

Impact of Financial Performance on Financial Distress Banking Sectors Listed on The Indonesia Stock Exchange (IDX) In 2019 -2024

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ABSTRACT

This study aims to analyze the effect of financial performance on Financial Distress in banking sector companies listed on the Indonesia Stock Exchange for the period 2019–2024. The independent variables used are Return on Assets (ROA), Debt Ratio (DR), Operating Expenses to Operating Income (BOPO), Non-Performing Loans (NPL), and Capital Adequacy Ratio (CAR). The dependent variable is measured using the Zmijewski model. This study uses a quantitative approach with multiple linear regression methods. The sampling technique uses purposive sampling so that 13 conventional commercial banks are obtained as research samples with a total of 67 observations after outlier testing. The results show that partially ROA, DR, and CAR have a significant effect on Financial Distress. ROA has a negative effect on Financial Distress, which indicates that increasing profitability can reduce the possibility of financial distress. DR has a positive effect on Financial Distress, which indicates that increasing the proportion of liabilities to assets increases the risk of financial distress. CAR also has a significant effect on Financial Distress, which emphasizes the importance of capital adequacy in maintaining banking stability. Meanwhile, BOPO and NPL did not significantly influence financial distress. Simultaneously, all independent variables did not significantly influence financial distress. The adjusted R Square value of 0.080 indicates that the research model can only explain 8% of the variation in financial distress, with the remainder influenced by factors outside the model.

Keywords: Financial Distress, ROA, DR, BOPO, NPL, CAR, Banking

INTRODUCTION

The banking sector is a key element in the national financial system, playing a major role in supporting economic stability and sustainable development. The banking sector acts as a financial intermediary institution. Banks collect funds from those with surplus funds (lenders/savers) and redistribute them to those in need of financing (borrowers/investors) in the form of credit, business financing, or other financial instruments. This intermediary role makes the banking sector not only the primary driver of money circulation in the economy but also a channel for conveying monetary policy, a means of distributing capital, and safeguarding financial system stability. Bank performance and financial stability are important indicators in evaluating the resilience of the overall macroeconomic system.

Solid financial performance reflects operational efficiency, maintained asset quality, adequate liquidity, and a healthy capital structure. All of these elements synergistically contribute to strengthening a bank's financial foundation, which in turn influences investor and stakeholder confidence in the institution's performance

and long-term prospects. Strong financial performance not only reflects a company's internal ability to manage resources effectively but also demonstrates a banking institution's fundamental strength in the face of external pressures and market changes.

Operational efficiency reflects how well management controls costs and maximizes revenue, while maintained asset quality demonstrates success in managing credit risk and maintaining a sound financing portfolio. Adequate liquidity reflects a bank's ability to meet short-term obligations, which is crucial for maintaining customer trust and the stability of the payment system. A solid capital structure through an optimal capital adequacy ratio (CAR) serves as a key buffer to absorb potential losses and support sustainable business growth. Each of these elements, if maintained simultaneously and consistently, will create a strong financial foundation, ultimately enhancing institutional trust among investors, strengthening the bank's strategic position as an intermediary institution, and ensuring its continued role in driving inclusive and sustainable national economic growth.

Financial performance encompasses the extent to which a company is able to generate consistent net profit, maintain liquidity to meet short-term obligations, manage its debt structure proportionally, optimize the utilization of all assets, and achieve sustainable growth in the long term (Purwanti, 2021). Financial performance provides a comprehensive overview of a company's operational effectiveness and efficiency through these indicators. Financial performance serves as an important barometer for evaluating the success of business strategy implementation and managerial decisions made by management in facing external and internal environmental dynamics (Mufidah and Handayani, 2024). Measuring financial performance serves as a primary reference for investors, creditors, and regulators in assessing the health and prospects for the sustainability of an entity's business.

The Indonesian banking sector experienced significant pressure between 2019 and 2024 due to a combination of domestic and global factors. The COVID-19 pandemic was the primary cause of national economic disruption, resulting in a drastic decline in corporate activity, weakened public purchasing power, and increased default risks across various sectors of the real economy. Bank asset quality experienced a significant decline, as indicated by an increase in the non-performing loan (NPL) ratio. The increase in NPLs indicates the significant credit risk exposure faced by banks and directly impacts net interest income and increases in provisioning expenses. This pressure is evident in declining bank profitability, which can be measured by a decline in Return on Assets (ROA).

In addition to experiencing a surge in non-performing loans (NPLs) between 2019 and 2024, the banking sector also experienced a decline in credit distribution, a decline in net profit, and liquidity risks. According to Irawan and Fajri (2021), the increase in credit risk during the pandemic demonstrates the need for a careful analysis of financial performance to understand the impact of these challenges. Recovery in the banking sector cannot occur instantly and quickly, even though the

Government, the Financial Services Authority (OJK), and Bank Indonesia (BI) have implemented stimulus policies and regulatory relaxations.

The global economic slowdown, geopolitical uncertainty, and changes in international interest rate policies, such as monetary tightening by the Fed, have also exacerbated domestic financial market volatility. This situation limits the scope for financing growth and increases financial institutions' caution in extending credit. These simultaneous pressures indicate the extent to which the banking sector is exposed to external shocks and emphasize the importance of financial resilience and flexible risk management to maintain long-term banking sector stability.

One way to assess a bank's performance and financial condition is through financial statement analysis. Financial statements serve as an official snapshot of a company's financial condition, prepared in accordance with accepted accounting principles. Information users, such as investors, management, regulators, and the public, can evaluate a bank's financial condition, business performance, and potential risks through financial statements. Good banking sector performance contributes to economic stability and sustainable growth. Evaluating a bank's financial performance is crucial. Financial performance is a key indicator for assessing the health of a banking institution.

Banks listed on the Indonesia Stock Exchange (IDX) provide transparent financial reports that can be used for this research. The 2021-2024 period was chosen because it reflects the post-pandemic recovery period and rapid developments in digitalization. Analysis of bank financial reports during this period provides a snapshot of historical conditions and reflects banks' adaptability and resilience in the face of economic and technological changes.

The post-pandemic economic recovery era presents new challenges. These include the normalization of interest rate policies by central banks, global geopolitical tensions, and technological disruptions that demand efficiency and digital transformation in banking business models. This makes financial statement analysis a key tool for evaluating banking performance and stability.

One method for gaining a comprehensive understanding of the financial situation in the banking sector is by analyzing financial statements. Financial statements provide data on a company's profits and losses. They reflect operational efficiency, capital structure, and the likelihood of bankruptcy.

Analyzing a bank's financial performance is crucial for assessing its resilience in the face of external pressures. Financial statement analysis is not only used to evaluate past performance but also to predict future financial conditions. According to Manuhutu et al. (2020), financial statements describe a company's financial condition and operating results at a specific point in time, allowing analysis to reveal information that is not readily apparent.

Increasing competition in an industry will intensify competition and can negatively impact banks, especially those just starting to develop. A bank experiencing a persistent decline in performance can lead to financial distress or a

difficult situation. A company can be considered very healthy when its financial ratios indicate good performance, and vice versa (Putri et al., 2021).

Several banks in Indonesia have shown a trend of increasing allowances for impairment losses on financial assets, particularly those from loan portfolios (OJK, 2021). This is a response to the decline in customer credit quality due to the economic impact of the COVID-19 pandemic, which has resulted in a significant increase in the risk of default. Net interest income has also declined, despite being the primary source of bank profits. The combination of rising allowances and declining operating income directly reduces banks' net profits. This phenomenon is an early sign of the increasing risk of financial distress.

Financial distress refers to a condition in which a company experiences serious financial pressure, making it unable to optimally meet its short-term and long-term obligations. This condition has the potential to develop into a liquidity crisis or bankruptcy if left untreated without appropriate mitigation strategies. It is crucial for every banking institution to actively monitor key financial indicators that can predict potential distress and adjust business strategies and risk management quickly, precisely, and accurately.

Early identification of potential financial distress is a crucial aspect of modern financial management. This allows companies to take preventative measures before financial conditions deteriorate further. Early detection allows authorities to implement strict oversight, policy intervention, or restructuring before systemic risk spreads to the broader financial sector. Developing an accurate financial distress prediction model based on relevant and measurable financial indicators is an urgent need to create a resilient and sustainable financial system.

One predictive model used to measure the potential for financial distress is the Zmijewski model. This model was created by Mark Zmijewski in 1984. The Zmijewski model is designed to predict the likelihood of a company's financial failure using a probit regression approach. The Zmijewski model uses ratios representing profitability, liquidity, and leverage as components of the financial distress score.

The three indicators above comprehensively describe the balance between profit-generating capacity, current asset adequacy, and debt reliance. The Zmijewski model is considered an effective diagnostic tool for identifying companies on the verge of distress and has been widely used in various empirical studies in financial management and accounting as an early detection model for corporate failure. This model has proven to be more effective in detecting bankruptcy risk in the financial services sector because it reflects the key characteristics of the banking industry (Bărbuță-Mișu and Madaleno, 2020).

Several additional indicators play a crucial role in assessing the banking sector's financial performance more comprehensively, in addition to the three main ratios used in the Zmijewski model. These additional indicators include the BOPO (Operating Costs to Operating Income) ratio as an indicator of operational efficiency, the Non-Performing Loan (NPL) ratio as a measure of asset quality, and the Capital Adequacy Ratio (CAR) ratio as a measure of capital adequacy. These three indicators

complement the analysis of a bank's financial health and are tested for their influence on financial distress, as measured by the Zmijewski model, in identifying potential financial distress in the 2019-2024 period, characterized by economic volatility and high external pressures.

Research using the Zmijewski model on financial sector companies demonstrates the model's ability to identify companies potentially experiencing financial distress. The Zmijewski model is designed to identify potential financial problems early, even before the company shows clear signs of crisis. Research conducted by Lestari (2022) supports this statement and shows that the Zmijewski model on financial sector companies is capable of identifying companies potentially experiencing financial distress.

Various previous studies have shown that financial performance plays a significant role in predicting a company's financial distress, including in the banking sector. Research conducted by Putra et al. (2024) found that Return on Assets (ROA) has a negative and significant effect on financial distress, indicating that the higher a company's profitability, the lower its likelihood of experiencing financial difficulties. Similar findings were also presented by Aslamiah et al. (2023), who concluded that ROA plays a significant role in reducing bankruptcy risk. Research by Ginting and Mawardi (2021) found that ROA had no significant effect on financial distress, suggesting that the effect of ROA can vary depending on the sector and analysis period.

Research conducted by Setiawan and Fitria (2020) found that the Debt-to-Asset Ratio (DAR) has a positive and significant effect on financial distress, meaning the greater the proportion of debt to assets, the higher the risk of a company experiencing financial distress. Kartika and Hasanudin (2019) supported this finding by stating that high leverage is an indicator of increasing financial stress. Research conducted by Damayanti and Rianto (2023) showed that DAR had no significant effect on financial distress, suggesting that the effectiveness of the debt ratio as a predictor of distress may be contextual.

Research conducted by Kartika and Hasanudin (2019) found that the Current Ratio (CR) variable has a negative and significant effect on financial distress, indicating that good liquidity helps companies avoid financial crises. Similar findings were also explained by Setiawan and Fitria (2020). Research by Silvia and Yulistina (2022) showed that CR had no significant effect on financial distress, so it cannot always be used as a reliable indicator for detecting bankruptcy risk, especially in certain industrial sectors.

Research conducted by Suardika et al. (2023) found that the BOPO variable has a positive and significant effect on financial distress, indicating that the higher the ratio of operating costs to revenue, the greater the likelihood of a company experiencing financial difficulties. Dewi (2022) supports this finding by stating that operational efficiency significantly impacts a bank's financial stability. Research by Ukhriyawati et al. (2021) indicates that BOPO has no significant effect on financial distress.

Research conducted by Putra et al. (2024) found that Non-Performing Loans (NPLs) have a positive and significant effect on financial distress, meaning that the higher the level of non-performing loans, the greater the potential for a company to experience financial stress. Similar results were also found in research by Ginting et al. (2024). Research conducted by Ginting and Mawardi (2021) found that NPLs had no significant effect on financial distress, indicating that credit quality is not the sole factor triggering financial distress.

Research conducted by Azis and Rahardjo (2020) found that the Capital Adequacy Ratio (CAR) variable has a negative and significant effect on financial distress, indicating that strong capital can reduce the likelihood of a company facing financial difficulties. Research by Putra et al. (2024) and Abdullah et al. (2021) found that CAR had no significant effect on financial distress, suggesting that CAR's role as a risk buffer is not consistently reflected in various studies.

The differing findings from these studies indicate that the influence of financial ratios on financial distress is not entirely consistent across sectors and research periods. This supports the need for further research, particularly in the context of Indonesian banking during the crucial period of 2019–2024. Research gaps can be identified by the presence of actual phenomena and inconsistencies in the findings, necessitating further research.

This study addresses this gap by offering novelty in several aspects. First, it analyzes five key financial performance indicators representing profitability, leverage, operational efficiency, credit risk, and capital adequacy against financial distress. Second, it utilizes the Zmijewski model, which has rarely been empirically used in the context of recent Indonesian banking. Third, it focuses on the crisis and post-pandemic periods (2019–2024), providing strong empirical relevance in measuring the impact of economic fluctuations on the survival of banking firms.

This research is expected to provide theoretical contributions to the development of financial management and banking system literature, while also providing practical implications for bank management, regulators, and investors in understanding and anticipating the risk of financial distress more effectively and measurably.

RESEARCH METHODS

This study uses a quantitative approach. The type of research used is causal associative research. This study aims to determine the causal relationship between two or more variables. This study aims to analyze whether the financial performance variables of banking companies have a significant influence on the likelihood of financial distress. This research allows researchers to identify the relationship between variables and the direction and strength of the influence between variables. This research is explanatory in nature. This study uses a quantitative secondary data approach, so it does not require primary data collection through direct observation or interviews in the field. The research site is documentary and conducted online by accessing various official data sources.

The main source of data was obtained through the official website of the Indonesian Stock Exchange (BEI) at www.idx.co.id, which provides financial reports

The annual financial statements of the banking sector companies being studied. Data were also collected through each bank's official website to obtain financial reports or other supporting information not fully available on the IDX website.

The population in this study is all banking sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2019 to 2024. In this study, samples were taken from the population of all banking sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2019 to 2024. The sampling technique in this study used purposive sampling. After the data tabulation was carried out, the data was processed using multiple linear regression analysis tools with the help of SPSS 27 software.

RESULTS AND DISCUSSION

Multiple Linear Regression

Table 1. Multiple Linear Regression Results

Variables	Regression Coefficient
Constant	-4,300
<i>Return on Assets</i> (ROA)	-0.045
<i>Debt Ratio</i> (DR)	0.057
Operating Expenses to Revenue Operational (BOPO)	-8.911E-10
<i>Non-Performing Loan</i> (NPL)	-1.616E-9
<i>Capital Adequacy Ratio</i> (CAR)	9.097E-9

Source: secondary data processing

The multiple linear regression equation obtained is:

$$Y = -4.300 - 0.045 X_1 + 0.057 X_2 - 8.911E-10 X_3 - 1.616E-9$$

Based on the regression equation, it can be explained that:

- 1) The constant regression coefficient of -4,300 indicates that if the variables Return on Assets (ROA), Debt Ratio (DR), Operating Costs to Operating Income (BOPO), Non-Performing Loans (NPL), and Capital Adequacy Ratio (CAR) are considered constant or have a value of zero, then the Financial Distress (Zmijewski Score) is -4,300. A negative constant value indicates that in general the sample of this study is in a condition that is relatively far from the distress category.
- 2) The regression coefficient of Return on Assets (ROA) of -0.045 indicates that if Return on Assets (ROA) increases by one unit and other variables are held constant, the Financial Distress value will decrease by 0.045.
- 3) The Debt Ratio (DR) regression coefficient of 0.057 indicates that if the Debt Ratio (DR) increases by one unit and other variables are held constant, the Financial Distress value will increase by 0.057.

- 4) The regression coefficient of Operating Costs to Operating Income (BOPO) of $-8.911\text{E-}10$ shows that if Operating Costs to Operating Income (BOPO) increases by one unit and other variables are considered constant, the Financial Distress value will decrease by a very small amount.
- 5) The regression coefficient of Non Performing Loan (NPL) of -1.616E- shows that if Non Performing Loan (NPL) increases by one unit and other variables are considered constant, the Financial Distress value will decrease by a very small amount.
- 6) The Capital Adequacy Ratio (CAR) regression coefficient of $9.097\text{E-}9$ shows that if the Capital Adequacy Ratio (CAR) increases by one unit and other variables are held constant, the Financial Distress value will increase by a very small amount.

Model Feasibility Test

Table 2. Model Testing Results

Model	Sig.	Standard	Information
Regression	0.071	0.05	Unsuitable Model

Source: Primary data processed in 2026

The results of simultaneous hypothesis testing through the F test obtained a sig. value of 0.071 which is greater than α of 0.05, so H_0 is accepted. Thus, it can be concluded that Return on Assets (ROA), Debt Ratio (DR), Operating Costs to Operating Income (BOPO), Non-Performing Loans (NPL), and Capital Adequacy Ratio (CAR) together have not been able to provide a significant influence on Financial Distress.

Statistically, these results indicate that the regression model used does not have sufficient simultaneous power to comprehensively explain variations in Financial Distress. However, the insignificance of the F-test does not necessarily indicate the model's irrelevance. The F-test examines the collective power of all variables, while the t-test indicates that some variables have an individual influence.

This condition indicates that financial distress in the banking sector from 2019 to 2024 is a complex and multidimensional phenomenon, and therefore cannot be fully explained by the combination of internal financial ratios used in this study. External factors such as macroeconomic conditions, financial system stability, credit restructuring policies during the pandemic, and the dynamics of banking regulations likely also influence the probability of financial distress.

Hypothesis Test/t-Test

Table 3 Hypothesis Testing Results

Variables	Sig.	Information
<i>Return on Assets</i> (ROA)	0.000	Influential
<i>Debt Ratio</i> (DR)	0.000	Influential
Operating Costs Against Operating Income (BOPO)	0.649	No influential

<i>Non-Performing Loan(NPL)</i>	0.867	No influential
<i>Capital Adequacy Ratio(CAR)</i>	0.009	Influential

Source: Primary data processed in 2026

Based on the results of the t-test in the table above, it can be explained in the following form:

- 1) For the Return on Assets (ROA) variable, the significant value of 0.000 is smaller than 0.05. This indicates that Return on Assets (ROA) has a significant effect on Financial Distress. Therefore, the hypothesis stating that Return on Assets (ROA) has an effect on Financial Distress is accepted.
- 2) For the Debt Ratio (DR) variable, the sig. value of 0.000 is smaller than 0.05. This indicates that the Debt Ratio (DR) has a significant effect on Financial Distress. Therefore, the hypothesis stating that the Debt Ratio (DR) has an effect on Financial Distress is accepted.
- 3) For the Operating Costs to Operating Income (BOPO) variable, the sig. value of 0.649 is greater than 0.05. This indicates that the Operating Costs to Operating Income (BOPO) does not significantly influence Financial Distress. Thus, the hypothesis stating that the Operating Costs to Operating Income (BOPO) influences Financial Distress is rejected.
- 4) For the Non-Performing Loan (NPL) variable, the significant value of 0.867 is greater than 0.05. This indicates that Non-Performing Loan (NPL) does not significantly influence Financial Distress. Therefore, the hypothesis stating that Non-Performing Loan (NPL) influences Financial Distress is rejected.
- 5) For the Capital Adequacy Ratio (CAR) variable, the sig. value of 0.009 is smaller than α of 0.05. This indicates that the Capital Adequacy Ratio (CAR) has a significant effect on Financial Distress. Thus, the hypothesis stating that the Capital Adequacy Ratio (CAR) has an effect on Financial Distress is accepted.

Coefficient of Determination Test (R²)

Table 4 Results of the Determination Coefficient

<i>Model</i>	<i>R Square</i>	<i>Adjusted R Square</i>
1	0.150	0.080

Source: Primary data processed in 2026

Based on the results of the regression analysis, the R Square was obtained at 0.150 and the Adjusted R Square at 0.080. The Adjusted R Square value shows that after adjusting for the number of independent variables, the model is able to explain 8% of the variation in Financial Distress, while 92% is influenced by other variables outside the research model.

Statistically, the relatively low coefficient of determination indicates that the

variables Return on Assets (ROA), Debt Ratio (DR), Operating Expenses to Operating Income (BOPO), Non-Performing Loans (NPL), and Capital Adequacy Ratio (CAR) are still limited in explaining Financial Distress. However, the low Adjusted R Square value does not necessarily indicate that the research model is infeasible or irrelevant.

Discussion

1. The Effect of Return on Assets (ROA) on Financial Distress

The test results according to the coefficients table show that the ROA significance value of 0.000 is less than 0.05, so ROA has a significant effect on Financial Distress. The ROA regression coefficient is negative (-0.045), indicating that increasing profitability will reduce the probability of Financial Distress.

ROA reflects a company's ability to generate profits from its assets. From the perspective of Signaling Theory (Spence, 1973), a high level of profitability provides a positive signal regarding a company's financial health. Companies with good profitability have the internal capacity to finance operations without a high dependence on external funding.

Furthermore, based on the Pecking Order Theory (Myers & Majluf, 1984), companies with high profits tend to use internal funding first, thereby mitigating the risk of financial distress. This study's findings align with those of Azis & Rahardjo (2020) and Putra et al. (2024), which found that ROA significantly influences financial distress. Therefore, it can be concluded that profitability is a key determinant in maintaining the financial stability of banking companies.

2. The Influence of Debt Ratio (DR) on Financial Distress

The test results show that the DR significance value of 0.000 is less than 0.05, so DR has a significant effect on Financial Distress. The DR regression coefficient is positive (0.057), which means that an increase in the liabilities-to-assets ratio will increase the probability of Financial Distress.

Theoretically, these results support the Trade-Off Theory, which states that the use of debt can increase the risk of bankruptcy due to increased fixed liability burdens. Although the banking sector is characterized by high levels of leverage, an increase in the fixed liability ratio can increase liquidity pressures and the risk of default.

This finding is consistent with research by Kartika & Hasanudin (2019), which found that leverage has a positive effect on financial distress. Therefore, a disproportionate funding structure can increase the risk of financial distress.

3. The Effect of BOPO on Financial Distress

The test results show that the BOPO significance value of 0.649 is greater than 0.05, indicating that BOPO has no significant effect on financial distress. BOPO reflects a company's level of operational efficiency.

Based on Agency Theory (Jensen & Meckling, 1976), operational inefficiency can indicate weak managerial oversight, potentially leading to financial distress. However, in this study, BOPO was not shown to have a significant effect on financial distress.

These results align with research by Ukhriyawati et al. (2021), which found that BOPO had no significant effect on distress. This indicates that in the banking sector, operational efficiency is not the primary determinant of financial distress risk compared to fundamental factors such as profitability and capital structure.

4. The Impact of Non-Performing Loans (NPL) on Financial Distress

The test results show that the NPL significance value of 0.867 is greater than 0.05, indicating that NPL has no significant effect on financial distress. Theoretically, according to Credit Risk Theory, an increase in non-performing loans can increase the risk of loss and potentially push a company into financial distress. However, the results of this study indicate that NPL has no significant effect.

This can be explained by the credit restructuring policies and regulatory interventions during the 2019–2024 study period, which resulted in a less direct impact of credit risk on distress. This finding aligns with research by Ginting & Mawardi (2021), which also found that NPLs had no significant effect on financial distress.

5. The Influence of Capital Adequacy Ratio (CAR) on Financial Distress

The test results show that the CAR significance value of 0.009 is less than 0.05, indicating a significant effect on financial distress. CAR reflects the level of capital adequacy to absorb the risk of loss. From the perspective of Prudential Banking Theory and Capital Buffer Theory, capital serves as a buffer against systemic risk and protection against potential losses.

This finding is consistent with research by Mahardini et al. (2024), which states that capital adequacy plays a role in determining the financial stability of banking companies. Therefore, the better the capital adequacy level, the greater the company's ability to avoid financial distress.

CONCLUSION AND SUGGESTIONS

The results of the study indicate that the Capital Adequacy Ratio (CAR) has a significant effect on Financial Distress, as evidenced by a significance value of 0.009, which is less than 0.05. This finding indicates that the level of capital adequacy plays a crucial role in determining a company's financial condition. Based on Prudential Banking Theory and Capital Buffer Theory, capital serves as a risk buffer and protection against potential losses that could threaten financial stability. The results of this study are in line with the research of Mahardini et al. (2024) which states that capital adequacy contributes to the financial stability of banking companies. Thus, the higher the level of capital adequacy a company has, the greater its ability to face risks and avoid Financial Distress.

REFERENCES

Abdullah, J., Hasan, W., and Dusa, SY (2021). Analysis of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and Net Interest Margin (NIM) in Predicting

- Financial Distress in Financial Reports of PT. Bank Rakyat Indonesia (Persero) Tbk. *Journal of Economics, Finance and Accounting Studies*, 3(2), 81–90. <https://doi.org/10.32996/jefas.2021.3.2.9>
- Arief, H., Fauzi, F., Saratian, ETP, Ashshidiqy, N., and Kolis, DN (2021). The Influence of Liquidity, Leverage, and Profitability on Financial Performance Distress. *Journal JDM*, 4(1), 68–77. <https://doi.org/10.32670/fairvalue.v5i3.2459>
- Asfali, I. (2019). The Effect of Profitability, Liquidity, Leverage, Activity, and Sales Growth on the Financial Distress of Chemical Companies. *Journal of Economics and Management*, 20(2), 56–66.
- Aslamiah, S., Karyatun, S., and Digidowiseiso, K. (2023). The Influence of Return on Assets, Current Ratio and Debt to Asset Ratio on Financial Distress in Consumption Goods Industry Sector Companies Listed on The Indonesia Stock Exchange in 2017-2021. *Journal of Syntax Admiration*, 4(4), 583–596. <https://doi.org/10.46799/jsa.v4i4.843>
- Atang, GD, Massie, JDD, and Wangke, SJ (2022). The Effect of Financial Ratios To Financial Distress Using Altman Z Score on Hotel and Tourism Companies Listed on Indonesian Stock Exchange. *EMBA Journal*, 10(1), 1467–1475.
- Azis, SN, and Rahardjo, SN (2020). Analysis of Factors Influencing Financial Distress in Banks Listed on the Indonesia Stock Exchange. *REKSA Journal: Financial Engineering, Sharia, and Audit*, 7(2), 117. <https://doi.org/10.12928/j.reksa.v7i2.2797>
- Bărbuță-Mișu, N., and Madaleno, M. (2020). Assessment of Bankruptcy Risk of Large Companies: European Countries Evolution Analysis. *Journal of Risk and Financial Management*, 13(3). <https://doi.org/10.3390/jrfm13030058>
- Brigham, E.F., and Houston, J.F. (2019). *Fundamentals of financial management* (15th ed.). Cengage Learning.
- Damayanti, A., and Rianto. (2023). The Effect of Current Ratio, Debt Ratio, and Return on Assets on Financial Distress (FD). *Journal of Business Research*, 7(1), 120–128. <https://journal.univpancasila.ac.id/index.php/jrb/article/view/5694%0Ahttps://journal.univpancasila.ac.id/index.php/jrb/article/download/5694/2616>
- Dewi, HP (2022). Financial Distress in the Joint Venture Bank Sector in Indonesia Using the Camel Ratio as a Measurement Tool. Study Period 2014–2019. *Krisnadwipayana Journal of Accounting and Business*, 9(2), 628–639. <https://doi.org/10.35137/jabk.v9i2.684>
- Diana, BM, and Yudiantoro, D. (2023). The Influence of Financial Performance on Financial Distress of Consumer Goods Industry Companies on the IDX 2018-2021. *Journal Ecobistek*, 12(2), 601–607. <https://doi.org/10.35134/ekobistek.v12i2.595>
- Ginting, D., and Mawardi, W. (2021). Analysis of the Effect of Camel Ratio and Firm Size on Financial Distress in Banking Companies in Indonesia (Study of

- Commercial Banks Listed on the Indonesia Stock Exchange 2015-2019). Diponegoro Journal of Management, 10(3), 1-11.
- Ginting, NAB, Munthe, K., and Purba, AM (2024). The Effect of ROA, ROE, LDR, CR, and NPL on Financial Distress Conditions in Banking Companies Listed on the Indonesia Stock Exchange for the 2019-2022 Period. 3(1), 64-83.
- Hidayat, T., Permatasari, M., and Suhamdeni, T. (2021). Analysis of the Influence of Financial Ratios on the Financial Distress Conditions of Manufacturing Companies Listed on the Indonesia Stock Exchange. *Pelita Bangsa Business Accounting Journal*, 5(02), 93-108. <https://doi.org/10.37366/akubis.v5i02.156>
- Irawan, WA, and Fajri, A. (2021). Comparative Analysis of Bankruptcy Predictions in Banking Companies on the IDX. *JABKO: Journal of Accounting and Business Contemporary*, 2(1), 55-67. <https://doi.org/10.24905/jabko.v2i1.27>
- Kartika, R., and Hasanudin. (2019). Analysis of the Effect of Liquidity, Leverage, Activity, and Profitability on Financial Distress in Public Companies in the Infrastructure, Utilities, and Transportation Sectors for the Period 2011-2015. *Journal of Management Science*, 15(1), 1-16.
- Lestari, SS (2022). Bankruptcy Potential Analysis Using the Altman, Ohlson, and Zmijewski Model in Property and Real Estate Subsector Companies Listed on the IDX 2017-2019. *Jurnal Acitya Ardana*, 2(1), 96-103. <https://doi.org/10.31092/jaa.v2i1.1340>
- Limajatini, Susanti, M., and Anggraeni, RD (2022). The Effect of Debt to Asset Ratio, Return On Assets and Total Assets Turn Over on Financial Distress (Empire Study on Chemical Sub-Industry Companies Listed on the Indonesia Stock Exchange in 2018-2020). *ECo-Buss*, 5(2), 700-710.
- Mahardini, NY, Octaviani, S., and Umdiana, N. (2024). 49 | J akme n. *Journal of Management Accounting*, 3(1), 49-60.
- Manuhutu, Y.A., Karamoy, H., and Rondonuwu, S. (2020). Financial Statement Analysis to Measure the Financial Performance of the Telecommunication Company Pt. Smartfren Telecom Tbk in 2017-2018. *Going Concern: Journal of Accounting Research*, 15(2), 55. <https://doi.org/10.32400/gc.15.2.27852.2020>
- Mufidah, K., and Handayani, A. (2024). Predicting Financial Distress in the Banking Sector Using the Altman Z-Score, Grover, Springate, and Zmijewski Methods. *Journal of Information Systems Management Economics*, 5(6), 540-553. <https://doi.org/10.38035/jemsi.v5i6.2479>
- Financial Services Authority. (2021). Indonesian Banking Profile Report 2021. Jakarta: OJK.
- Purwanti, D. (2021). Determination of Corporate Financial Performance: Analysis of Liquidity, Leverage, and Company Size (Financial Management Literature Review). *Journal of Applied Management Science*, 2(5), 692-698. <https://doi.org/10.31933/jimt.v2i5.593>

- Putra, CIW, Manurung, AH, and Machdar, NM (2024). Effect of Capital Adequacy Ratio, Credit Policy, Liquidity Risk and Non-Performing Loans on Financial Distress. *Greenation International Journal of Economics and Accounting*, 2(4), 309–322. <https://doi.org/10.38035/gijea.v2i4.300>
- Putri Adelia Tungga Dewi, Deny Yudiantoro, and Amalia Nuril Hidayati. (2022). The Influence of Financial Ratios on Financial Distress Conditions in the Food and Beverage Sub-Sector Registered on the Indonesian Stock Exchange. *Jurnal Cakrawala Ilmiah*, 1(11), 3013–3026. <https://doi.org/10.53625/jcijurnalcakrawalailmiah.v1i11.2893>
- Putri, YM, Rahman, A., and Hidayati, K. (2021). Analysis of Profitability Ratios, Liquidity Ratios, and Solvency Ratios in Assessing Financial Performance at PT. Bank Rakyat Indonesia (Persero), Tbk Listed on the Indonesia Stock Exchange. *Equity: Journal of Accounting*, 2(1), 14–26. <https://doi.org/10.46821/equity.v2i1.198>
- Ross, S. A., Westerfield, R. W., and Jordan, B. D. (2016). *Essentials of corporate finance* (9th ed.). McGraw-Hill Education.
- Rosi, NA, and Hasanuh, N. (2020). The Influence of Return on Assets, Debt to Assets Ratio, and Current Ratio on Financial Distress. *E-Journal of Economics and Business*, Udayana University, 995–1018.
- Sugiyono. (2019). *Quantitative, qualitative and R and D research methods*. Alfabeta.
- Saputri, EK, and Sari, EP (2024). The Influence of Current Ratio, Debt to Asset Ratio, Total Asset Turnover and Return on Assets on Financials Distress (Altman Z-Score Model) in Plantation Subsector Companies Listed on the Indonesia Stock Exchange for the Period 2019–2022. *Management, Accounting, Islamic Banking and Islamic Economic Journal*, 2(1), 99–111. <http://kti.potensi-utama.ac.id/index.php/MAIBIE/index>
- Saragih, CP, Suri, A., Ayu, S., and Setiyawati, H. (2023). the Effect of Current Ratio, Return on Assets, and Debt Equity Ratio on Financial Distress. *International Journal of Management Studies and Social Science Research*, 05(05), 267–275. <https://doi.org/10.56293/ijmsssr.2022.4723>
- Setiawan, R., and Fitria, Y. (2020). The effect of debt ratio, current ratio, and return on assets on financial distress in manufacturing companies in the basic and chemical industries listed on the Indonesian Stock Exchange. *Akuntabel*, 17(2), 226–230.
- Silanno, GL, and Loupatty, LG (2021). The Effect of Current Ratio, Debt to Equity Ratio, and Return on Assets on Financial Distress in Companies in the Consumer Goods Industry Sector (Empirical Study on the Indonesia Stock Exchange). *Intelektiva: Journal of Economics, Social Sciences, and Humanities*, 2(07), 85–109.
- Silvia, D., and Yulistina, Y. (2022). The Effect of Current Ratio, Return on Assets, and Debt to Assets on Financial Distress During the Pandemic. *Global Financial Accounting Journal*, 6(1), 89. <https://doi.org/10.37253/gfa.v6i1.6528>

- Suardika, IW, Endiana, IDM, and Pramesti, IGAA (2023). The Effect of Return on Assets, Capital Adequacy Ratio, Non-Performing Loan, Loan to Deposits Ratio, Operating Costs and Operating Income on Financial Distress at BPRs in Denpasar City in 2019-2021. *Collection of Accounting Student Research Results (KHARISMA)*, 5(3), 492–506.
- Sugiyono. (2022). *Quantitative, Qualitative, and R&D Research Methods*. Bandung: Alfabeta.
- Sukirno. (2022). Financial Distress: Implications of Cash Ratio, Total Debt to Equity Ratio, and Return on Assets. *Journal of Finance and Banking (KEBAN)*, 2(1), 48–59.
- Suot, LY, Koleangan, RA., and Palandeng, ID (2020). Financial Ratio Analysis in Predicting Financial Distress Conditions in the Banking Industry Listed on the Indonesia Stock Exchange. *EMBA Journal*, 8(1), 501–510.
- Sutanto, E., and Atun, Y. (2020). The Effect of Current Ratio, Debt Ratio, and Total Asset Turnover Ratio on Financial Distress in Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX). *Jurnal Studia Akuntansi Dan Bisnis (The Indonesian Journal of Management and Accounting)*, 8(2), 143–154. <https://doi.org/10.55171/jsab.v8i2.593>
- Ukhriyawati, CF, Arifin, A., and Mulyati, S. (2021). The Influence of Financial Performance in Predicting Financial Distress Conditions in Banks Listed on the Indonesia Stock Exchange. *Bening Journal*, 8(2), 256–274.
- Ummah, FK, and Aisyah, EN (2024). Analysis of Zmijewski Model's Accuracy in Predicting Potential Financial Distress for Indonesian Islamic Banking. *Asian Journal of Economics, Business and Accounting*, 24(5), 34– 40. <https://doi.org/10.9734/ajeba/2024/v24i51290>