Bank Mandiri's OEOI was in the range of 51,88% to 80,94%. The highest OEOI occurred in 2016 and 2020, indicating an increase in operating expenses relative to operating income in those years. However, OEOI decreased significantly in 2022 and 2023, indicating an improvement in operational efficiency. Thus, the earnings aspect generally supports Bank Mandiri's healthy rating because the ability to generate profit and control operating costs was still maintained (Hayati *et al.*, 2022).

**5. Liquidity is healthy, but the most fluctuating**

Based on Table 8., Bank Mandiri's LDR moved fluctuatively during the 2015–2025 period. The lowest ratio occurred in 2022 at 77,61%, while the highest ratio occurred in 2024 at 98,04%. The LDR weighted score declined in 2018, 2019, and 2024 because the liquidity ratio was at a higher level than in other years (Pratikto, Fabrela and Basya, 2021). Fluctuations in LDR show that the liquidity aspect is one area that needs attention. A ratio that is too low may indicate that fund distribution is not yet optimal, while a ratio that is too high may increase liquidity pressure if it is not balanced by growth in third-party funds. Nevertheless, fluctuations in LDR did not cause Bank Mandiri to fall outside the healthy rating. This indicates that the relative weakness in the liquidity aspect could still be compensated for by strong capital, improving asset quality, and stable profitability.

**6. Final CAMEL results consistently indicate a healthy rating**

Based on Table 9. and Table 10., Bank Mandiri's CAMEL score during 2015–2025 was in the range of 87,23 to 93,40, with an average of 90,48. The lowest score occurred in 2018 at 87,23, while the highest score occurred in 2025 at 93,40. All CAMEL scores were in the healthy category. The consistently healthy CAMEL score indicates that Bank Mandiri was able to maintain a balance between capital, asset quality, management, profitability, and liquidity. The year 2018 had the lowest score mainly because of the decline in the weighted score for the liquidity aspect. Conversely, 2025 had the highest score because the capital, asset quality, earnings, and liquidity aspects as a whole made strong contributions to the final score. Thus, the results of this research show that Bank Mandiri's financial condition during the observation period was healthy and relatively stable (Aliyah and A'yun, 2025).

## CONCLUSIONS

These findings indicate that Bank Mandiri has maintained sustainable financial resilience despite experiencing significant economic shocks during the observation period. Based on the results of the analysis using the CAMEL method, the financial performance of PT Bank Mandiri (Persero) Tbk during the 2015–2025 period was in the healthy rating. This is shown by the CAMEL score, which was in the range of 87,23 to 93,40 with an average of 90,48. All observation years received a healthy rating, so it can be concluded that Bank Mandiri was able to maintain overall financial performance stability. This condition was supported by strong capital, increasingly improving asset quality, relatively stable management, maintained profitability, and liquidity that remained within acceptable limits.

The findings provide useful information for bank management, investors, regulators, and future researchers in evaluating long-term banking performance. In more detail, the capital aspect showed a very strong condition because CAR was above the minimum threshold and obtained the maximum credit score in all observation years. The asset aspect improved especially after 2021, as shown by the decline in the CEAR ratio. The management aspect proxied by NPM was relatively stable despite experiencing pressure in 2020. Meanwhile, the earnings aspect through ROA and OEOI continued to support the healthy rating because the ability to generate profit and operational efficiency were still maintained. However, the liquidity aspect still needs attention because LDR fluctuated, especially in 2018, 2019, and 2024. These fluctuations did not reduce the final bank soundness rating, but they indicate that liquidity management needs to continue to be strengthened so that Bank Mandiri's performance stability is maintained in the following period.

### RECOMMENDATIONS

Based on the research results, Bank Mandiri has generally shown healthy financial performance during the 2015–2025 period. However, several aspects still need attention so that bank soundness stability can be maintained in the following period, especially asset quality, operational efficiency, and liquidity, which still showed fluctuating movements in several observation years. Therefore, the recommendations that can be given are as follows:

1. **Bank Mandiri needs to maintain capital strength.**  
The capital aspect measured through CAR showed a very strong condition during the research period. This condition needs to continue to be maintained so that Bank Mandiri still has adequate capacity to face credit risk, market risk, and operational risk. Capital adequacy is also important to support the bank's business expansion without neglecting the prudential principle.
2. **Management needs to continue maintaining the quality of productive assets.**  
The improvement in the CEAR ratio shows that Bank Mandiri's asset quality has improved, especially after 2021. Nevertheless, supervision of problematic productive assets still needs to be strengthened. The bank needs to apply more selective credit analysis, monitor debtors periodically, and maintain the quality of the credit portfolio so that the risk of asset deterioration can be suppressed.
3. **Operational efficiency needs to be maintained and improved.**  
The relatively controlled OEOI ratio shows that Bank Mandiri was able to maintain its operational efficiency. However, the increase in OEOI in several particular years still needs attention because it can suppress the bank's ability to generate profit. Therefore, the bank needs to continue optimizing the use of digital technology, simplifying business processes, and controlling operating expenses so that profitability remains maintained.
4. **Liquidity management needs to be strengthened sustainably.**  
The liquidity aspect measured through LDR experienced fluctuations, especially in 2018, 2019, and 2024. This condition shows that Bank Mandiri needs to maintain a balance between credit distribution and the collection of third-party funds. A liquidity ratio that is too high can increase pressure on the bank's ability to meet short-term obligations, so liquidity management needs to be carried out carefully and measurably.
5. **Future research is recommended to use comparative objects and methods.**  
Future research can compare Bank Mandiri's performance with other state-owned banks, such as BRI, BNI, or BTN, so that the analysis results are broader and more comparative. In addition, the CAMEL method can also be combined with the RGEC or CAMELS methods so that the assessment of bank soundness becomes more comprehensive, especially because these additional methods can assess risk and governance aspects more deeply. Future studies are also encouraged to incorporate the RGEC framework or statistical trend analysis to provide a more comprehensive evaluation of banking performance.

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