THE INFLUENCE OF CAMEL FINANCIAL RATIO IN PREDICTING POTENTIAL FINANCIAL DISTRESS IN BANKING COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE 2019-2022

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ABSTRACT
This research was conducted with the aim of determining the effect of the CAMEL ratio on predicting potential financial distress in banking companies listed on the Indonesia Stock Exchange. The CAMEL ratio is presented using the variables capital adequacy ratio (CAR), operational costs to operating income (BOPO), return on assets (ROA), return on equity (ROE), non-performing loans (NPL), and loan to deposit ratio (LDR). Sampling in this study used a purposive sampling method, with a total population of 46 banking companies listed on the Indonesian Stock Exchange for the 2019-2022 period. From this population, 25 banking companies were obtained as research samples. The data analysis method used is the coefficient of determination method and partial test. The results of this research show that CAR, BOPO, ROA, ROE, partially do not have a significant effect on financial distress, while for the NPL variable, LDR has a significant positive effect on financial distress conditions in banking companies listed on the Indonesian Stock Exchange.

Keywords : Camel Ratio, Financial Distress, Bank

INTRODUCTION

Banks in a country can be said to be the blood of a country's economy. The role of banking is very influential in economic activities. In general, banks have a very important role in the economic world, this role is as a medium that is able to collect and channel funds effectively to the community to improve people's welfare. A bank is a business entity that collects funds from the community and then distributes them back to the community in the form of credit with the aim of improving the standard of living of many people in an economy. To create good and effective banking, a company needs effective bank regulation or supervision of its financial performance and has the authority to determine the level of health of a bank based on the bank's financial reports in a certain period (Lavas, Mangantar, 2014). Bank health is the ability of a banking business to carry out banking operational activities properly in accordance with the existing banking regulations (SOP). Entering the beginning of 2020, the world was shocked by the discovery of the SARS-COV-2 virus or what could be called Covid-19, which is an infectious disease that attacks the respiratory system and can cause death. The impact caused by the Covid-19 pandemic greatly affected banking companies in Indonesia because it could trigger an increase in bad loans from customers, thereby affecting company revenues. This decrease in income causes the company to experience difficulties in fulfilling its obligations, thereby leading to the company's financial difficulties. Conditions of financial distress that occur are the initial stage of continuous decline or bankruptcy if not anticipated from the start.

*Financial distress*is a condition where a company is unable to generate sufficient income or profits for the company, so that the company is unable to fulfill its obligations (Investopedia.com). For companies, this condition of financial distress can be the cause of bankruptcy because this condition is different from an ordinary decline in profits, but the nominal value caused by financial distress can be very large, affecting the smooth operations of a company (OCBC NISP.com). Usually financial distress conditions are caused by high fixed costs, the large value of illiquid assets, and income that is vulnerable to economic decline. Companies with unstable profits will experience very large and higher opportunities for bankruptcy because the profits obtained are not able to pay off the company's obligations. It is best for companies to minimize debt so that the profits obtained remain in a stable condition (Houston, 2019).

Financial distress is often interpreted as financial difficulties or can be said to mean that the company is in a state of crisis in meeting its long-term and short-term debt obligations, one way that management can do this is by measuring its financial performance using the CAMEL method on the bank's financial reports. in the previous period as a tool for measuring company financial distress. CAMEL is an abbreviation for (Capital, Asset Quality, Management, Earning, and Liquidity). CAMEL measurement is carried out by classifying several components of each factor, namely capital (capital is measured by CAR). Assets (assets measured by NPL), Management (management measured by BOPO), Earnings (income measured by ROA), Liquidity (liquidity measured by LDR). In this research the author uses six financial ratios as measurement tools consisting of CAR, BOPO, ROA, ROE, NPL, LDR which refer to financial distress. Based on the description above, the author is interested in selecting and researching the level of financial performance of banking companies with the title "The Influence of CAMEL Financial Ratios in Predicting Potential Financial Distress in Banking Companies Listed on the Indonesian Stock Exchange in 2019-2022". The aim of this research is to analyze that the financial ratios CAR, BOPO, ROA, ROE, NPL, LDR can be used as a tool to predict potential financial distress for banking companies listed on the Indonesia Stock Exchange.

LITERATURE REVIEW

Bank
According to (Kasmir, 2016) a bank is a financial institution that operates in a special field of finance and the main activity in banking is collecting funds from the public and channeling them back to the community as well as providing other banking services. Banking in Indonesia has the aim of supporting the implementation of national development in order to increase equality, economic growth and improve people's living standards (UU article 4 number 10 of 1998).

Financial Distress
Financial distress is a condition where a company's financial condition is unstable or is experiencing a financial crisis in fulfilling its obligations. Financial difficulties are a situation where a company experiences liquidity difficulties so that the company is unable to carry out the company's operational activities properly because its financial condition is experiencing a continuous decline in profits and as a result there are liabilities whose nominal value is increasingly increasing compared to the value of the assets owned by the company.

RESEARCH METHODS

The type of research used in this research is quantitative research. Quantitative research is a method for testing certain theories by examining the relationship between variables (Kusnawati, 2020). The type of data used is secondary data. This research uses secondary data whose data source is obtained by collecting banking company financial report data taken from company websites and from the Indonesia Stock Exchange website. The population in this research is the total of 46 banking companies listed on the Indonesia Stock Exchange in 2019-2022. Meanwhile, the research sample used a purposive sampling method which was based on the researcher's criteria so that the researcher determined 25 sample data from banking companies. The number of samples for this research is 25 (number of companies) multiplied by 4 (year of research) = 100 data.

The dependent variable in this research is the prediction of financial distress using the Altman Z-Score (Formula 1) calculation. The z-score method is a score number determined from a standard comparative calculation which will indicate the level of probability of bankruptcy in a company (Supardi, 2017).

$$Z\text{-}Score = 6.56 (X1) + 3.26 (X2) + 6.72 (X3) + 1.05 (X4) \tag{1}$$

Information :
Z = Financial Distress
X1 = Working Capital To Total Assets (WCTA)
X2 = Retained Earnings To Total Assets (RETA)
X3 = Earnings Before Interest And Taxes To Total Assets (EBITTA)
X4 = Book Value Of Equity To Book Value Of Liabilities (MVETL)

Independent Variables
Capital Adequacy Ratio (CAR)
Capital adequacy ratiois a ratio used to reflect the capital of a banking company. Currently, the minimum CAR value is ≥9%. The bank is said to be healthy. If the value obtained is higher, the better the company's financial health condition will be because the capital owned is able to maintain the emergence of RWA.

Operational costs to operating income (BOPO)
Operational costs to operational income is a ratio used to measure management's ability to control operational costs to operational income (Wibisono, 2017).

Return On Assets (ROA)
Return on assetsis a ratio used to measure financial management's ability to obtain profits resulting from the average total assets of the bank concerned. The higher the ROA ratio value obtained, the greater the profits the company will get.

Return On Equity (ROE)
Return on equityis a ratio used to assess a company's ability to obtain profits or profits from shareholders' investments in a banking company. The higher the ROE value, the better the company's performance in controlling capital to gain profits.

Non-Performing Loans (NPL)
Non-performing loansis a ratio that represents the quality of a company's assets or can also be said to be a loan in the form of credit which is experiencing difficulties in repayment due to deliberate factors carried out by the debtor or deliberate factors originating from external factors (Muniarty, 2022). The smaller the NPL value, the better the financial condition of the banking company concerned.

Loan To Deposit Ratio (LDR)
Loan to deposit ratiois a ratio used to assess bank liquidity by dividing the amount of credit provided by the bank against third party funds (Harun, 2016). The higher the LDR value, the smaller the company's liquidity ability to experience financial problems.

The data collection method used in this research uses: Internet Research Method by obtaining data and information through internet sites related to the research title, Documentation Method by obtaining written notes or descriptive data regarding the history of the company's life in the form of documents in the form of financial reports of registered banking companies on the Indonesian Stock Exchange via the website address www.idx.co.id, Literature study method by conducting literature from various reference sources related to research such as journals, theses, articles, and so on.

The data analysis technique used in this research is to carry out data analysis on financial reports with the aim of measuring, or providing an overview of the potential possibility of financial distress in a banking company by utilizing the SPSS statistical data management program such as descriptive statistical analysis, classic assumption testing. consisting of data normality test, multicollinearity test, autocorrelation test, heteroscedasticity test, partial test (t test) and coefficient of determination (R2).

MULTIPLE LINEAR REGRESSION ANALYSIS

In this study, regression analysis was carried out to test the relationship regarding the influence between more than one independent variable (CAR, BOPO, ROA, ROE, NPL, LDR) on the related variable (Financial distress).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e \qquad (2)$$

Information :
Y = Financial distress
α = Constant
β1, β2, β3, β4, β5, β6 = CAR, BOPO, ROA, ROE, NPL, LDR regression coefficients
X1,X2,X3,X4,X5,X6 = CAR, BOPO, ROA, ROE, NPL, LDR variables
e = Standard error

RESULTS AND DISCUSSION

General description of the research object

The research objects used in this research are banking sector companies in Indonesia and listed on the Indonesia Stock Exchange in 2019-2022. The sample selection in this research was determined using a purposive sampling method with the criteria of banking companies that have included complete and consecutive annual financial reports according to the year of research. Based on research criteria, it was found that 25 general banking companies were listed on the Indonesia Stock Exchange in 2019-2022.

Table 1. Hasil Partial Test (t)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (constant)	20,335	,340		59,847	,000
CAR	-,085	,080	-,101	-1,069	,288
BOPO	-,250	,290	-,082	-,864	,390
ROA	,246	,244	,095	1,009	,316
ROE	-,034	,043	-,076	-,805	,423
NPLs	3,982	1,535	,247	2,595	,011
LDR	1,270	,501	,242	2,535	,013

Based on the table above, the constant value is 20.335, which means that if CAR, BOPO, ROA, ROE, NPL, LDR are 0, then the Y (Financial distress) value is constant at 20.335. The results of logistic regression testing showed that the CAR variable had a coefficient of -0.085 and a significance value of 0.288 > 0.05, meaning that CAR had no significant effect on financial distress. The results of logistic regression testing showed that the BOPO variable had a coefficient of -0.250 and a significance value of 0.390 > 0.05, meaning that BOPO had no significant effect on financial distress. The results of logistic regression testing showed that the ROA variable had a coefficient of 0.246 and a significance value of 0.316 > 0.05, meaning that ROA had no significant effect on financial distress. The results of logistic regression testing showed that the ROE variable had a coefficient of -0.034 and a significance value of 0.423 > 0.05, meaning that ROE had no significant effect on financial distress. The results of logistic regression testing showed that the NPL variable had a significance level of 0.11 <0.05 and the regression coefficient showed a positive relationship of 3.982, which means that NPL had a significant positive effect on financial distress. The results of logistic regression testing showed that the LDR variable had a significance level of 0.013 <0.05 and the regression coefficient showed a positive relationship of 1.270, which means that LDR had a significant positive effect on financial distress.

Table 2. Determination Coefficient (R2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,418	,175	,122	2.11363

Source: Data processed by researchers (2024)

Based on the Table 2, it is known that the R Square value is 0.175, which means that 0.175 of the variation in the financial distress variable can be explained by the six independent variables, namely CAR, BOPO, ROA, ROE, NPL, LDR while the remainder is (100% - 17.5% = 82.5 %) is explained by other causes outside the research variables.

The Influence of Capital Adequency Ratio (CAR) on Financial Distress
The partial test results (t) obtained a significance value of 0.288 where the probability value (0.288) > 0.05, meaning that H0 was accepted and H1 was rejected, so it can be concluded that CAR does not have a significant influence on financial distress. The CAR ratio regression coefficient value is -0.085, the direction of the coefficient is negative, meaning that if there is an increase or decrease in CAR during the research period it does not significantly affect the financial distress condition. This means that some banking companies are able to manage their capital well so that banks do not experience financial difficulties. The higher the CAR, the higher the probability that a bank will be in financial distress. The results of this research are the same as research conducted by (Suci Aminah, 2019) which examined the CAR variable on financial distress with the CAR results not having a significant effect on financial distress. This research also has differences with research conducted by (Trie Sartika, 2022) which examined the CAR variable in the influence of financial distress with the results of CAR having a significant negative effect on financial distress.

The Effect of Operational Costs on Operating Income (BOPO) on Financial Distress.
The partial test results (t) obtained a significance value of 0.390 where the probability value (0.390) > 0.05, meaning that H0 was accepted and H1 was rejected, so it can be concluded that BOPO does not have a significant influence on financial distress. The BOPO ratio regression coefficient value is -0.250 with a negative sign because some banks are able to balance the operational costs incurred to generate income. The higher the BOPO, the greater the probability that a bank will be in financial distress. The results of this research are the same as research conducted by (Suci Aminah, 2019) who examined the BOPO variable on financial distress with the results that BOPO had no significant effect on financial distress. This research also has differences with research conducted by (Trie Sartika, 2022) which examined the BOPO variable in the influence of financial distress with the results that BOPO had an insignificant positive influence on financial distress.

The Effect of Return on Assets (ROA) on Financial Distress
The partial test results (t) obtained a significance value of 0.316 where the probability value (0.316) > 0.05, meaning that H0 is accepted and H1 is rejected so it can be concluded that ROA does not have a significant influence on financial distress. The regression coefficient value for the ROA ratio is 0.246 with a positive sign, which means that an increase or decrease in ROA during the research period significantly influences financial distress. The higher the ROA, the lower the probability that a bank will be in financial distress. The results of this research are the same as research conducted by (Suci Aminah, 2019) who examined the ROA variable on financial distress with the results that ROA had no significant effect on financial distress. This research also has differences with research conducted by (Trie Sartika, 2022) which examined the ROA variable in the influence of financial distress with the results that ROA had a positive and insignificant effect on financial distress.

The Effect of Return on Equity (ROE) on Financial Distress

The partial test results (t) obtained a significance value of 0.423 where the probability value (0.423) > 0.05, meaning that H0 was accepted and H1 was rejected, so it can be concluded that ROE does not have a significant influence on financial distress. The ROE regression coefficient value is -0.034, the direction of the coefficient is negative, which means that an increase or decrease in ROE does not significantly affect financial distress conditions. The results of this research are the same as research conducted by (Trie Sartika, 2022) which examined the ROE variable on the influence of financial distress with the results that ROE had no significant effect on financial distress. This research also has differences with research conducted by (D.Nugraha, 2021) which examined the ROE variable in the influence of financial distress with the results that ROE had a significant effect on financial distress.

The Effect of Non-Performing Loans (NPL) on Financial Distress
The results of the partial influence (t) show that the significance value is 0.011, where the probability value (0.011) is > 0.05, meaning that H0 is rejected and H1 is accepted, so it can be concluded that NPL has a significant positive influence on financial distress. The NPL regression coefficient value is 3.982, the coefficient has a positive sign, indicating that an increase or decrease in NPL during the research period significantly influences financial distress conditions. The higher the NPL value, the smaller the probability that a bank will be affected by financial distress. The results of this research are the same as research conducted by (Trie Sartika, 2022) which examined the NPL variable on the influence of financial distress with the results of NPL having a significant positive effect on financial distress. This research also has differences with research conducted by (Suci Aminah, 2019) which examined the NPL variable in the influence of financial distress with the results that NPL did not have a significant influence on financial distress.

The Influence of Loan To Deposite Ratio (LDR) on Financial Distress
The partial test results (t) showed that the significance value was 0.013, where the probability value (0.013) was > 0.05, meaning that H0 was rejected and H1 was accepted, so it could be concluded that LDR had a significant positive influence on financial distress. The LDR regression coefficient value is 1.270 with the coefficient direction being positive, indicating that an increase or decrease in LDR during the research period significantly influences financial distress conditions. The higher the LDR value, the greater the probability of a bank. The results of this research are the same as research conducted by (Trie Sartika, 2022) which examined the LDR variable on the influence of financial distress with the results of LDR having a significant positive effect on financial distress. Research II also has differences with research conducted by (Suci Aminah, 2019) which examined the LDR variable in the influence of financial distress with the results that LDR did not have a significant influence on financial distress.

CONCLUSION

Capital Adequacy Ratio(CAR) does not have a significant effect on financial distress because CAR in the research year banking companies were able to manage capital well so that banks did not experience decline due to problems with their financial health. Operational costs on operational income (BOPO) do not have a significant effect on financial distress because BOPO in the year of banking research was able to obtain optimal income and was able to control operational costs on operational income. Return On Assets(ROA) does not have a significant effect on financial distress because ROA in the year of banking research was able to maintain its level of financial health in obtaining profits. Return On Equity(ROE) does not have a significant effect on financial distress because ROE in the banking research year was able to generate quite large profits from shareholders' investments in the bank. Non Performing Loans(NPL) has a significant positive effect on financial distress because NPL in the research year companies cannot be selective in providing financial credit so that it can increase the condition of problem loans and affect a bank's income. Loan To Deposit Ratio(LDR) has a significant positive effect on financial distress because the LDR in the research year was too small so that the

level of profit obtained by the company decreased and as a result the company experienced financial distress.

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