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The Influence of Board Size, CEO Duality and Bank Specific on Financial Distress

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Abstract

This study aims to examine the effect of, Board Size, CEO Duality, Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Return On Assets (ROA), Net Interest Margin (NIM), and Capital Adequacy Ratio (CAR) to financial distress in banking companies listed on the Indonesia Stock Exchange in 2014-2019. The independent variable in this study is CEO Duality, Board Size. While the characteristics of the company consist of NPL, LDR, ROA, NIM and CAR. Financial distress as the dependent variable. The population of this study are Banking Companies Listed on the Indonesia Stock Exchange in 2014-2019 with a total of 255 observation. With a sample of 26 banks or 156 observation, which determined using the purposive sampling method, The analysis technique used in this study is multiple linear regression analysis and processed using SPSS 25. The results show that CEO Duality has a negative and significant effect on financial distress, Board Size has a positive and significant effect on financial distress, NPL has a positive and significant effect on financial distress, LDR has a negative and insignificant effect on financial distress, ROA has a positive and insignificant effect on financial distress. financial distress, NIM has a positive and significant effect on financial distress, CAR has a positive and significant effect on financial distress.

Keywords: *Board Size, Financial Distress, Non-CEO Duality.*

INTRODUCTION

A crucial part of the corporate governance system is held by the board of directors (BD), whose function has expanded over time (Hermalin and Weisbach, 2003; Jensen, 1993; Lipton and Lorsch, 1992; Cardoso, 2019). Investigations into its function in various economic and dire situations are ongoing.

The Asian monetary crisis occurred globally, starting in mid-1997 and continuing until 2008. The monetary crisis that hit Indonesia in mid-1997 began with liquidity difficulties due to a decline in the rupiah exchange rate against the US dollar. The crisis led to the revocation of 16 private banks and the takeover of bank management because the amount of bank Indonesian liquidity assistance (BLBI) exceeded 200% by the Minister of Finance. The banking crisis occurred again in Indonesia in 2008 and had a systemic impact on the banking sector, so the interest rate was lowered to increase consumption and investment (Alawiyah, 2016).

The crisis had a negative impact on the performance of Indonesian banks. As an intermediary institution, banking is directly related to the development of the real sector and circulation of money in the community, thus playing an important role in the entire economy of Indonesia (Shidiq and Wibowo 2017). If the decline in bank performance continues, it can cause financial difficulties, which, if not resolved immediately, will have a major impact on banks with a loss of trust from customers (Endri, 2009).

Financial distress is a decrease in financial conditions in which the number of liabilities exceeds the total equity in a company. In a company, strategy implementation is very important, so that a company can overcome the problems faced. According to Ahsan et al. (2020), predicting a company's financial difficulties is important for assessing early signs of bankruptcy as part of an early warning system for management. Good Corporate governance is one of the key elements in performance optimization and consists of relationships between company management, the board of directors, human rights holders, and other OECD stakeholders, (1999) in Helena and Saifi (2018).

Cardoso (2019) explained that the implementation of corporate governance aims to control the company to provide added value to shareholders and stakeholders in the long term. In this study, the mechanism of implementing corporate governance was proxied by CEO Duality, and Board Size.

CEO Duality is someone who has two positions at once, namely, the Chairman of Board (board of commissioners) and Chief Executive Officer (board of directors) in a company (Boot et al.,2002). For

example, Ciampi et al. Darrat et al (2015) (2014), Elloumi and Gueyie (2001), Manazaneque, Merino and Priego (2016), stated that CEO Duality has a significant negative effect on the occurrence of financial distress. However, in contrast to the results of a study conducted by Kashif et al. (2020) show that CEO Duality has a positive effect on the occurrence of financial distress.

Appuhami and Bhuyan's (2015) board size refers to the number of members on an organization's board of commissioners. Jensen and Meckling (1976) stated that a larger board of directors size can reduce the effectiveness of supervision because communication and coordination as well as the board's ability to control management can cause agency problems due to the separation between management and control.

The results of research by Cardoso, et al. (2019), found that Board Size negatively affects financial distress. This research is in line with Juniarti's findings (2013), which state that Board Size negatively affects the occurrence of financial distress. Meanwhile, according to Pramudena (2017), Elloumi and Gueyie (2001), Manazaneque et al. (2016), and Lefort and Urzúa (2008) that Board Size positively affects financial distress.

In addition to corporate governance, internal company factors can affect financial distress. Banks refer specifically to the CAMELS model, which includes Capital, Assets, Earnings, Management, and Liquidity, and Sensitivity to market risk. CAMELS not only measures the soundness banks, but is also used as an indicator in rating and predicting bank bankruptcies. In this study, we use the CAMEL model proxied with non-performing loans (NPL), Loan Deposit Ratio (LDR), Return on Assets (ROA), Net Interest Margin (NIM), and Capital Adequacy Ratio (CAR) (Paule (2019).

According to Alawiyah (2016), NPL (Non Performing Loan) shows the bank's ability to manage non-performing loans for the entire credit provided by the bank. The greater the NPL, the greater the reserves that must be formed, which means that the opportunity costs that must be borne by the bank are greater, which can result in potential bank losses (Mulyaningrum, 2008). Siregar and Fauzie (2012) found that the NPL ratio had a significant positive effect on financial distress.

The LDR ratio is used to measure the ratio of the amount of credit provided to the funds received by a bank. The LDR describes the ability of banks to repay public funds by relying on the credit provided as a source of liquidity (Alawiyah (2016).

Almilia and Herdiningtyas (2005) state that the higher this ratio, the lower the liquidity ability of the bank, so that the possibility of a bank in a problematic condition will be greater. Research Aminah et al. (2019) found that LDR has a significant positive effect on bank bankruptcies.

According to Maheswari and Suryanawa (2016), ROA is the ratio used to measure the ability of certain assets to generate profit. ROA is the ability to generate profits relative to total assets.

The results of research by Finishtya (2020) and Diyanto (2020) found that profitability measured by ROA has a significant effect on financial distress, while Masduvi, et al. (2018) found that profitability as measured by ROA has a significant negative influence on financial distress.

Maheswari and Suryanawa (2016) stated that NIM is a measure of credit distribution through bank management performance; the greater this ratio, the smaller the chance of banks in problematic conditions. Almilia and Herdningytas (2015) find that NIM has a significant negative effect on financial distress.

CAR is used to measure the adequacy of capital owned by banks to support assets that carry or generate risk (Alawiyah 2016). The higher the bank's risk, the greater the capital that must be provided to anticipate the risk. Aminah et al. (2020), Siregar and Fauzie (2012) find that the CAR ratio has a significant negative effect on financial distress. However, Pryangan and Payamta (2020) find that CAR has a significant positive effect on financial distress.

The Altman Z-score (2000) method is used to predict potential bankruptcy. Altman uses the MDA method to produce a score known as the Altman Z-Score, which is a tool that calculates and combines certain financial ratios in a company into a discriminant equation that indicates the probability of bankruptcy of the company.

Referring to the research gap, phenomenon, and research recommendations of Cardoso et al. (2019) and Paule's journal (2019), entitled Prediction of financial distress. This study adopts two models related to financial performance, namely RBBS to measure risk and RGEC to measure corporate governance in banks. Based on the recommendations of the study, the author is interested in conducting research on "The Effect of

Corporate Governance and Corporate Characteristics on Financial Distress" (Study on Banking Companies Listed on the Indonesia Stock Exchange, 2014-2019 Period).

Hery (2015), financial distress is a situation in which a company has difficulty fulfilling its obligations, a situation where the company's revenue cannot cover total costs and is experiencing losses. For creditors, this situation is an early symptom of a debtor failure.

Thus, it can be concluded that financial distress is a stage of decline in the financial condition experienced by a company, which is characterized by the company's inability to pay off both long- and short-term obligations, which, if not resolved, can lead to bankruptcy or liquidation.

Corporate governance is a key element in optimizing performance. According to Hanafi and Breliastiti (2016), the mechanism of implementing corporate governance aims to control the company to provide added value to shareholders and stakeholders on an ongoing basis in the long term. In this study, the mechanism of implementing corporate governance can be seen in CEO Duality, Independent Directors, Outsiders, Professionals, Board Size.

Safitri (2015) states that company characteristics are the characteristics or traits inherent in a business entity. Munawir (2010: 106) explains that financial ratio analysis is future oriented or future oriented, meaning that financial ratio analysis can be used as a tool to forecast financial conditions and future business results, which can be used as a basis for preparing projected financial statements as a form of corporate financial planning.

Financial distress includes various types of financial problems. Paule (2019) says that the risk of financial distress can be measured based on financial ratio analysis. Financial ratios consist of Capital, Assets, Management, Earnings and Liquidity (CAMEL). In this study, company characteristics were proxied by NPL, LDR, ROA, NIM, and CAR.

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Based on the theoretical basis and review of previous research, the conceptual framework of this study is as follows:

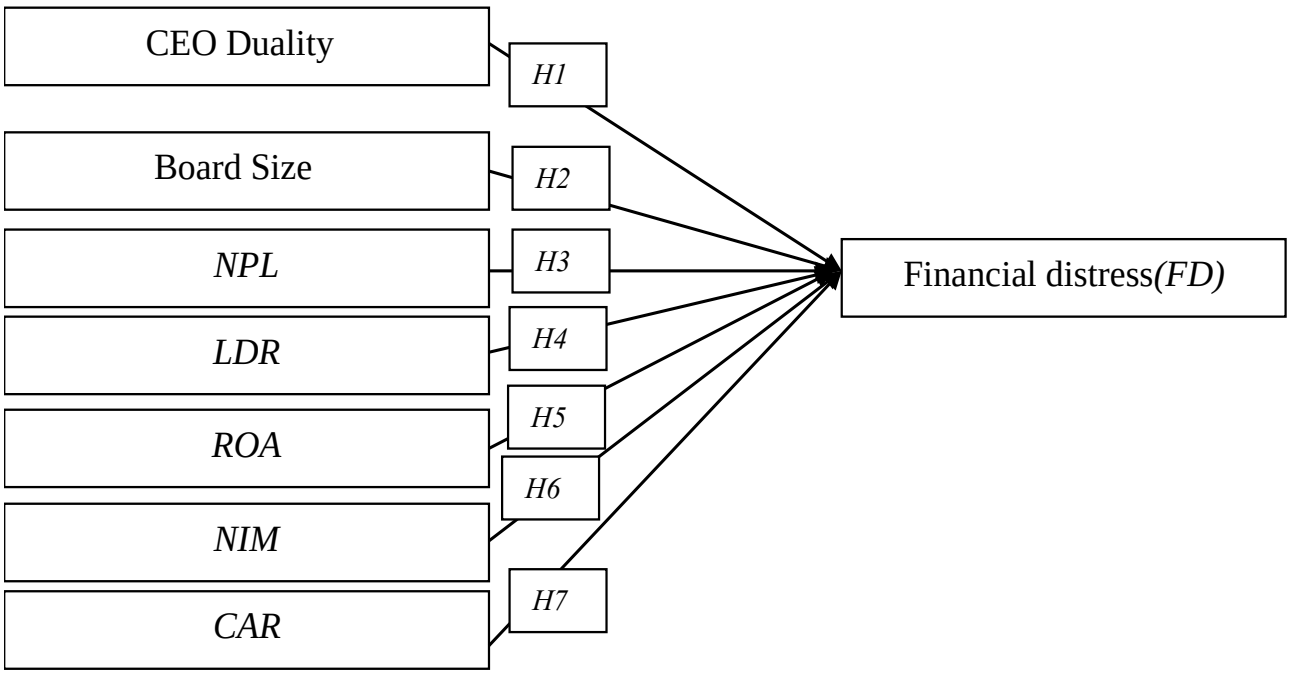

Figure 1. Conceptual Framework of Research

Hypothesis

Based on these underlying problems and theories, the hypotheses of this study are as follows:

The Effect of CEO Duality on Financial distress

Simpson and Gleason (1999) argued that when a person holds positions as the CEO and board of commissioners, the likelihood of financial hardship is lower. This is because the combination of the CEO and board of commissioners in one position can affect the internal control system of a banking company, which reduces the possibility of financial distress in the company. Miglani et al. (2015) found that CEO duality reduces the likelihood of financial distress. KIashif et al. (2020) also found that CEO duality has a positive effect on financial distress.

H1: CEO Duality has a negative and significant effect on financial distress.

Effect of Board Size on Financial distress

Jensen and Meckling (1976) and Lipton and Lorch (1992) state that large board sizes can reduce the effectiveness of oversight. Research (Jensen, 1993; Fich & Slezak, 2008; Pramudena, 2017), Elloumi and Gueyie (2001), Manazaneque et al. (2016), and Lefort and Urzúa (2008) found that smaller numbers of board members tend to be more effective in avoiding bankruptcy. Based on this description, the following hypothesis was proposed:

H2: Board Size Positively Affects Financial Distress

Effect of NPL on Financial distress

Asset quality is used to assess the types of assets owned by the banks. A good NPL is an NPL that has a ratio below 5%. NPLs reflect credit risk; that is, the smaller the NPL, the smaller is the credit risk borne by the bank. Banks with high NPLs incur large costs, both for the reserve of productive assets and other costs, potentially causing bank losses. The results of research by Siregar and Fauzie (2012) and Mulyaningrum (2008) found that the NPL ratio had a significant positive effect on financial distress). Based on the above illustration, we formulate the following hypothesis:

H3: NPLs have a significant positive influence on financial distress

Effect of LDR on Financial distress

The LDR ratio compares the amount of credit provided by funds received by the bank. This ratio describes a bank's ability to repay public funds by relying on the credit provided as its source of liquidity. Alawiyah, 2016; Rivai (2006). A high LDR (above 110%) indicates that the bank's liquidity is poor because the amount of deposits (third-party funds) is unable to cover the credit provided. Meanwhile, a low LDR indicates a less-than-optimal intermediation

function where the credit provided is far from the collected deposits. Almilia and Herdiningtyas (2005) also stated that the higher this ratio, the lower the liquidity ability of the bank, so that the possibility of a bank in a problematic condition will be greater. Aminah et al. (2019) find that LDR has a significant positive effect on bankruptcy.

H4: LDR has a positive and significant influence on financial distress

Effect of ROA on Financial distress

ROA is the ratio used to measure an asset's ability to generate profit (Maheswari and Suryanawa, 2016; Alawiyah, 2016). The results of research by Pryangan and Payamta (2020) and Masduvi et al. (2018), Siregar and Fauzie (2012) found that ROA has a negative and significant influence on financial distress. Based on this, the following hypothesis is formulated:

H5: ROA has a significantly negative influence on financial distress.

Effect of NIM on Financial distress

The NIM measures the difference between loan interest rates and deposit rates (Maheswari and Suryanawa, 2016). The greater this ratio, the more likely it is that a bank is in trouble. Almilia & Herdningytas (201:5). stated that NIM have a significant negative effect on bankruptcy. Based on this argument, we formulate the following hypothesis:

H6: NIM has negative and significant influence on financial distress

Effect of CAR on Financial distress

The CAR ratio is used to measure the adequacy of capital owned by banks to support assets that contain or generate risks (Alawiyah, 2016). The CAR is a comparison between capital and risk-weighted assets. According to Maheswari and Suryanawa (2016), the capital factor is measured based on the evaluation of capital adequacy and capital management adequacy. The higher the bank's risk, the greater the capital that must be provided to anticipate the risk. Januarti (2002) argues that the higher the bank's capital will reduce the possibility of a bank going bankrupt. Aminah et al. (2020), Siregar and Fauzie (2012) find that the CAR ratio has a significant negative effect on financial distress. Santoso (1996) also states that the greater this ratio, the smaller is the probability of a bank going bankrupt. On this basis, the hypothesis is drawn

H7: CAR has a negative and significant effect on financial distress

METHODS

This research was conducted on banks listed in the banking industry on the Indonesian Stock Exchange. The method used to determine the sample was purposive samnpel. Observation years 2014–2019. Based on this, the number of banks that meet the criteria is 26, with an observation period of six years, so the number of observations is 156. Data were obtained online from the website of each company.

In this study, the independent variables, namely corporate governance, are CEO Duality, Board Size, and company characteristics proxied by NPL, LDR, ROA, NIM, and CAR. The dependent variable is financial distress with the Almant Z-Score measurement method (2000). The equation model used in this study is as follows.

$$Y = a + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \beta 6X6 + \beta 7X7 + \beta 8X8 + e$$

Description:

Y	= Financial Distress (FD)
a	= constant
$\beta 1 - \beta 8$	= regression coefficient
X1	= Non-CEO Duality
X2	= Board Size
X3	= Non Performing Loan (NPL)
X4	= Loan To Deposit Ratio (LDR)
X5	= Retrun On Asset (ROA)
X6	= Net Interest Margin (NIM)
X7	= Capital Adequacy Ratio (CAR)
e	= error

Financial Distress

Hery (2016) states that financial distress is a situation in which a company has difficulty fulfilling its obligations, a situation in which the company's revenue cannot cover total costs, and is experiencing losses. For creditors, this situation is an early symptom of a debtor failure. The dependent variable in this study is the condition of financial distress denoted by FIN_DIS, measured using the Almant-Z score method (2000). The formula used is as follows:

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

Description:

X1 : Net Working Capital To Total Assets

X2 : Retained Earning To Total Assets

X3: Earning Before Interest And Taxes To Total Assets

X4 : Book Value Of Equity To Liabilities

CEO Duality

CEO Duality is someone who has two positions at once, namely, the Chairman of the Board (board of commissioners) and the Chief Executive Officer (board of directors) in Boot et al. (2002). CEO Duality in this study uses dummy data, where CEO Duality is coded as 1 if there is a family relationship between a person who serves as a board of commissioners and a board of directors in a company and coded as 0 if there is no family relationship between a person who serves as a board of commissioners and a board of directors in a company Setyawan and Devie (2019).

Board Size

Appuhami and Bhuyan (2015) stated that board size refers to the number of members on an organization's board of commissioners. Jensen and Meckling (1976) state that a larger board size can reduce the effectiveness of supervision because communication and coordination aThe resultsd's ability to control management can lead to agency problems due to the separation between management and controller,s.

NPL

According to Alawiyah (2016), the NPL ratio shows a bank's ability to manaowingnon- performing loans from the overall credit provided by the bank. The NPL ratio is obtained from non-performing loans, which are loans to non-bank third parties classified as substandard, doubtful, and bad divided by total loans to non-bank third parties. This ratio can be formulated as follows.

$$\text{NPL} = \frac{\text{Non Performing Loan}}{\text{Total Loan}} \times 100\%$$

LDR

According to Alawiyah (2016), the LDR ratio is the ratio of total loans to non-bank third-party funds, consisting of savings, current accounts, and time deposits. The LDR ratio measures the ratio of the amount of credit provided by the bank to the funds received by the bank, which illustrates the bank's ability to repay withdrawals by the public by relying on credit provided as a source of liquidity. This ratio can be formulated as follows.

$$\text{LDR} = \frac{\text{Total Loans}}{\text{Total Third Party Funds}} \times 100\%$$

ROA

According to Maheswari and Suryanawa (2016), ROA is a ratio used to measure the ability at a certain asset level in the company's achievement in generating profits in simple terms, namely the ability to generate profits relative to its total assets. Net income used in this ratio is the net income before the tax calculation. This ratio can be formulated as follows.

$$\text{ROA} = \frac{\text{Earning After Tax}}{\text{Total Assets}} \times 100\%$$

ROA = (Earnings After Tax /Total Assets) × 100%

NIM

According to Maheswari and Suryanawa (2016), NIM is a measure of lending through the performance of bank management, considering that the difference between loan interest rates and deposit interest rates plays an important role in the size of a bank's operating income (net interest income). The NIM is the ratio of net interest income to average earnings assets. The productive assets in question are the investments of bank funds in rupiah and foreign currencies in the form of loans, securities, interbank placements, investments, and commitments and contingencies on administrative account transactions. This ratio can be formulated as follows.

$$\text{NIM} = \frac{\text{Net Interest Income}}{\text{Earning Assets}} \times 100\%$$

CAR

Alawiyah (2016) CAR ratio is used to measure the adequacy of capital owned by banks to support assets that contain or generate risk. CAR is the ratio of capital Ri risk-weighted assets. The three risks referred to here are 3 risks, namely credit risk, operational risk, and market risk. According to Maheswari and Suryanawa (2016), the capital factor is measured based on an evaluation of the adequacy of capital and capital management. The higher the bank's risk, the greater the capital that must be provided to anticipate these risks. This ratio can be formulated as follows.

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

Control Variables

Bank Size

According to Hery (2016), company size is one of the factors considered by the company in determining the amount of funding decision policy (assets) in fulfilling the size of the company's assets. The size of a company is indicated by a value often referred to as company size. Prasanja and Ramantha (2013) define company size as the amount of wealth or assets owned by the company, which is measured using the natural logarithm of total assets. The company size variable is measured using the natural logarithm (Ln) of total assets. This is because the amount of total assets of each company is different, and even has a large difference, resulting in extreme values. To avoid abnormal data, the total asset data must be Ln. The formula used is as follows:

Company Size = Ln (total assets)

Sales growth

The growth ratio measures a company's ability to maintain its position in the industry and in general economic development (Fahmi, 2014). The sales growth rate can be measured from the success of investment in the past period and can be used as a prediction for future company growth (Widhiari and Merkusiwati, 2015). The formula used is as follows:

$$Sales\ Growth = \frac{\text{Current Sales-End Sales}}{\text{End Sales}} \times 100\%$$

Financial Burden

Payables are balanced by other parties for goods, supplies, or services purchased on an open account or credit. Accounts payable arise because of the time gap between the receipt of services or the acquisition of asset rights, and the payment thereof. This credit extension period is usually found in terms of sales (Kieso 2002). Brigham and Houston (2006) reveal that to measure how much assets are financed by debt, the debt ratio is used. The debt ratio is the ratio of total debt to total assets. The formula used is as follows:

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Aktiva}} \times 100\%$$

Retained Earnings

According to Kieso (2002) retained earnings are retained for use in business activities. The basic source of retained earnings is the profit from operations. Any profit that is not distributed to shareholders will become additional equity. Retained earnings can be determined using the following formula:

Retained earnings = Net Profit After Tax – Divided

RESULTS AND DISCUSSION

The Result of Multiple Linear Regression Analysis

Tabel 1 Multiple Linear Regression Equation Test Results Data

Model		Unstandardized Coefficients	StandardizedCoefficients		t	Sig.
		B	Beta			
1	(Constant)	0.459		Std. Error	1.293	0.198
	N-CEO Duality	-1.347	-0.197	0.355	-2.887	0.004
	BS	0.321	0.155	0.467	1.909	0.058
	NPL	-8.585	-0.31	0.168	-3.843	0.000
	LDR	-0.396	-0.09	2.234	-1.133	0.259
	ROA	0.803	0.035	0.35	0.448	0.655
	NIM	7.944	0.255	1.793	3.288	0.001
	CAR	2.009	0.265	2.416	3.434	0.001
	FE	-4.09E13	-0.078	0.585	-1.011	0.314
	RE	5.78E-14	0.049	0.000	0.531	0.596
	FZ	-0.005	-0.033	0.000	-0.383	0.702
	R^2	.594				
	F	7.192				

Source: Primary Data Processed SPSS, 2023

Based on the above analysis, we conclude that Non-CEO Duality (X1) has a negative effect. H1 is accepted. The Board Size variable (X2) has a significant positive effect on banking financial distress, so H2 is accepted. The NPL variable (X3) has a significant effect; therefore, H3 is rejected. LDR (X4) had no significant effect, and H4 was rejected. ROA variable (X5) has no effect, and H5 is rejected. The NIM variable (X6) has a significant effect; thus, H6 is rejected. CAR variable (X7) has a significant effect on financial distress (Y). Based on the above analysis, it is concluded that CAR has a significant positive effect on banking financial distress, so H7 is rejected.

DISCUSSION

The Effect of Non-CEO Duality on Financial Distress

Based on the results of the hypothesis testing in this study, Non-CEO Duality has a negative and significant effect on financial distress. Non-CEO Duality has a negative effect, indicating that the higher the Non-CEO Duality, the lower the possibility of financial distress, meaning that when someone holds the position of CEO and chairman of the board, the lower the possibility of financial distress. The significant result is that the combination of the CEO and board of commissioners in one position can affect the internal control system of a banking company, which reduces the possibility of financial distress in the company.

This is in accordance with the Resource Dependency Theory, which states that a company's strategy, structure, and survival are highly dependent on the internal resources available to the company to connect with the external environment. These resources, designated as directors, are tasked with conducting operational activities, supporting the organization, and focusing on problem-solving. The diversity of the board of directors, such as the number of directors and directors of foreign nationality, will have a good influence in identifying and evaluating strategies with more comprehensive alternatives and creating relationships with the external environment due to the diversity of skills possessed by the directors.

The results of this study are in line with research conducted by Ciampi Darrat et al (2015) (2014), Elloumi and Gueyie (2001), Manazaneque et al. (2016), found that CEO Duality has a significant negative effect on financial distress. Based on the results, H1 was accepted.

Effect of Board Size on Financial distress

The results of the hypothesis testing in this study show that board size has a positive and significant effect on financial distress. Board Size has a positive effect on financial distress, indicating that the higher the board size, the higher is the possibility of experiencing financial distress. This shows that companies with large boards are likely to experience financial distress.

Significant results indicate that a larger board size can reduce the effectiveness of supervision because communication and coordination as well as the board's ability to control management can lead to agency problems due to the separation between management and controllers. A large board size will result in a lack of discussion because expressing opinions in large groups will generally be time consuming, difficult, and result in a lack of cohesiveness. Thus, assigned tasks and responsibilities are less effective and efficient.

This is in accordance with agency theory, which explains that the separation of ownership and control of a company creates an agency relationship. An agency relationship is a contract in which one party (principal) asks another party (agent) to perform services and provide decision-making authority on its behalf. Based on the contract, all agent decisions should be shown to be of interest to the principal. However, managerial decision making only provides benefits to individuals. This can lead to or trigger costs that should not occur during the company's operations.

The results of this study are in line with research conducted by Pramudena (2017), Elloumi and Gueyie (2001), Manazaneque et al. (2016), and Lefort and U rzúa (2008), who found that board size has a significant positive effect on financial distress. Based on the obtained results, H2 was accepted.

Effect of NPL on Financial distress

The results of hypothesis testing in this study show that Non-performing loans have a significant negative effect on financial distress. The negative NPL ratio for financial distress indicates that the higher the NPL, the smaller the probability of financial distress.

The results of this study are not in accordance with the statement that the higher the NPL, the greater the possibility of a bank experiencing losses. This will have an impact on reducing profit achievement,

resulting in decreased profitability. High NPL is one of the causes of banks' difficulty in extending credit.

According to Kasmir (2008), banks with high NPLs will increase costs, both productive asset reserves and other costs, so that the potential for the number of non-performing loans is greater. Therefore, the bank must bear losses in its operational activities, so that it affects the decrease in profits earned by the bank, because the higher the NPL ratio, the higher the bad debts, which hinders the bank from obtaining income from loan interests, thereby increasing financial distress. The NPL of banks is increasing because banks are not selective in providing credit. The non-selectivity of bank management can increase bank's non-performing loans. The increasing number of non-performing loans, which are part of the total assets, will affect the level of bank income.

The results of the analysis show that NPL have a significant negative effect on financial distress because the credit given in this case is only credit given to third-party funds, excluding credit to other banks. credit is the only aspect of total assets. Earning assets, which are the source of bank income, are supported by accounts other than loans such as securities, acceptance bills, derivative bills, investments, administrative account transactions, and other forms of fund provision. As long as banks' earnings assets increase, an increase in NPLs will reduce the probability of financial distress.

The results of this study are consistent with those reported by Aminah et al. (2019), Gebreslassie (2015) finds that the NPL ratio has a significant negative effect on financial distress. With the results obtained, H3 is rejected

Effect of LDR on Financial distress

The results of hypothesis testing in this study show that the loan-to-deposit ratio has a negative and insignificant effect on financial distress. The LDR ratio shows a bank's ability to channel funds from the third party it collects.

The results of the LDR ratio have a negative effect, indicating that the greater the LDR ratio, the smaller is the probability of financial distress. This can be explained by the fact that the magnitude of the LDR ratio affects the level of bank profitability in the opportunity to earn interest generated from the loans provided, so that the greater the loan disbursed, the greater the bank income.

However, the insignificant results indicate that an increase in the LDR value does not have a large contribution to the probability of financial distress. This is because a large LDR ratio can increase the risk borne by the bank, and if the funds lent to debtors ideally all funds are categorized as collectibility 1 (current), it can lead to the ability of the community to return loan funds from banks not always in accordance with agreed policies, which means that the community's ability is low in returning loan funds that have been given by the bank. This causes the bank to be open to non-current risk, and bank liquidity can be disrupted.

The results of this study are in line with the research conducted by andhari (2017), Susanto et al. (2012), and Wibowo (2017), who found that the LDR ratio has a negative and insignificant effect on financial distress. Thus, H4 was rejected.

Effect of ROA on Financial distress

The results of hypothesis testing in this study show that Return On Asset (ROA) has a positive and insignificant effect on financial distress. A positive ROA ratio indicates that the higher the ROA ratio generated by the company, the higher is the possibility of financial distress. This ratio indicates a bank's ability to generate profits from its assets. ROA can measure a company's ability to generate profits in the past and then project in the future. Assets or assets in question are all company assets obtained from their own capital or from foreign capital that the company has converted into company assets that are used for the survival of the company.

The insignificant result shows that the ROA ratio does not contribute significantly to the probability of financial distress. This means that the ROA ratio cannot determine a bank's health. This is because BI, as a banking supervisor and supervisor, prioritizes the profitability generated by a bank based on the value of assets obtained from public deposits. The results of this study are in line with those of Raymadani et al. (2014), who find that return on assets (ROA) has a positive and insignificant effect on financial distress. Thus, H5 was rejected.

Effect of NIM on Financial distress

The results of hypothesis testing in this study show that the ((NIM) has a positive and significant effect on financial distress. NIM is a measure of lending through the performance of bank management, considering that the difference between loan interest

rates and deposit interest rates plays an important role in the size of a bank's operating income (net interest income). This ratio is used to measure the ability of bank management to manage productive assets and generate net interest income.

The NIM ratio has a positive effect on financial distress, meaning that the greater the ratio, the higher is the risk of financial distress. This is not in accordance with the theory that states a higher NIM ratio indicates that the company is able to generate greater interest income from its productive assets. A large interest income can increase the company's profitability, which is improving.

A significant relationship can be caused because banking companies still have not maximized the management of productive assets in generating net interest income. For example, at Bank Tabungan Negara (Persero) Tbk, the NIM ratio fluctuated by 1.00% in 2019. The decrease in BBTN's NIM value occurred due to an increase in interest rates in 2019, which caused high interest costs, so that BBTN's net interest income decreased. A small NIM indicates that a company's ability to generate interest income is decreasing. This affects the sustainability of a company's profitability.

The results of this study are in line with those of Pryangan and Payamta (2020) and Siregar and Fauzie (2012), who state that NIM have a significant positive effect on financial distress. Thus, H6 was rejected.

Effect of CAR on Financial distress

The results of hypothesis testing in this study show that the Capital Adequacy Ratio (CAR) has a significant positive effect on financial distress. The CAR results have a positive effect on financial distress, meaning that the higher the CAR, the higher is the probability of financial distress. Thus, an increase in CAR causes a decrease in a bank's ability to provide capital, thereby affecting the level of financial distress. A very high CAR ratio does not always provide good results for managing risky assets, thus affecting bank health.

A significant relationship means that a high CAR ratio indicates that the bank is not expansive enough to invest in risky assets to generate income. The greater the amount of risk-weighted assets, the greater the amount of bank capital that is not invested and is idle. This means that the amount of capital has not been properly realized.

The level of bank profitability is also determined by the amount of funds invested and channeled to the public in the hope of returning these funds in the form of profit. The results of this study are in line with research conducted by Pryangan and Payamta (2020), Kuncoro and Agustina (2017), who found CAR has a significant positive effect on financial distress. Based on the results, H7 was rejected.

CONCLUSION

The following research results were found:

1. Non-performing loans have a significant negative effect on financial distress. The results of this study are not in accordance with the statement that the higher the NPL, the greater is the possibility of banks experiencing losses. The results of the analysis show that NPL have a negative effect on financial distress because credit is only one aspect of total assets. Productive assets, which are a source of bank income, are supported by accounts other than credit. As long as the bank's productive assets increase, an increase in NPLs reduces the probability of financial distress.
2. The loan-to-deposit ratio has a negative and insignificant effect on financial distress. This can be explained by the magnitude of the LDR ratio that affects bank profitability. By increasing the LDR value, the risk borne by the bank increases, which can lead to a low ability of the debtor to return the loan funds given by the bank. This causes the bank to be open to non-current risk.
3. Return On Asset (ROA) has a positive but insignificant effect on financial distress. This shows that a high ROA ratio does not determine a bank’s health. This is because BI, as a banking supervisor and supervisor, prioritizes the profitability generated by a bank based on the value of assets obtained from public deposits.
4. The ((NIM) has a positive and significant effect on financial distress. A large NIM ratio indicates that banking companies still do not maximize productive assets in generating interest income. This causes high interest costs and decreases the net interest income. This affects the sustainability of a company's profitability.
5. The Capital Adequacy Ratio (CAR) has a significant positive effect on financial distress. A very high CAR does not always provide good results for the management of risky assets, thus

affecting the health of banks. A high CAR ratio indicates that a bank is not sufficiently expensive to invest in risky assets to generate income. The greater the amount of risk-weighted assets, the greater the amount of bank capital that is not invested and is idle. This means that the amount of capital has not been properly realized.

The results of this study have provided several findings, but there are still several issues that need to be studied further. Thus, the researcher realizes that there are still many shortcomings and limitations in this study, including the following:

1. This study used only companies in the banking sector. Therefore, the results cannot be generalized to all companies listed on the IDX, as this research only focuses on internal bank factors, not pay attention to external bank or macroeconomic factors.
2. There are other variables that were not examined in this study, which can be seen from the adjusted R Square value of 58.6%, while the remaining 41.4% is explained by other variables not tested in this study.

This study is expected to improve company performance, especially in the banking sector. In addition, attention should be paid to related factors that can influence the possibility of financial distress. when managing corporate governance and company characteristics.

Investors are expected to always observe a company's financial performance. Through these observations, investors can obtain complete information related to financial performance. Thus, it can be used as a prediction material to achieve financial performance in the future to avoid the risk of bankruptcy.

For future researchers who want to conduct similar research, it is recommended that the number of samples used be increased by paying attention to the type of banking company or using other financial services sectors; in addition, it is recommended to add other variables such as macroeconomic factors, namely interest rates, inflation, and exchange rates, which can also affect financial distress.

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