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**BANK NTB SYARIAH'S SOUNDNESS: A MULTI-METHOD ASSESSMENT USING
CAMELS, RGEC, AND ALTMAN Z-SCORE**

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Abstract. This paper endeavors to appraise the level of stability of Bank NTB Syariah during the time span of 2019 to 2021, by employing the CAMELS technique (which scrutinizes the bank's Capital, Assets, Management, Earnings, Liquidity, and Market Sensitivity), RGEC (which assesses the Risk Profile, Good Corporate Governance (GCG), Earnings, and Capital), as well as the Altman Z Score method (which analyzes the potential for bankruptcy). The data utilized for this research were procured through the application of documentation techniques and sourced from the financial statements and annual reports of Bank NTB Syariah, from 2019 to 2021. The data analysis technique utilized involved an evaluation of the bank's level of stability, utilizing a risk-based approach, encompassing the CAMELS, RGEC, and Altman Z Score factors. Based on the appraisal of the level of stability of PT. Bank NTB Syariah from 2019 to 2021, as evaluated by the comprehensive RGEC and CAMELS approach, the bank is deemed to be in a sound financial condition. However, the results of the bankruptcy prediction analysis, utilizing the Altman Z Score model, indicate that the financial state of Bank NTB Syariah in 2021 is situated in a nebulous area, albeit superior to its condition in 2020 and 2019, which indicated an indication of financial distress and potential bankruptcy.

Abstrak. Penelitian ini berupaya menilai tingkat stabilitas Bank NTB Syariah selama rentang waktu 2019 hingga 2021 dengan menggunakan teknik CAMELS (yang meneliti Permodalan, Aset, Manajemen, Pendapatan, Likuiditas, dan Sensitivitas Pasar), RGEC (yang menganalisis menilai Profil Risiko, Good Corporate Governance (GCG), Earnings, dan Capital), serta metode Altman Z Score (yang menganalisis potensi kebangkrutan). Data yang digunakan dalam penelitian ini diperoleh melalui penerapan teknik dokumentasi dan bersumber dari laporan keuangan dan laporan tahunan Bank NTB Syariah tahun 2019 hingga tahun 2021. Teknik analisis data yang digunakan adalah evaluasi tingkat stabilitas bank dengan menggunakan metode pendekatan berbasis risiko, yang mencakup faktor CAMELS, RGEC, dan Altman Z Score. Berdasarkan penilaian tingkat stabilitas PT. Bank NTB Syariah pada tahun 2019 hingga tahun 2021, jika dinilai dengan pendekatan komprehensif RGEC dan CAMELS, bank dinilai berada dalam kondisi keuangan yang sehat. Namun, hasil analisis prediksi kebangkrutan dengan menggunakan model Altman Z Score menunjukkan bahwa kondisi keuangan Bank NTB Syariah pada tahun 2021 berada dalam area yang samar-samar, namun lebih unggul dibandingkan kondisi tahun 2020 dan 2019 yang mengindikasikan adanya indikasi kebangkrutan. kesulitan keuangan dan potensi kebangkrutan.

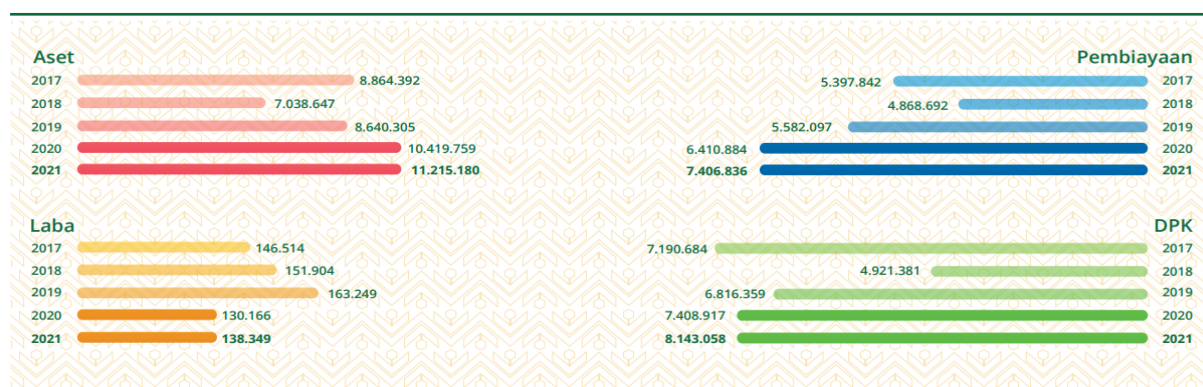
INTRODUCTION

Based on the resolution of the General Meeting of Shareholders (RUPS) on June 13, 2016, which has approved the implementation of the conversion of PT Bank NTB Syariah, which is a bank owned by the West Nusa Tenggara provincial government together with the City/Regency government throughout the West Nusa Tenggara region (Ramdan et al., 2020). Bank NTB Syariah has a vision to be a trustworthy, reputable, and community-choice sharia commercial bank so that it can provide excellent and superior services for the community and provide good performance aspects. Then in 2021, Bank NTB Syariah will have 55 office networks, including 1 Head Office, 12 Branch Offices (KC), 24 Sub-Branch Offices (KCP), 6 Cash Offices (KK), 7 Service Offices (KP), and 5 Mobile Cash Cars. The Office Network spread across the West Nusa Tenggara region (Lombok Island and Sumbawa Island), and Surabaya is intended to provide easy access to Bank customers and Bank partners, among others, the Regional Government, government agencies, public and private universities, schools, foundations, mosques and Islamic boarding schools, Baznaz of NTB Province, companies in NTB regions, MSME supervisory agencies/organizations and communities and other partners (Bank NTB Syariah, 2023).

In 2021, the economic recovery momentum will continue to be characterized by the banking intermediation function improvement, supported by the increased mobility of the population and the enhanced management of Covid-19. It can support Bank NTB Syariah in maintaining positive performance and contributing optimally to the recovery of economic conditions in the west Nusa Tenggara region, as evidenced by the performance trend of Bank NTB Syariah shown below.

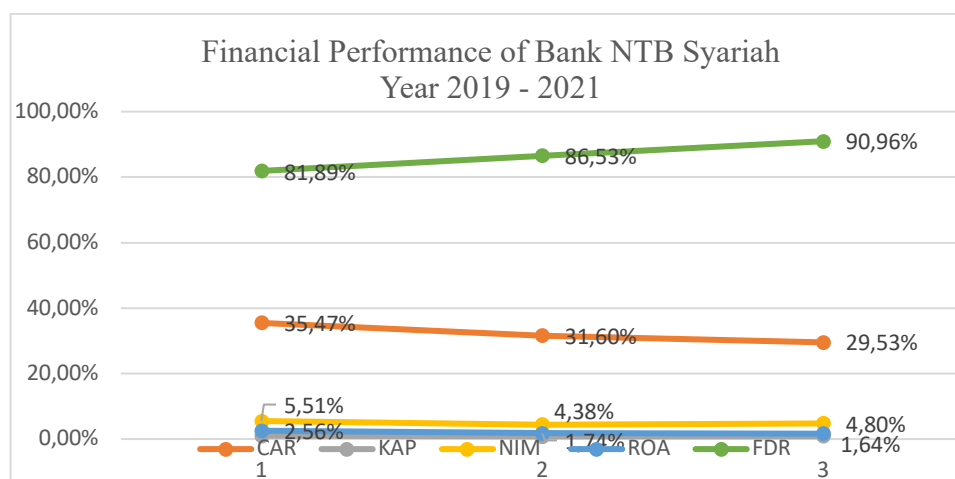
Performance Trends of Bank NTB Syariah in 2017-2021

(In million Rupiah)



Source: Bank NTB Syariah Annual Report 2021

Based on Bank NTB Syariah's financial performance from 2017 to 2021, it is known that the total value of its assets, financing, and third-party funds in 2021 will be higher than in previous years. The value of its assets will have grown by 7.63% to IDR11,215 billion, the value of its financing will have grown by 15.54% to IDR7,407 billion, its net income will have grown by 6.29% to IDR138 billion, and its third-party funds will have Along with the improvement in financial performance, core capital grew by 2.58 percent to IDR 1,410 billion, and equity grew by 4.17 percent to IDR 1,445 billion. Nevertheless, on the fabric side, profit performance in 2020 and 2021 is lower compared to 2017, 2018, and 2019 (Mayasari et al., 2022).



Source: processed by the author from the data of the Annual Report of Bank NTB Syariah in 2020 and 2021

Bank NTB Syariah had a good year in 2021, even though the banking industry is getting harder and harder. The fact that the bank made a net profit of IDR138 billion shows this. It represents 113.43% of the budgeted IDR122 billion for 2021, and a 6.2% increase over the IDR130 billion the bank earned the previous year. The growth in Net Profit obtained by the Bank, supported by an increase in Net Income (NI) of 4.80%, grew by 9.59% (YoY) compared to the previous year. From IDR43,3 billion in fee-based income in the same period last year to IDR53,1 billion this year, there was an increase of IDR9.7 billion, or 22.52% (YoY). This increase in net profit is also in line with the achievement of targets from several profitability indicators, such as the Return on Assets (ROA) Ratio of 1.64% and Return on Equity (ROE) Ratio of 10.04%

Improvements to the financing portfolio channeled by the Bank always prioritize applying prudential principles to maintain the quality of the Bank's financing in a good position. It can be seen from the NPF ratio in 2021 of 1.18%, better than the previous year of 1.26%. The Bank's Capital Adequacy Ratio (CAR) in 2021 is 29.53%. It indicates adequate opportunities to support the expansion of the Bank's business that can be balanced with the ability to anticipate the risks faced.

Bank performance can be used as a benchmark for bank soundness assessment. The Koran's legal basis, which explains the need for assessing the bank's soundness, is "O you who believe! Fear Allah, and let every soul look to what it has sent ahead for tomorrow, and fear Allah; indeed, Allah is Acquainted with what you do" The Holy Koran verse 18 (Al-Quran, 2013).

A bank's soundness is essential for forming trust in the banking world (Iqbal, 2012). Customer trust and loyalty to the bank are beneficial factors and make it easier for management to develop a good strategy (Phan & Ghantous, 2013). However, if the customer's trust in the bank is concerned, loyalty will also be significantly reduced. It is undoubtedly very unfavorable for the bank because the owners of the funds can withdraw their funds back and transfer them to other banks at any time (Crujisen & Diepstraten, 2017). Therefore, banks are required to achieve and maintain a good and optimal level of performance so that it will increase the trust and loyalty of customers and the wider community to use the bank's products, services, and financial activities. The Financial Services Authority has rules about a bank's soundness (Demirgüç-Kunt & Detragiache, 2011). The rules say that the bank should always be healthy so that people will still want to do business or other things in the bank. A bank's soundness can be seen as its ability to carry out regular banking activities or meet its obligations legally and correctly according to banking regulations. The level of bank soundness can be assessed from several

indicators. One of the main ways that the bank is judged is based on the bank's financial statements in question (Martin, 1977).

From the background description, the problem can be formulated as follows: How is the analysis of the soundness level of Bank NTB Syariah Mataram in 2019 to 2021 financial statements, whether it is included in the category of healthy, moderately healthy, somewhat healthy, or unhealthy when assessed using the CAMELS, RGEC and Altman Z Score bankruptcy assessment methods.

DATA AND METHODOLOGY

The employed research method is descriptive and follows a qualitative approach (Njie & Asimiran, 2014). The utilized data sources are secondary in nature, encompassing the annual reports of Bank NTB Syariah over the course of three consecutive years, namely, 2019, 2020, and 2021. The data analysis methodology includes an explanation of the annual report or financial statements of Bank NTB Syariah, adopting the RGEC, CAMELS, and Altman Z Score approaches (Damayanti et al., 2020) (Haralayya & Aithal, 2021) (Hamid et al., 2016).

The data source utilized in the form of the annual report of Bank NTB Syariah comprises statements concerning the financial condition, operating outcomes, projections, plans, strategies, policies, and objectives of the organization, which are classified as futuristic statements, in line with the pertinent legislation. Each of these statements present in the annual report is based on associated risks and uncertainties, and the materialization of real-world events can affect such statements. The raw data obtained from the annual reports will be further processed and analyzed to determine the level of bank soundness (Bank NTB Syariah, 2023).

RESULTS AND DISCUSSION

A. The Bank Soundness

Assessing the level of soundness of a bank entails an evaluation of its capacity to undertake routine banking activities and meet its obligations (Sarker, 2006). The soundness level of a bank can be determined by its composite rating. As per the Financial Services Authority's provisions, specifically, Regulation Number 8/POJK.03/2014, concerning the assessment of the soundness level of Islamic commercial banks and Sharia business units, the bank's soundness status can be ascertained (OJK, 2014). This regulatory framework establishes a comprehensive framework for evaluating the soundness of banks, providing guidance on risk-based approaches, and emphasizing the importance of considering various risk factors, such as market sensitivity, liquidity, management, capital, earnings, and assets. Utilizing this established framework, a thorough evaluation of the bank's level of soundness can be conducted, taking into account its ability to carry out banking operations and meet its obligations.

Bank soundness assessments are carried out annually to determine whether there is an increase or a decrease in bank soundness. For banks whose soundness continues to improve is not a problem because it is expected and an effort to maintain the bank's soundness. If the bank continues in an unhealthy condition, it must get a direction or sanction from the Financial Services Authority (OJK) as a supervisor and supervisor of banking in Indonesia. OJK can provide direction to change bank management, liquidate its existence, etc.

B. Bank Soundness Assessment Method

In the course of the history of Indonesian banking, various research methods have emerged aimed at assessing the soundness of banks, including CAMELS (Camels (abbreviation of Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk), RGEC (abbreviation

of Risk Profile, Good Corporate Governance, Earnings, and Capital), as well as Altman Z-Score bankruptcy analysis. These methods, developed based on rigorous research and empirical studies, can help regulators, investors, and stakeholders in the banking sector to evaluate the soundness levels of banks in a comprehensive and objective manner (Larasati & Achmad, 2021).

1. RGEC method (Risk profile, Good Corporate Governance, Earnings, and Capital)

Pursuant to the provisions of Regulation of the Financial Services Authority Number 8/POJK.03/2014, which became effective as of January 2014, the 14 erstwhile methods utilized for assessing bank soundness level were replaced with the RGEC method, which comprises the following components: Risk Profile, Good Corporate Governance, Earnings, and Capital. The RGEC approach, which is based on the Financial Services Authority Regulation Number 8/POJK.03/2014, serves as a template for evaluating the soundness level of Islamic commercial banks and their business units. Banks must undertake a standalone or consolidated assessment of their soundness level using the RGEC method (Abdullah, 2020). The bank soundness level assessment process involves scrutinizing various factors, including the Risk Profile, Good Corporate Governance, Earnings, and Capital of the bank. Through the utilization of this method, the bank's soundness status can be accurately determined, which can aid in making informed decisions about the bank's future.

a. Risk Profile Assessment

A scrutiny of the risk management practices employed by a bank in its operational activities is performed through a risk profile assessment. The assessment involves utilizing financial ratios to evaluate the robustness of the bank's risk profile. The computations used in determining the soundness of the bank's risk profile are elaborated upon below:

1) Credit risk

Credit risk is the likelihood of default by a borrower or other party in meeting their financial obligations to the bank. Typically, credit risk is prevalent in banking operations, wherein the bank's performance is contingent upon the counterparties' ability to fulfill their commitments, the issuer's performance, or the fund providers' performance. The management of credit risk is a critical task for banks and financial institutions that engage in lending or other credit-related activities, as it has the potential to cause significant losses and can negatively impact the financial health of the institution. Therefore, the effective identification, assessment, and management of credit risk are essential to ensure the financial stability and profitability of the bank (Brown & Moles, 2014).

This risk is determined by:

$$NPF = \frac{\text{Problematic funding}}{\text{Total Funding}} \times 100\%$$

Risk Profile Rating Criteria (NPF)

Tabel 1

Rank	Description	Criteria
1	Very Healthy	Below 2%
2	Healthy	$2\% \leq NPF < 5\%$
3	Moderately Healthy	$5\% \leq NPF < 8\%$
4	Somewhat Healthy	$8\% \leq NPF < 12\%$
5	Unhealthy	$NPF \geq 12\%$

- 2) Liquidity risk arises when a bank is unable to fulfill its obligations due to the unavailability of adequate cash flow or high-quality liquid assets that can be utilized without disrupting the bank's financial operations. This risk is assessed by analyzing the Financing to Deposit Ratio (FDR), which is a ratio that measures a bank's reliance on external funding sources in relation to its deposit base. Insufficient liquidity can severely impact a bank's ability to meet its short-term obligations and can result in the need for emergency funding or asset sales, which can lead to significant financial losses. Therefore, managing liquidity risk is a crucial aspect of a bank's risk management framework, and banks must maintain sufficient liquidity levels to ensure uninterrupted operations and financial stability (Megeid & Sobhy, 2017).

$$\text{FDR} = \frac{\text{Funding Volume Total}}{\text{Fund Receipts Total}} \times 100\%$$

Risk Profile Rating Criteria (NPF)

Table 2

Rank	Description	Criteria
1	Very Healthy	FDR<75%
2	Healthy	75% ≤ FDR ≤ 85%
3	Moderately Healthy	85% ≤ FDR ≤ 100%
4	Somewhat Healthy	100% ≤ FDR ≤ 120%
5	Unhealthy	FDR ≥ 120%

b. Good Corporate Governance

The evaluation of the GCG factor measures the standard of bank administration in implementing GCG principles, which are based on the provisions set forth by Bank Indonesia for Commercial Banks, taking into account the nuances and complexities of their operations. The parameters utilized in assessing the GCG factor involve various aspects of implementing GCG principles (Yuliani & Fithria, 2022).

The following list consists of factors that are used to assess the good corporate governance practices of a bank, which are as follows:

1. The execution of levers and responsibilities of the Board of Commissioners
2. The execution of duties and responsibilities of the Board of Directors
3. The thoroughness and performance of committee duties
4. The handling of conflicts of interest
5. The implementation of bank compliance functions
6. The utilization of the internal audit function
7. The utilization of the external audit function
8. The implementation of risk management and internal control functions
9. The provision of funds to related parties and large debtors
10. The transparency of financial and non-financial conditions, reports on the implementation of good corporate governance, and internal reports
11. The bank's strategic plan.

c. Rentability (earnings)

- 1) The evaluation of rentability risk is a fundamental method for measuring the efficiency and profitability of a bank's operations. The bank's rentability factors can be assessed using a set of parameters, including but not limited to:

ROA (Return on Asset)

The Return on Assets (ROA) ratio serves as a metric for evaluating the effectiveness of a bank's management in generating profits across all operations.

This ratio is formulated by:

$$ROA = \frac{\text{Profit after Tax}}{\text{Total Asset}} \times 100\%$$

Risk Profile Rating (ROA) Criteria

Table 3

Rank	Description	Criteria
1	Very Healthy	Above 2%
2	Healthy	$1.25\% \leq ROA \leq 2\%$
3	Moderately Healthy	$0.5\% \leq ROA \leq 1.25\%$
4	Somewhat Healthy	$0\% \leq ROA \leq 0.5\%$
5	Unhealthy	Below 0%

2) ROE (Return on Equity)

The Return on Equity (ROE) ratio serves as an indicator of a bank's capacity to produce net income relative to the equity invested in the business.

This ratio is formulated by:

$$ROE = \frac{\text{Profit after Tax}}{\text{Total Equity}} \times 100\%$$

Risk Profile Rating (ROE) Criteria

Table 4

Rank	Description	Criteria
1	Very Healthy	Above 20%
2	Healthy	$12.5\% \leq ROE \leq 20\%$
3	Moderately Healthy	$5\% \leq ROE \leq 12.5\%$
4	Somewhat Healthy	$0\% \leq ROE \leq 0.5\%$
5	Unhealthy	Below 0%

3) Operating expenses to operating income (BOPO)

The Bank Operating Profitability Ratio (BOPO) is utilized to gauge a bank's proficiency and aptitude in executing its activities. This ratio evaluates the income generated in comparison to the operating expenses incurred, with a lower BOPO indicating a greater level of efficiency in utilizing the bank's assets to attain profits.

$$BOPO = \frac{\text{Operating Expense Total}}{\text{Operating Income Total}} \times 100\%$$

Risk Profile Rating (BOPO) Criteria

Rank	Description	Criteria
1	Very Healthy	BOPO<88%
2	Healthy	89% < BOPO ≤93%
3	Moderately Healthy	94% < BOPO ≤96%
4	Somewhat Healthy	97% ≤ BOPO ≤100%
5	Unhealthy	Above 100%

4) Net Interest Margin (NIM)

The Net Interest Margin (NIM) ratio is employed to assess the quantum of net revenue share derived from productive assets.

$$\text{NIM} = \frac{\text{Reward Income}}{\text{Mean of Productive Asset}} \times 100\%$$

Risk Profile Rating (NIM) Criteria

Rank	Description	Criteria
1	Very Healthy	NI above 6.5%
2	Healthy	2.01% < NI ≤6.5%
3	Moderately Healthy	1.5% < NI≤2%
4	Somewhat Healthy	0% < NI≤1.49%
5	Unhealthy	NI<0%

d. Capital

The Capital Adequacy Ratio (CAR) is an evaluative tool used to determine the adequacy of a bank's capital reserves that bear or produce risk, such as loans or financing provided by the bank. (Karim et al., 2022).

This ratio is formulated by:

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

Risk-weighted assets are sums of credit risk, market risk, operational risk, and liquidity risk.

Risk Profile Rating (CAR) Criteria

Rank	Description	Criteria
1	Very Healthy	CAR>12%
2	Healthy	9% < CAR≤12%
3	Moderately Healthy	8% < CAR≤9%
4	Somewhat Healthy	6% < CAR≤8%
5	Unhealthy	CAR<6%

Based on the results of the soundness analysis of Bank NTB Syariah using the RGEC method during the 2019 to 2021 period, the following conditions are indicated:

Component	Ratio	2019	Rank	2020	Rank	2021	Rank	Description
Risk profile	NPF (Gross)	1.36%	1	1.26%	1	1.18%	1	Very Healthy
	FDR	81.89%	1	86.53%	1	90.96%	1	Very Healthy
GCG	Lap.GCG	-	2		2	-	2	Healthy
Earnings	ROA	2.56%	1	1.74%	2	1.64%	2	Healthy
	ROE	12.05%	3	9.54%	3	10.04%	3	Moderately Healthy
	NI	5.51%	2	4.38%	2	4.80%	2	Healthy
	BOPO	76.83%	1	81.39%	1	82.56%	1	Very Healthy
Capital	CAR	35.47%	1	31.60%	1	29.53%	1	Very Healthy

Using RGEC analysis, the Risk profile aspect of Bank NTB Syariah is in a moderately healthy condition with an average FDR value of 81.89%, 86.53%, and 90.96% and is very healthy with an NPF ratio value (gross) of 1.36%, 1.26%, and 1.18%; GCG aspects based on the annual report of Bank NTB Syariah have an index of 2 (2) of all 11 indicators which means that they are in good condition during 2019 to 2022. Earnings aspects from 2019 to 2021 are healthy and very healthy, with average ROA values of 2.56%, 1.74%, and 1.64%, BOPO values of 76.83%, 81.39%, and 82.56%, and NI values of 5.51%, 4.38%, and 4.80%, except for ROE, which has a moderately healthy ratio of 12.04%, 9.04%, and 1.64%, BOPO values of 76.83%, 81.39%, and 82.56% and 35.56% in an average CAR condition.

Based on the data above, it can be done composite index calculation for 2021, with details in the following table.

Calculation of composite index of RGEC components in 2021

Component	Ratio	2021	Rank	Description	Criteria	Rank					Index
						1	2	3	4	5	Composite
Risk profile	NPF (Gross)	1.18%	1	Very Healthy	NPF<2%	V					VERY HEALTHY
	FDR	90.96%	1	Very Healthy	FDR<75%	V					
GCG	Healthy	-	2	Healthy			V				
Earnings	ROA	1.64%	2	Healthy	1.25% < ROA ≤ 2%		V				
	ROE	10.04%	3	Moderately Healthy	5% ≤ ROE≤12.5%			V			
	NI	4.80%	2	Healthy	2.01% < NI ≤6.5%		V				
	BOPO	82.56%	1	Very Healthy	BOPO<88%	V					
Capital	CAR	29.53%	1	Very Healthy	CAR>12%	V					
COMPOSITE VALUE						20	12	3	0	0	87.50%

According to the calculation of the compilation table on the aspects/components of RGEC as a whole in 2021, it can be seen that Bank NTB Syariah has a composite value of 87.50% or can be interpreted as a “healthy” bank.

2. CAMEL Method

The CAMEL method evaluates the soundness of a bank based on five key elements: Capital, Asset Quality, Management, Earnings, and Liquidity. Initially developed in the United States, it was later adapted in Indonesia in response to the economic and monetary crisis in the late 1990s (Ledhem & Mekidiche, 2020). The CAMELS analysis is widely used to assess and analyze the financial management of commercial banks in Indonesia. This analysis is governed by two key regulations, Bank Indonesia Regulation (PBI) Number 6/10/PBI/2004, which pertains to bank soundness level, and Bank Indonesia Regulation Number 9/1/PBI/2007, which outlines the assessment system for commercial bank soundness level based on Sharia principles (Bank Indonesia, 2004) (Bank Indonesia, 2007).

In the CAMELS method, the elements assessed to see the bank's soundness include: Capital, Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk (Faozi et al., 2022). Some indicators used in the CAMELS method are the same as the RGEC method, such as Capital using the Capital Asset Ratio (CAR) ratio, Management using the Net Interest ratio or Net Interest Margin, Earnings using the Return on Assets (ROA) ratio, and Liquidity using the Finance to Deposit Ratio (FDR) ratio. In contrast, Productive Asset Quality (Asset quality) is the only different indicator (Munir & Bustamam, 2017).

Asset quality is all assets that are owned to earn income. The ratio used is Productive Asset Quality (KAP), with the formula:

$$KAP = \frac{\text{Classified Productive Asset}}{\text{Total Productive Asset}} \times 100\%$$

Risk Profile Rating (KAP) Criteria

Rank	Description	Criteria
1	Very Healthy	$KAP \leq 2\%$
2	Healthy	$2\% < KAP \leq 3\%$
3	Moderately Healthy	$3\% < KAP \leq 6\%$
4	Somewhat Healthy	$6\% < KAP \leq 9\%$
5	Unhealthy	$KAP > 9\%$

The results of the CAMEL methodology utilized to assess the stability of Bank NTB Syariah between 2019 and 2021 revealed the utilization of five ratios, with the outcomes being as follows :

Bank Soundness Calculation Results using the CAMEL method Period 2019 to 2021

Factor	Ratio	2019	Rank	2020	Rank	2021	Rank
Capital	CAR	35.47%	1	31.60%	1	29.53%	1
Asset Quality	KAP	1.02%	1	0.84%	1	0.88%	1
Management	NIM	5.51%	2	4.38%	2	4.80%	2
Earnings	ROA	2.56%	1	1.74%	2	1.64%	2
Liquidity	FDR	81.89%	1	86.53%	1	90.96%	1

The evaluation using the CAMEL model indicates that Bank NTB Syariah has a highly healthy condition with respect to Capital and Asset Quality parameters. Meanwhile, the Management and Equity parameters indicate a healthy condition, and the Liquidity parameter has a moderately healthy condition with an FDR ratio value between 81.89% to 90.96% in the last three years (2019-2021). However, the Earnings ratio, as measured by the ROA criteria, has shown a decline in health from highly healthy in 2019 to healthy in 2020 and 2021.

Calculation of the 2021 CAMEL Component Composite index

Component	Ratio	2021	Rank	Description	Criteria	Rank					Index Composite
						1	2	3	4	5	
Capital	CAR	29.53%	1	Very Healthy	CAR>12%	V					HEALTHY
Asset Quality	KAP	0.88%	1	Very Healthy	KAP ≤ 2%	V					
Management	NIM	4.80%	2	Healthy	2.01% < NI ≤ 6.5%		V				
Earnings	ROA	1.64%	2	Healthy	1.25% < ROA ≤ 2%		V				
Liquidity	FDR	90.96%	1	Very Healthy	FDR ≤ 75%			V			
COMPOSITE VALUE						20	10	8	3	0	84.00%

According to the calculation of the compilation table on the aspects/components of CAMEL as a whole in 2021, it can be seen that Bank NTB Syariah has a composite value of 84% or can be interpreted as a “healthy” bank.

C. Bankruptcy Analysis Altman Z Score

Bankruptcy is a phenomenon that occurs when a company becomes incapable of achieving its goals due to a range of factors that can include an inability to meet its financial obligations at the designated time, thereby instigating insolvency or other forms of financial distress that may signify the inception of bankruptcy (Altman et al., 2017). The Altman Z-Score is one of the most famous models of financial hardship. Where Altman z-score is a predictive tool of the difficulty or bankruptcy of a company that is useful for filtering (Altman & Hotchkiss, 2005).

Much research has been performed to ascertain the usefulness of financial ratio analysis in predicting business failure or bankruptcy. One of the studies on this prediction is Multiple Discriminant Analysis that Altman has done. Edward I. Altman conducted the study looking for similar financial ratios commonly used to predict bankruptcy for all countries of study. Z-Score bankruptcy analysis is a tool used to predict a company's bankruptcy rate by calculating the value of several ratios and then inserted in a discrete company. A Z-score is a score of 51 that is determined from a standard calculation that will indicate the bankruptcy likelihood level of the company (Altman et al., 2017).

The Altman model for bankruptcy measurement is not static but rather dynamic, as it is continually evolving through ongoing testing and expansion by Altman (Lubawa & Louangrath, 2016). This model's application has expanded beyond public manufacturing companies to include non-public manufacturing companies and corporate bond companies (Saputri & Krisnawati, 2020). The modified Altman Z-Score model differs from the original and revised Altman Z-Score models, as they were created specifically to predict the bankruptcy of public manufacturing companies. In the modified Altman Z-Score analysis, Altman eliminated the X5 variable, as this ratio varies across industries with different asset sizes (Batchelor, 2018). Then the formula of the Z-Score equation that Altman has modified is as follows:

$$Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$$

Notes:

X1: Net Working Capital to Total Assets

X2: Retained Earnings to Total Assets

X3: Earnings Before Interest and Tax (EBIT)/Total Assets

X4: Total Equity to Total Debt Ratio

With cut-off values used:

a. $Z'' < 1.1$, then including bankrupt companies.

b. $1.1 < Z'' < 2.6$ then includes a gray area

c. $Z'' > 2.6$, then including companies that are not bankrupt

The soundness analysis of Bank NTB Syariah using the Altman Z Score method during the 2019 to 2021 period was carried out through 2 (two) stages. The first is to calculate the components of the equation variables in the Altman Z score method, as shown in the following table:

**Calculation of Variable Components in the Altman Z Score Method
Bank NTB Syariah year 2019 to 2021**

Component	Variables	2019		2020		2021	
Working Capital	X1	1,206,801	0.140	1,179,181	0.113	1,204,377	0.107
Total Assets		8,640,305		10,419,759		11,215,180	
Retained Earnings	X2	686,190	0.079	696,203	0.067	738,474	0.066
Total Assets		8,640,305		10,419,759		11,215,180	
EBIT	X3	224,376	0.026	176,166	0.017	1,888,731	0.168
Total Assets		8,640,305		10,419,759		11,215,180	
Book Value of Equity	X4	1,400,359	0.193	1,397,091	0.155	1,455,370	0.149
Book Value of Total Debt		7,239,946		9,022,667		9,759,810	

After that, the calculation of 4 variables of Altman Z Score results is included in the equation model to calculate the predicted value of bankruptcy as in the following table.

**Results of Altman Z Score Model Calculation
Bank NTB Syariah year 2019 to 2021**

Year	X1	X2	X3	X4	Z Score	Cut Off Point	Prediction
	6.560	3.260	6.720	1.050			
2021	0.1074	0.0658	0.1684	0.1491	2.207	2.60 < Z < 1.10	Gray Area
Score Z Count	0.7045	0.2147	1.1317	0.1566			
2020	0.1132	0.0668	0.0169	0.1548	0.137	2.60 < Z < 1.10	BANKRUPT
Score Z Count	0.0797	0.0143	0.0191	0.0242			
2019	0.1397	0.0794	0.0260	0.1934	0.017	< 1.10	BANKRUPT
Score Z Count	0.0111	0.0011	0.0005	0.0047			

According to the analysis using the Altman Z Score model, Bank NTB Syariah's financial position in 2021 is in a relatively uncertain state, which is an improvement from the previous years of 2020 and 2019, where the position was considered to be in financial distress or even bankruptcy. This improvement is attributed to the increase in the value of assets, working capital, and profits in 2021 as compared to the previous years. It is important to note that the Altman Z Score model is a reliable tool for predicting the likelihood of bankruptcy and financial distress in companies. Therefore, the improved

position of Bank NTB Syariah in 2021 indicates a positive direction for the bank's financial health, but further analysis and monitoring are necessary to ensure sustained financial stability

CONCLUSION AND IMPLICATION

As previously stated, the comprehensive evaluation of PT. Bank NTB Syariah's soundness using both the RGEC and CAMEL methods reveals a healthy bank that can withstand significant negative impacts from various external factors. The bank has shown good financial performance, positive net income and total assets trends, and a sound capital structure.

According to the RGEC approach, Bank NTB Syariah has a composite rating of "HEALTHY" with a composite value of 87.50% in terms of risk profile, earnings, good corporate governance, and capital. Meanwhile, using the CAMEL approach, the bank has a composite rating of "HEALTHY" with a composite value of 84% in terms of capital, asset quality, management, earnings, and liquidity. It's worth noting that management and market sensitivity were not evaluated as they have not exposed the bank to significant risks.

Moreover, the Altman Z Score model analysis shows that Bank NTB Syariah's condition in 2021 is in a gray area, which is an improvement from its position of financial distress (bankruptcy) in 2020 and 2019. This improvement is attributed to an increase in the value of assets, working capital, and profits in 2021 compared to the previous year.

Overall, the RGEC, CAMEL, and Altman Z Score model analyses provide a robust evaluation of Bank NTB Syariah's soundness, revealing a healthy bank that can navigate various business conditions and external factors.

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