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Analysis of Financial Performance of Indonesian Banking Companies Using the Z-Score Model

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Abstract

This research aims to find out how to analyze the financial performance of banking companies in Indonesia using the Z-Score model. This research uses a descriptive quantitative approach and uses the Z-Score model to assess banking performance. The data processing stages begin with collecting financial report data according to the Z-Score model indicators, calculating each indicator item, formulating the results according to the Z-Score model, analyzing them and drawing research conclusions. The financial report data taken is 3 years (2020-2022) which is time series data. The results of this research show that the overall financial performance of Indonesian banking seen from the Z-Score Model shows that the majority are in the bad category and 4 banks are in the healthy category, namely AMAR, ARTO, BTPS and PNBS. AMAR is categorized as healthy for 2022, ARTO 2021, BTPS for 2020-2022 is consistently considered healthy and PNBS is also considered healthy for 2020-2022. This shows that financial supervision needs to be improved and this information provides a warning to all banks that must focus more on efforts to improve their respective financial performance to increase existing ratios.

1. Introduction

One of the government-owned banking institutions, in this case, is a state-owned company, namely Bank Negara Indonesia (BNI), which is the oldest bank in Indonesia, and the Circulation Bank or Central Bank, which is responsible for issuing and managing the Indonesian currency. Bank financial performance is a description of the bank's financial condition in a certain period, including aspects of collecting funds and distributing funds. Assessment of bank performance is carried out through the analysis of its financial reports. According to (Suteja, 2018), "a financial report is a report that describes the financial position from the results of an accounting process during a certain period, used as a communication tool for the parties involved." Meanwhile, a bank's financial performance can be seen from the resources owned by the company as outlined in the bank's financial reports. Bank financial reports show the financial conditions of the bank as a whole. This report also shows the bank's performance management during one period. Therefore, financial information obtained from the company's financial reports needs to be understood by the reader, thus requiring an analysis of financial ratios (Akbar, 2022).

It is important for banks to always maintain good performance. However, bank financial performance can no longer be measured solely during the COVID-19 pandemic, where the implementation used greatly influences the financial performance implemented by a company. The size of the achievements achieved by a bank can be seen from its profitability. Banks need to maintain a high level of profitability, be able to distribute dividends well, have continually growing business prospects, and fulfill the provisions of prudential banking regulations well so that the company can develop and advance in their field. According to Kasmir (2016: 196), the profitability ratio assesses the company's ability to make a profit and provides a measure of the level of management effectiveness of a company. This is shown by profits generated from sales and investment income. The use of this ratio shows the company's efficiency.

It is important for banks to maintain their profitability stable and even increasing to fulfill obligations to shareholders, increase the attractiveness of investors in investing capital, and increase trust in society for keeping excess funds owned by the bank. The most profitable placement of funds is in the form of credit; however, the risks faced by banks in placing these funds are also large. Credit is the biggest source of bank income and profits. Besides that, credit is also a type of fund investment activity which is often the main cause of a bank facing significant problems. Therefore, it is not an exaggeration to say that bank businesses are greatly influenced by their success in managing credit. Basically, all businesses are not free from the risk of failure, and the world of banking is no exception. Providing credit by banks carries risks, namely in the form of non-current principal payments on loans and interest, which can directly reduce bank performance and cause banks to be inefficient.

Problematic credit arises when customers are unable to repay the loan at the agreed time, but not all problematic credit is bad credit. If handled well, problem loans can definitely be resolved. Meanwhile, according to (Mudrajad and Suhardjono, 2015:120), they define problematic credit as credit that is not current or credit where the debtor breaches the repayment agreement, resulting in arrears or failure to fulfill the agreed terms.

The COVID-19 pandemic has affected several achievements, especially in the company's financial performance, where during this pandemic, the company's financial performance was unstable due to several factors, both company management factors and global factors which indirectly influenced the financial performance that is usually carried out. During the COVID-19 pandemic, the main company, the Bank, continues to experience a decline in performance. Good financial performance by the company will have a positive impact on the company's reputation. This will attract investors to invest in the company with the hope they will get profit (dividend). If the company generates significant profits in the year, the amount of dividends distributed will also increase, thus attracting more investors to invest in the company in the future. Therefore, the more investors invest capital in the company, the higher the share prices of the company, and the more outstanding shares there will be. This is what can be done to increase the company's reputation. The value of a company is determined by the earning power of the company's assets. Therefore, the better the financial performance of the company, the higher the ability of the company to generate profit. When profits continue to increase, the dividends received by investors will also increase, or it can be said that the welfare of the shareholders will increase. Investors whose welfare is taken care of will automatically give a good assessment to the company.

This research is important to carry out considering that previous research in measuring financial performance mostly used the Z-Score Model. This study is important to remember the situation and condition of the COVID-19 pandemic, where financial performance, especially of banks, has experienced decline or instability. If previous research describes that financial performance is still stable and continuously increasing when measured using the EVA (Economic Value Added) and RBV (Resource-Based View) theories, this might not be the case due to the current COVID-19 pandemic situation.

This is evidenced by operational restrictions and limited working hours, as well as a decrease in performance sources rather than an increase, caused by the implementation of terms such as Work From Home (WFH) and Social Distancing (SD) by the government. This study is important to remember because finance is an internally vital part of a company's activities. Besides that, research to study and analyze banking performance is important to pay attention to, as businessmen deposit and commit credit to the bank for financing their business activities. This study also explores more comprehensively the performance of banking finance in Indonesia in particular.

2. Literature Review

2.1 Financial performance

According to Fahmi (2018: 142), financial performance analysis is conducted to assess how well a company adheres to and implements financial regulations effectively and accurately. The financial performance of a good company signifies the proper and correct implementation of applicable rules. Evaluation of a company's financial aspects is crucial to ensure ongoing progress. This financial report can also forecast whether a company is capable of enduring future challenges. Financial performance analysis aims to evaluate the degree to which a company has adhered to financial regulations accurately and effectively. It provides a description of a company's financial status, analyzed through financial analytical tools, revealing its performance over a certain period. This analysis is vital for optimizing resource utilization in the face of environmental changes.

2.2 Altman Model Z-Score Analysis

The Z-Score is an index used to evaluate or predict the likelihood of a company's bankruptcy within a two-year period after conducting an analysis. This formulation was developed by Edward I. Altman. According to Hanafi and Halim (2016), Edward I. Altman from New York University conducted a survey and developed several models in various countries including the United States, England, Australia, Japan, Switzerland, Brazil, Canada, the Netherlands, France, and Ireland. Altman identified five financial ratios that could be combined to predict a company's likelihood of bankruptcy. These ratios are then aggregated and multiplied to produce a multivariate value. This value, derived from two or more variables combined in a single equation, is known as the Z-Score method by Altman.

3. Research Methods

This research employs a mixed-method analysis approach within the framework of a case study. Mixed-method analysis combines qualitative and quantitative methodologies, incorporating philosophical assumptions and integrating both approaches into a single research endeavor. As Sugiyono (2016) elucidates, this methodological fusion aims to yield comprehensive, valid, reliable, and objective data by synthesizing the strengths of both qualitative and quantitative methods throughout various phases of the research process.

The research, conducted both as single and series studies, emphasizes the amalgamation of quantitative and qualitative data for a holistic understanding of the research object. The approach underscores a focus on fundamental research questions rather than rigid adherence to specific methodologies, emphasizing pragmatism, pluralism, and practicality in research design. The research took place at PT Bank BNI Makassar Regional Office in Makassar City, South Sulawesi, with a duration spanning two months from January to February 2022. This stage involved formulating the research design, obtaining necessary permits, preparing research equipment, and outlining data collection, analysis, and conclusion procedures. Regarding the type and source of data, the research utilized both qualitative and quantitative data, represented in verbal and numerical forms, respectively.

Primary data sources included documentation and interviews, while secondary data sources comprised journals and previous research. Data collection involved accessing financial reports in documentation form. Quantitative descriptive analysis was conducted sequentially, utilizing Altman's classification to predict a company's likelihood of bankruptcy based on Z-Score values: Z-Score > 2.99 indicating a Healthy financial performance, Z-Score < 1.81 indicating potential bankruptcy, and Z-Score between 1.81-2.99 indicating a gray area or vulnerability to bankruptcy.

4. Research and Discussion

4.1 Financial Performance of Banking Companies

The financial performance of banking institutions reflects their success in operational activities. Evaluating the financial performance of banks is crucial for assessing their overall performance. Based on the analysis conducted, the following key findings regarding the financial performance of banks listed on the Indonesia Stock Exchange (BEI) are highlighted:

1. Three banks have a WCTA ratio value greater than 1, indicating a need for evaluation and self-warning to control liquidity levels within their business operations.
2. Three banks exhibit high RETA ratio values, namely BBYB, ARTO, and DNAR, suggesting that these banks utilize their profits to finance their assets internally.
3. Two banks demonstrate high EBITTA ratio values, indicating their efficient management of assets to generate optimal profits, thereby supporting the continuity of the company.
4. The MVEBVL ratio reveals that only two out of the 44 analyzed banks have high values, while the rest have low values. A low MVEBVL ratio suggests that the company is highly aggressive in managing existing debt, potentially increasing the burden of debt owed.
5. Regarding the STA ratio, two banks exhibit high values (0.1 and 0.2), while others have relatively lower values. This indicates that many banks have not been aggressive in improving their income.

These findings underscore the importance of evaluating various financial ratios to gain insights into the performance and financial health of banking institutions. Additionally, they highlight areas where banks may need to focus their efforts to improve their financial performance and ensure long-term sustainability.

4.2 Banking Health Level in Indonesia

The results of data analysis reveal that out of a total of 44 banks analyzed, only three banks, namely ARTO, BTPS, and PNBS, exhibit good performance (Healthy category). However, these banks are facing issues with liquidity and solvency, which is a signal of insufficient performance (with the worst consequence being bankruptcy). This situation may lead to decreased customer trust and further complications in the bank's financial condition. Therefore, there is a need for strict regulations and controls in the banking sector. The Central Bank and financial authorities are typically responsible for monitoring, evaluation, and regulating internal bank operations to ensure the stability of the financial system and mitigate financial risks as early as possible.

The analysis also indicates that BTPS and PNBS consistently perform well across various financial ratios, including WCTA, RETA, EBITTA, MVBEVL, and STA. This emphasizes the importance of these banks in maintaining stability and financial health.

This study aligns with previous research conducted by Meilinda et al. (2017) and Mellisyah (2023), which emphasize the importance of analyzing financial performance using appropriate tools. Similarly, research by Alamsjah (2023) highlights that state-owned enterprises (BUMN) are in the "zone of ignorance" or uncertainty regarding financial risk. Therefore, company managers must focus their efforts on improving financial performance, enhancing efficiency, managing risks effectively, and developing strategies to ensure the health and stability of the company in the future.

5. Conclusions

5.1 Conclusion

Based on the results of the research conducted by the author, the following conclusions were drawn:

1. The analysis of the 44 banks indicates that most of them have suboptimal financial performance. Therefore, there is a need for appropriate risk mitigation measures to be taken as early as possible. Addressing these financial challenges is crucial for ensuring the survival of these banks in various economic conditions.
2. Regarding the health of banks, three companies were identified as having good (healthy) financial health based on their Z-Score values. These banks are ARTO, BTPS, and PNBS. The health of a bank is a critical factor in determining its ability to endure in the long term.

These findings underscore the importance of closely monitoring and managing the financial health of banks to ensure their sustainability and resilience in the face of economic challenges. Additionally, identifying banks with good financial health can provide insights into effective strategies and practices that contribute to long-term success in the banking industry.

5.2 Suggestion

Based on results study the has outlined on then any suggestions can be made taken that is:

1. Banking Performance in this category of zone of ignorance (grey / bad / less good) . must more focus on business repair performance company For increase fifth required ratio
2. Party management of each company must more give attention and warning self specifically in management finance as well as repair and take the right policies to be sustainable in various existing conditions .

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