



## CAMEL Method Assessment Model in Determining The Soundness Level Of Bank XYZ

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### ABSTRACT

As a description of the state of the bank's performance and as a source of evaluation material for the government, particularly Bank Indonesia, it is highly important to evaluate the soundness of a bank. Maintaining the confidence of the general public throughout the process of making financial investments, saving money, applying for credit, and engaging in a variety of other pursuits is of the utmost importance. Each bank has the ability to establish its own category of soundness level. In this investigation, the method known as CAMEL is used to evaluate the soundness of the Bank's assessment model. CAMEL is an acronym that stands for Capital (C1), Asset Quality (C2), Management (C3), Equity (C4), and Liquidity. Each of these evaluation criteria has a specific set of evaluation criteria associated with it (C5). There are four distinct subcategories within the realm of bank soundness; these are as follows: unhealthy, less healthy, somewhat healthy, and healthy. The CAMEL method assessment model is applied to the case simulation, which consists of determining the soundness level of Bank XYZ based on the results of the financial performance evaluation. Because of this, the final value of the CAMEL method is 94.6, which can be categorized as a healthy level of the Bank.

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## INTRODUCTION

A bank is a sort of financial institution that bolsters financial stability and implements monetary policy to attain state financial stability. Banks must operate at a high level financially and operationally in order to fulfill their responsibilities (Zain & Akbar, 2020). The importance of banks as intermediaries in the economy of a nation cannot be emphasized. In carrying out its responsibilities, the Bank functions as a conduit for finances, distributes monies locally, and channels

funds to advance national development. Banks do their responsibilities admirably and require government control, particularly in assessing and monitoring healthy financial performance (Rodriguez-Fernandez, 2016).

Capital (capital), Asset Quality (asset quality), Management (management), Equity (equity), and Liquidity (liquidity), which can be abbreviated as CAMEL, provide the basis for Bank Indonesia's assessment of the Bank's financial health (Direksi Bank Indonesia, 1997). These factors encompass the entirety of the financial management process within the bank. The evaluation of the bank's soundness consists of four categories: unhealthy, less healthy, relatively healthy, and healthy (Indonesia, 2010).

The objective of a bank's soundness evaluation is to identify whether the bank is in a healthy, moderately healthy, less healthy, or unhealthy condition, so that Bank Indonesia can issue directives or instructions for the continuation of a bank's operating activities (Rifai et al., 2021). The final results of the assessment of a bank's condition can be utilized by banks to determine business strategy, and by Bank Indonesia, among others, to determine and implement its supervisory plan (Nurhayati et al., 2020). Quarterly assessments of the bank's soundness are conducted using its financial statements to determine if the bank's soundness has increased or decreased. Because public trust is so important (Wongsansukcharoen, 2022), if the bank's health level is in the poor category, the owner of the funds may move their money to another bank if the findings of the assessment of the bank's soundness affect the level of public trust and loyalty in saving, investing (Lestari & Hardiyanti, 2020), and lending credit (Sudipa & Sudiani, 2019).

It is of the utmost importance to evaluate the bank's soundness level as a description of the condition of the bank's performance for evaluation material for the government and particularly for the community to decide the Bank's capacity to conduct operations and sustain public loyalty (Dubina et al., 2020). Consequently, the purpose of this study is to apply the CAMEL method of assessment model to the simulation case of Bank XYZ in order to provide an overview of the bank's ability to protect funds held as bank capital from various types of risks faced by the bank by determining Bank XYZ's level of welfare.

## RESEARCH METHOD

### A. Bank

A bank is a type of business entity that operates to carry out its functions to collect funds from the general public in the form of deposits and redistribute those monies to the general public in the form of credit or other financial instruments. There is no exception to the rule that every single bank needs to have a plan to improve the overall community's level of living (Kasmir, 2017).

### B. Bank Soundness Level

The ability of a bank to carry out normal banking activities and be able to satisfy all of its obligations in a manner that is appropriate and in line with applicable banking rules can be defined as the bank's "health" (Amelia & Aprilianti, 2018) (Hidayati & Purwitosari, 2020).

### C. CAMEL Method

The CAMEL approach is used to calculate credit scores in order to determine the financial stability of a bank. The CAMEL method's considerations have the greatest impact on the bank's financial position, which in turn impacts the bank's safety and soundness. This method employs multiple ratios for analysis. In compliance with Bank Indonesia laws, CAMEL ratio analysis is performed as a form of bank financial analysis and as a method for monitoring bank performance (Karma & Sukasih, 2019). The CAMEL technique employs valuation factors based on the following financial ratios (Gaffar, 2021) (Christianto & Djazuli, 2013):

#### 1. Capital

The goal of calculating the capital ratio or capital is to assess the bank's capacity for accommodating loss risk in the context of company development. Based on Bank Indonesia's guidelines, the evaluation is based on the CAR (Capital Adequacy Ratio). The ratio of bank capital to risk-weighted assets provides capital (RWA).

$$CAR = \frac{\text{Total Capital}}{\text{RWA}} \times 100\%$$

## 2. Asset Quality

The calculation of Asset quality is based on the type of assets the bank has. A comparison is made between Nonperforming Loans and Total Earning Assets for the purpose of valuing assets. According to the ratio of KAP (Quality of Earning Assets). The KAP ratio is an evaluation of the quality of the bank's assets.

$$KAP = \frac{\text{Troubled credit}}{\text{Total earning assets}} \times 100\%$$

## 3. Management

The calculation of banking management is based on how operations are managed and an evaluation of the management's quality. The evaluation is based upon the NPM (Net Profit Margin) ratio. NPM is a ratio used to gauge a bank's ability to create operational net income.

$$NPM = \frac{\text{Net profit}}{\text{Operational profit}} \times 100\%$$

## 4. Earning

The ability of a bank to raise its profit, either on a period-to-period basis or as a measurement of the level of business efficiency and profitability reached by the bank in question is what is meant by the term "earnings calculation." The evaluation is based on two ratios, namely the ROA ratio (Return On Assets) and the BOPO ratio (which measures return on profits) (Operating Expenses to Operating Income). The return on assets, or ROA, is a ratio that indicates how well a company is able to create profits from the cash that it has invested in its overall assets.

$$ROA = \frac{\text{Net profit before Tax}}{\text{Average total assets}} \times 100\%$$

$$BOPO = \frac{\text{Total operating costs}}{\text{Total operating income}} \times 100\%$$

## 5. Liquidity

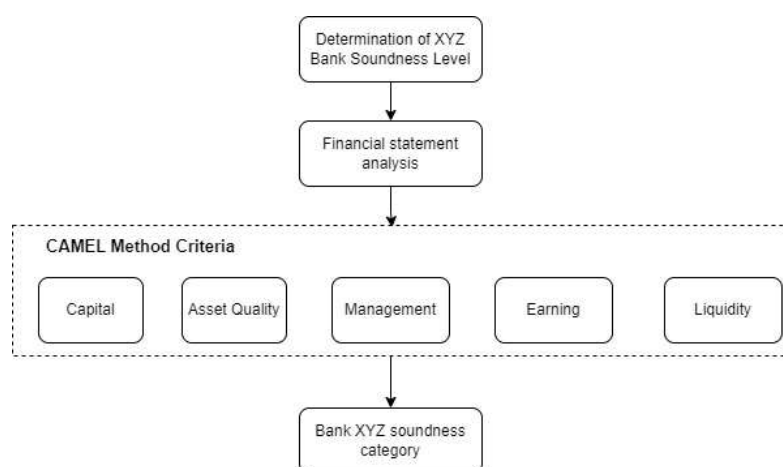
Liquidity is the ability of a bank to pay all of its commitments. LDR is utilized as a metric for evaluation (Loan to Deposit Ratio). The LDR (Loan to Deposit Ratio) indicates the bank's capacity to channel third-party money gathered by the bank in question.

$$LDR = \frac{\text{Credit}}{\text{Total funds}} \times 100\%.$$

# RESULTS AND DISCUSSIONS

## A. Assesstment Model of Bank XYZ Soundness Level

This study employs the CAMEL method of assessment model to simulate a case at Bank XYZ to determine the soundness level of the bank. The evaluation model is depicted in Figure 1 below.



**Figure 1.** Assesstment Model of Bank XYZ Soundness Level

Figure 1 explains the CAMEL method used to rate the soundness of XYZ Bank. On the basis of the CAMEL method parameter report, the soundness of Bank XYZ is determined by analyzing the Bank's financial options. The process of evaluating a bank involves adjusting its financial statements to the CAMEL criteria of Capital, Asset Quality, Management, Earnings, and Liquidity. After the financial statements and criteria have been set, the values for each criterion are calculated, and the model is then utilized to generate the Bank's welfare level category.

## B. Analisis Metode CAMEL Method Analysis

### 1. Determination of Criteria Weight Values

The CAMEL technique uses five evaluation factors to determine the financial health of a bank: capital (C1), asset quality (C2), management (C3), equity (C4), and liquidity (L) (C5). Determination of the value of the weight of the criteria is governed by the BI DIR Number: 30/21/KEP/DIR dated 30 April 1997 pertaining to processes for evaluating the soundness of banks (Direksi Bank Indonesia, 1997). The value of the criteria's weight can be found in Table 1 below.

**Table 1.** Criteria Weight Value

Criteria (C)	Performance Indicator	Value Weight (%)
Capital (C1)	CAR	25%
Asset Quality (C2)	KAP	30%
Management (C3)	NPM	25%
Equity (C4)	ROA	10%
	BOPO	
Liquidity (C5)	LDR	10%

### 2. Determination of Bank Soundness Level Category

Based on the weight value of the CAMEL method criterion in table 1, the category of bank soundness level can be calculated in accordance with BI Decree No. 30/21/KEP/DIR dated 30 April 1997 regarding methods for assessing bank soundness level (Direksi Bank Indonesia, 1997). Table 2 displays the category of the bank's level of financial stability.

**Table 2.** Bank Soundness Category

Score	Bank Soundness Level Predicate
81 - 100	Healthy
66 - <81	Moderately healthy
51 - <66	Less healthy

0 - <51 Not Healthy

### 3. Determination of Criteria Assessment

In determining the assessment of the Capital criterion using the CAR calculation, Asset Quality using the KAP calculation, Management using the NPM calculation, Equity using the ROA and BOPO calculations, and Liquidity using the ROA calculation, a reference is made to BI Decree No. 30/21/KEP/ DIR dated 30 April 1997 regarding procedures for assessing the soundness of banks (Direksi Bank Indonesia, 1997).

**Table 3.** CAR Assessment Criteria

Credit Score	Bank Soundness Level Predicate
>8%	Healthy
7,9 - 8%	Moderately healthy
6,5 < 7,9%	Less healthy
<6,5%	Not Healthy

**Table 4.** KAP Assessment Criteria

Credit Score	Bank Soundness Level Predicate
<10,35%	Healthy
10,35-12,60%	Moderately healthy
12,61-14,85%	Less healthy
>14,86%	Not Healthy

**Table 5.** NPM Assessment Criteria

Credit Score	Bank Soundness Level Predicate
>81-100%	Healthy
>66-<81%	Moderately healthy
>51-<66%	Less healthy
<51%	Not Healthy

**Table 6.** ROA Assessment Criteria

Credit Score	Bank Soundness Level Predicate
>1,22%	Healthy
0,99-1,21%	Moderately healthy
0,77-0,98%	Less healthy
<0,76%	Not Healthy

**Table 7.** BOPO Assessment Criteria

Credit Score	Bank Soundness Level Predicate
<95,52%	Healthy
93,52-94,73%	Moderately healthy
97,73-95,92%	Less healthy
>95,92%	Not Healthy

**Table 8.** LDR Assessment Criteria

Credit Score	Bank Soundness Level Predicate
<94,755%	Healthy
94,755-98,75%	Moderately healthy
98,75%-102,25%	Less healthy
>102,25%	Not Healthy

### 4. XYZ Bank Soundness Level Determination Case Simulation

In the case simulation, the financial performance of Bank XYZ is evaluated in accordance with the CAMEL method's criteria, and the level of Bank XYZ's financial soundness is then determined using the CAMEL method's calculation formula. A credit value parameter with the maximum value of 100 is present in the simulation data. Therefore, the highest value is multiplied by the weight of the criteria in Table 1 to determine the CAMEL computation value. Table 9 below shows the data from the case simulation.

**Table 9.** Results of Financial Performance Evaluation at Bank XYZ

Criteria	Performance Indicator	Ratio Value (%)	Credit Score	Value Weight (%)	CAMEL value
Capital (C1)	CAR	16	100	25%	25
Asset Quality(C2)	KAP	12,5	100	30%	30
Management(C3)	NPM	56	80	25%	20
Equity (C4)	ROA	5	65	10%	6,5
	BOPO	42	86		8,6
Liquidity(C5)	LDR	6	75	10%	7,5
CAMEL's Total Score					<b>94,6</b>

According to Table 8, the value of the financial evaluation results at Bank XYZ reflects the ratio value derived from the application of the CAR, KAP, NPM, ROA, BOPO, and LDR formulas. The credit score has a maximum possible value of 100. The value of the criteria's weight has been determined using Table 1. The CAMEL method's final value calculation yields a final value of 94.6, which, according to Table 2, qualifies as a healthy level for Bank XYZ. The CAMEL approach can assess the category of a bank's level of soundness.

## CONCLUSION

The conclusion that can be drawn is that the CAMEL method of assessment model has been used successfully to determine the category of bank soundness based on 5 assessment criteria: Capital (C1), Asset Quality (C2), Management (C3), Equity (C4), and Liquidity (C5). And there are performance indicators for each criterion, such as CAR, KAP, NPM, ROA, BOPO, and LDR, that can be used to evaluate the results of financial performance in the simulation case of figuring out Bank XYZ's welfare level. The CAMEL method is easy to use because there is already a standard reference from Bank Indonesia about how to evaluate the level of Bank welfare. This means that the assessment can be done continuously at each Bank to determine the category of the Bank's soundness level, which is very important because it affects the Bank's ability to improve performance and keep community loyalty.

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