The International Journal of Business Management and Technology, Volume 7 Issue 1 January-February 2023
ISSN: 2581-3889

Research Article Open Access

Financial Ratios and Financial Distress: Evidence from Indonesian Industrial Subsectors

[1*)] Nafilah Yumna Iftinan , [2*)] Rina Trisnawati
[1)]Faculty of Economics and Business, University of Muhammadiyah Surakarta, Indonesia
[2)]Faculty of Economics and Business, University of Muhammadiyah Surakarta, Indonesia

Abstract: This study intends to examine how financial parameters, such as the current ratio, retained earnings to total assets, earnings before interest and tax to total assets, return on equity, debt to equity ratio, and net profit margin, affect financial distress. This study makes use of secondary data in the form of information taken from annual reports or financial statements of companies. This study employs a quantitative approach method with multiple linear regression analysis approaches utilizing SPSS software. The population of this study consists of businesses in the industrial subsector that are listed on the Indonesia Stock Exchange (IDX) for the years 2018 through 2021. Purposive sampling was used in the sampling procedure, which led to the collection of 168 data from 42 companies. The study's findings show that the current ratio, retained earnings to total assets, earnings before interest and tax to total assets, return on equity, and debt to equity ratio are statistically significant in influencing financial distress. In the meantime, financial distress is unaffected by net profit margin.

Keyword: current ratio, debt to equity ratio, earnings before interest and tax to total assets, net profit margin, retained earnings to total assets, return on equity

I. Introduction

The financial performance of businesses will undoubtedly be impacted by an unpredictable economic environment in a nation. A bankruptcy could result from this money issue. A few financially troubled enterprises attempt to control their situation by taking out loans, combining their operations, or even going out of business. The bankruptcy, especially in a large company, will also have negative consequence for management, creditors, investors, and the government as well. In Indonesia, debtors who have two or more creditors unable paying at least one debt can be declared as bankrupt by a court decision either at the request of five or more creditors or at their own request. The bankruptcy can be indicated by a financial distress, a condition that is characterized by a decrease in a financial condition (Platt, 2002).

The goal of this study is to develop a financial ratio-based model that may foretell a company's insolvency, particularly when it results from financial duress. Finding out how financial ratios affect financial distress is the goal of this study (Brahmana, 2004; Setiawan, et al., 2009). Financial distress is measured by Whitaker (1999) using a lower cash flow value for current long-term debt. By examining the financial reports, the degree of financial crisis can also be determined.

On the other hand, financial ratios are excellent tools for computing financial statements since they provide information about a company's past, present, and future conditions (Khaliq, et al., 2014). Altman(1986) conducted early research on the Z-score, which is a measure of financial ratios used to forecast insolvency. Financial ratios can be used to predict a company's future state, according to research by Brigham & Houston (2010). The use of financial parameters to forecast insolvency was then discussed by Almilia & Kristijasi (2003).

In this study, there are six ratios used as indicators of financial ratios, i.e., current ratio, retained earnings to total assets, earnings before interest and tax to total assets, return-on-equity, debt-to-equity ratio, and net profit margin. The current ratio measures a company's ability to meet its short-term debt by using its current assets (i.e., assets that will turn into cash within one year or one business cycle) (Mamduh, 2016). Retained earnings to total assets shows the company's ability to generate retained earnings from the company's total assets. It shows how much of a company's income is not paid out in the form of dividends to shareholders. Earnings before interest and taxes is the total profit earned by a company in the current year before deducting interest expense and income tax (Edwin, 2017). According to Kamsir (2014), return-on-equity (ROE) is very important for shareholders and potential investors since if ROE increases, the shares will also increase. The debt-to-equity ratio is important for measuring a company's business risk as if it increases by the changes in liabilities (Sukamulja, 2017). Finally, a company's net profit will drop if it can't control its spending even while its net income is high. The purpose of this study is to evaluate the impact of six financial parameters on financial distress, including current ratio, retained earnings to total assets, earnings before interest and tax to total assets, return on equity, debt-to-equity ratio, and net profit margin.

II. Literature Review

2.1. Agency Theory

Sulistyanto (2008) claims that the signaling theory explains how financial data are essentially employed by businesses to send either positive or negative signals to the wearer. If a firm announces good news, it will dazzle investors and raise the value and price of its shares, but, if a company announces poor news, it will provide investors less information and may result in a decline in the company's stock price. One of the information that can be used as a signal is an announcement made by an issuer. This announcement can later affect the ups and downs of the company's stock price that made the announcement.

2.2. Signaling Theory

According to Sulistyanto (2008) says that signaling theory explains that basically financial reports are used by companies to give good or bad signals to the wearer. If the company provides good news, it will give a good impression to investors and increase the value and price of the company's shares, but if the company provides bad news, it will provide less information and can cause a reduction in the company's stock price. A statement released by an issuer is one of the pieces of information that might serve as a signal. The company's stock price that made the news may fluctuate as a result of this statement.

2.3. Financial Distress

Plat & Plat (2006) defined a financial distress as a stage of decline in a financial condition that occurred before the company experienced bankruptcy or liquidation. Ross et.al. (2013) defined financial distress as a company's condition experiencing financial difficulties where its cash flow is insufficient to meet current obligations. There are 2 factors that cause financial distress, namely internal factors and external factors.

2.4. Current Ratio

The current ratio, according to Kasmir (2014), is a ratio used to assess a company's capacity to settle short-term debts that are due as soon as they are billed. According to Prihadi (2008), the current ratio is a ratio that assesses how well a company's current assets can cover its short-term debts. If the current ratio is low, it means that a company lacks capital in paying debts or that a company has problems in liquidity. However, if the ratio is high, it does not necessarily mean that a company is in good condition; but it can provide an indication of good collateral for short-term creditors, meaning that a company has the ability to pay short-term obligations any time.

2.5. Retained Earning to Total Assets

Retained earnings to total assets shows a company's ability to generate retained earnings from its total assets. The definition of retained earnings is a profit that is not distributed to shareholders. The amount of shareholders' rights is displayed by combining the retained earnings balance with the paid-up capital. The balance of any shortfall must be subtracted from the amount of retained earnings. The likelihood of financial trouble is reduced since the higher the resulting ratio indicates that a company has large profits to finance its assets and pay dividends.

2.6. Earning Before Interest and Tax to Total Assets

Earnings before interest and tax to total assets (EBITTA) is a ratio that measures a company's ability to generate net income based on the total assets used. This ratio can also be used to evaluate a loan's effectiveness or assess a company's profitability. If the ratio is high, then a company's assets have been used rationally to prevent financial distress.

2.7. Return on Equity Ratio

The ratio of an issuer's net income to its own capital is known as the ROE (Harahap, 2007). A company's ability to create profits from its own capital is demonstrated by a high ROE. According to Jumingan (2014), ROE is used to measure the amount of return on investment of shareholders. In general, ROE is a ratio to compare net income to equity where this ratio is used to determine the rate of return on shareholder investment. If a company's ROE is high, it suggests that it effectively manages its capital to produce large profits.

2.8. Net Profit Margin

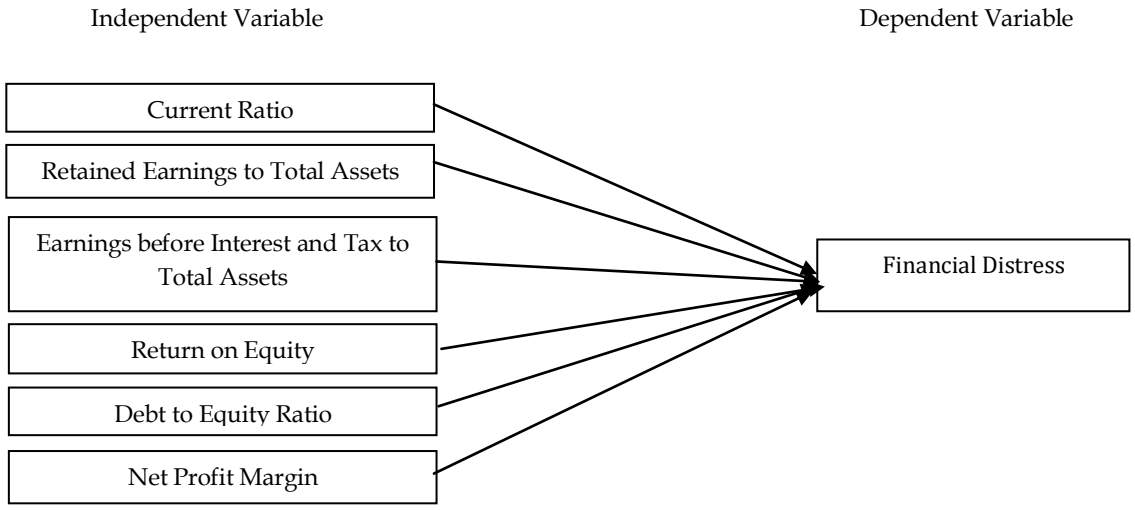
Harjito & Martono (2018) argued that net profit margin is sales profit after calculating all costs and income taxes. Net profit margin is a measure of profit by comparing net profit after tax interest with sales (Kasmir, 2017). A company's performance will be more effective if its net profit margin is high since its ability to make money from sales is relatively high. Additionally, a high margin indicates that a corporation has the capacity to control costs in a way that prevents financial distress. On the contrary, if this margin is low, a company's ability to earn profits through sales is considered quite low.

III. Identification and Equation

3.1. Research Design

Because this study used numbers as variable indicators to address a research problem, associative quantitative methodology was used to analyze the study's research concerns.

3.2. Conceptual



3.3. Population and Sample

In this study, the population consists of 45 industrial sub-sector enterprises that are listed on the Indonesia Stock Exchange (IDX). With a total sample size of 168 for four periods and 33 data outliers used, the sampling technique used a purposive sampling technique, resulting in a final sample size of 135 samples. The selected 42 companies results were used in this process.

3.4. Data

The secondary data used in this study comes from the annual reports of industrial sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2018–2020 period, with data sources coming from the website of the Indonesian Stock Exchange (www.idx.co.id) or websites associated to it.

3.5. Data Analysis

Model the analysis used in this study to test the hypothesis is a multiple linear regression model. Multiple linear regression analysis to test the effect of several independent variables on one dependent variable. The model will be derive a linear relationship as follows:

$$ETR = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Information:

α	: Constant
$\beta_1 - \beta_6$	: The coefficient of each variable
ETR	: Financial Distress
X_1	: Current Ratio
X_2	: Retained Earning to Total Assets
X_3	: Earning Before Interest and Tax to Total Assets
X_4	: Return On Equity
X_5	: Debt to Equity Ratio
X_6	: Net Profit Margin
ε	; error value

3.6. Variables Measurement

Current Ratio (CR)

The current ratio shows how a company's current assets are available relative to its total current liabilities. According to Kasmir (2018: 135), the formula for calculating the current ratio is as follows:

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

Retained Earning to Total Assets (RETA)

The ratio of retained earnings to total assets demonstrates a company's capacity to produce retained earnings from those assets. Compared to older organizations, younger companies experience a higher rate of corporate failure (Altman, 2000). Therefore, it can be expressed as follows:

$$\text{RETA} = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

Earning Before Interest and Tax to Total Assets (EBITTA)

EBITTA is a measure of a company's capacity to assess the actual productivity or profitability of its assets; it is independent of tax or leverage considerations (Chieng, 2013). Therefore, it can be expressed as follows:

$$\text{EBITTA} = \frac{\text{Earning Before Interest and Tax}}{\text{Total Assets}}$$

Return On Equity (ROE)

Return on equity is regarded as a representation of the wealth of shareholders or the worth of the business. While a low ROE shows a company's inability to profitably employ equity, or that the use of equity is not ideal, which will increase the likelihood of bankruptcy, a high ROE demonstrates excellent management's capacity to do so. Consequently, it can be stated as follows:

$$\text{ROE} = \frac{\text{Earning After Tax}}{\text{Shareholder's Equity}}$$

Debt to Equity Ratio (DER)

The ratio of debt to equity reveals the assets contributed by the business's owner. Creditors benefit from a low DER since it means that the owner of the company is providing more assets, increasing the security that creditors have over their money. Shidiq & Khairunnisa (2019) gave the following equation to calculate DER:

$$\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Net Profit Margin (NPM)

Hanafi & Halim (2016) claim that an income statement's common size analysis clearly demonstrates the direct impact of NPM. The net profit from each sale is calculated using the NPM metric. We can understand how sales can influence a company's net profit by taking a look at this number. Sujarweni (2017) claims that the NPM formula is as follows:

$$\text{NPM} = \frac{\text{Earning After Tax}}{\text{Net Sales}}$$

IV. Data Analysis and Discussion

4.1. Descriptive Statistical Analysis

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	std. Deviation
Current Ratio	135	0.1582	3.5139	1.660840	0.6127865
Retained Earning to Total Assets	135	-1.9906	0.6585	0.119150	0.4225603
Earnings Berfore Interest and Tax to Total Assets	135	-0.4121	0.4688	0.059506	0.1079700
Return On Equity	135	-0.5820	0.9019	0.092001	0.1896600
Debt to Equity Ratio	135	-3.6987	5.9680	1.027489	1.1746873
Net Profit Margins	135	-1.5002	1.7787	0.040936	0.2754316
Financial Distress	135	-6.0524	6.4707	3.439087	1.6489318

Source: Data processed, 2022

The table above contains information about the minimum, maximum, average (mean), and standard deviation values of each variable examined in this study based on the descriptive statistical test.

1. Current Ratio (CR) has the lowest value of 0.1582 in the Intraco Penta Tbk company in 2021 and the highest value is 3.5139 in the Lion Metal Works Tbk company in 2018. The liquidity value of sample companies tends to be high with a value of 1.660840.
2. Retained Earnings to Total Assets (RETA) has the lowest score of -1.9906 in the Modern Internasional Tbk company in 2019 and the highest score is 0.6585 in the Arwana Citramulia Tbk company in 2021. The profit value of sample companies tends to be low with a value of 0.119150.

3. Earnings Before Interest and Tax to Total Assets (EBITTA) has the lowest value of -0.4121 in the Keramika Indonesia Association Tbk company in 2019 and the highest value is 0.4688 in the Mark Dynamics Indonesia Tbk company in 2021. The profit value of sample companies tends to be low with a value of 0.059506.
4. Return On Equity (ROE) has the lowest value in the Keramika Indonesia Association Tbk company in 2019 of -0.5820 and the highest value is 0.9019 in the Intraco Penta Tbk company in 2020. The profit value of sample companies tends to be low with a value of 0.092001.
5. The Debt to Equity Ratio (DER) has the lowest value of -3.6987 in the Modern Internasional Tbk company in 2019 and the highest value is 5.9680 in the Perdana Bangun Pusaka Tbk company in 2019. The profit value of sample companies tends to be low with a value of 1.027489.
6. Net Profit Margin (NPM) has the lowest value of -1.5002 in the Intraco Penta Tbk company in 2020 and the highest value is 1.7787 in the Dosni Roha Indonesia Tbk company in 2021. The profit value of sample companies tends to be low with a value of 0.040936.
7. Financial distress as the dependent variable measured using the Altman Z-Score model has the lowest value of -6.0524 in the Modern Internasional Tbk company in 2019 and the highest value at 6.4707 in the Perdana Bangun Pusaka Tbk company in 2019.

4.2. Classical Assumptions Test

Based on the data that has been processed in this study, the classical assumption test results are obtained as follows. The first test is the normality test. The data distribution of a decent regression model should be normal or nearly normal. The data in this study were not normally distributed, hence the Kolmogorov-Smirnov test was not used to test for normality; instead, the CLT assumption was used. Given that this study's total N is 135 and is greater than 30, it can be said that the research data are regularly distributed..

The multicollinearity test is the next. According to the results of this test, all independent variables do not exhibit multicollinearity because the score of each tolerance value for each independent variable is larger than 0.1 and the VIF value is less than 10.

The Glejser test is used in this study's following test, which examines heteroscedasticity. As can be seen from the significant values that all independent variables in this study displayed, none of the independent variables in this study displayed heteroscedasticity symptoms.

Then, the last test is the autocorrelation test. Based on the test results, it is known that the resulting DW value is 1.994, which means it is greater than (du), which is 1.8125 and smaller than (4-du) of 2.1857 (4-1.8125) or 1.8125 < 1.994 < 2.1857. These results were obtained from the DW table with the number of samples (N) 135 and the number of independent variables (k = 6) 6. These findings indicate that there is no autocorrelation among the independent variables, making it possible to utilize the regression equation model.

4.3. Hypothesis Test

Table 2. Multiple Regression Analysis

Variable	B	std. Error	t value	Sig.	Description
(Constant)	0.014	0.029	0.479	0.632	
Current Ratio	1.193	0.015	78,642	0.000	Accepted
Retained Earning to Total Assets	1.406	0.022	64,205	0.000	Accepted
Earnings Before Interest and Tax to Total Assets	3,277	0.113	29,033	0.000	Accepted
Return On Equity	0.594	0.053	11.251	0.000	Accepted
Debt to Equity Ratio	0.999	0.008	131,600	0.000	Accepted
Net Profit Margin	0.006	0.037	0.173	0.863	Rejected
Fvalue = 7,873					
Sig. = 0,000					
Adj. R Square = 99,7%					

Source: Data processed, 2022

Based on this table, the regression equation can be arranged as follows:

$$Y = 1.193X1 + 1.406X2 + 3.277X3 + 0.594X4 + 0.9999X5 + \varepsilon$$

Based on the regression equation can be interpreted as follows a constant of 0.014 indicates that if there are no independent variables (current ratio, retained earnings to total assets, earnings before interest and tax to total assets, return on equity, debt to equity ratio, and net profit margin) then the value of financial distress is 0.014. The current ratio value of 1.193 indicates that every increase in the current ratio of 1 will be followed by an increase in financial distress of 1.193. The retained earnings to total assets value of 1.406 indicates that any increase in retained earnings to total assets of 1 will be followed by an increase in financial distress of 1.406. The earnings before interest and tax to total assets value of 3.277 indicates that every increase in earnings before interest and tax to total assets of 1 will be followed by an increase in financial distress of 3.277. The return on equity value of 0.594 indicates that every increase in return on equity of 1 will be followed by an increase in financial distress of 0.594. The debt to equity ratio valueeof of 0.999 indicates that every increase in the debt to equity ratio of 1 will be followed by an increase in financial distress of 0.999. The net profit margin value of 0.006 indicates that every increase in the net profit margin of 1 will be followed by a increase in financial distress of 0.006.

According to the results table above for the simultaneous test (F-Test), the Fvalue is 7.873 and has a significance level of 0.000, which is less than 0.05. Consequently, it can be claimed that the regression model utilized is adequate or that it fits the data.

Based on the results of the aforementioned determination coefficient test table, an adjusted R-square of 99.7% is discovered. It means that the current ratio, the ratio of retained earnings to total assets, the ratio of earnings before interest and tax to total assets, the return on equity, the debt to equity ratio, and the net profit margin of approximately 99.7% all contribute to the explanation of the financial distress. The remaining 0.3% is explained by other variables outside this model or by a statistical disturbance. This high value of adjusted *R*-square indicates that the financial ratios are very good in modelling the financial distress.

Based on the table, a results of the statistical test (t-test) it can be explained as follows:

1. First Hypothesis Test Results (H_1)

   In this study, the first hypothesis (H_1) is the current ratio. The present ratio has a significant value of 0.000, less than 0.05, as shown by the statistical t test findings in table IV.2 above. This suggests that H_1 is accepted. Therefore, it can be said that financial distress is impacted by the current ratio.

2. Second Hypothesis Test Results (H_2)

   Based on the results of the statistical t test in table IV.2 above, It is well known that the significant ratio of retained earnings to total assets is 0.000, or less than 0.05. This suggests that H_2 is accepted. This suggests that financial difficulty is influenced by retained earnings on total assets.

3. Results of the Third Hypothesis Test (H_3)

   Based on the results of the statistical t-test in table IV.2 above, It is well known that the significant ratio of earnings before interest and taxes to total assets is 0.000, or less than 0.05. This demonstrates that H_3 is accepted. Therefore, financial distress is influenced by the ratio of earnings before interest and tax to total assets.

4. Fourth Hypothesis Test Results (H_4)

   It is known that return on equity has a significant value of 0.000, less than 0.05, based on the findings of the statistical t-test in table IV.2 above. It is clear from this that H_4 is accepted. Consequently, it can be inferred that return on equity has an impact on financial distress.

5. Fifth Hypothesis Test Results (H_5)

   The debt to equity ratio is known to have a significant value of 0.000, less than 0.05, according to the statistical t test results in table IV.2 above. This demonstrates that H_5 is accepted. Therefore, it may be inferred that financial distress is influenced by the debt to equity ratio..

6. Sixth Hypothesis Test Results (H_6)

   The net profit margin is known to have a significant value of 0.863, which is more than 0.05, based on the findings of the statistical t test in table IV.2 above. That H_6 is rejected is evident from this. So it is possible to conclude that financial distress is unaffected by the net profit margin.

4.4. Discussion

1. The Effect of Current Ratio on Financial Distress

   Based on the analysis's findings, the current ratio has an impact on financial distress since it lowers the liquidity value. The Z-Score value will rise along with the liquidity value because the beta value is positive. The company is in good health as a result of the high Z-Score rating.

   This is in line with the results of research conducted by Fitrianingsih and Novitasari (2021) which show that the current ratio has a positive effect on financial distress. The results of another study by Sarina, Lubis, and Linda (2020 stated that the current ratio has a significant effect on financial distress.

2. The Effect of Retained Earning To Total Assets on Financial Distress

   Based on the results of the analysis, retained earnings to total assets have an effect on financial distress because the company finances a lot of company assets. The beta value is positive so that if profits increase or the company has high profits, the Z-Score value will also increase. The high value of the Z-Score causes the company to be in a healthy condition. If the company has high profits to finance and pay dividends, it will reduce the possibility of financial distress. This shows the size of the assets being financed so that the debt owned by the company increases, which means the Z-Score number is higher, because the higher the Z-Score number indicates the potential for financial distress the company is getting lower or in a healthy financial condition.

   This is in line with the research conducted by Moediarso (2018), the results of his research show that retained earnings to total assets have an effect on financial distress. Meanwhile, in contrast to the results of research by Restianti and Agutina (2018) it shows that retained earnings to total assets do not affect financial distress.

3. The Effect of Earnings Before Interest and Tax To Total Assets on Financial Distress

   Based on the results of the analysis, earnings before interest and taxes to total assets affect financial distress. The beta value shows positive, which means that the profit value is high so that it can fulfill its obligations causing the Z-Score value to also increase. If the Z-Score is high, the company is in a healthy condition. This shows that the higher

the profit owned by the company so that it is able to fulfill its obligations, which means that the Z-Score number is higher, because the higher the Z-Score number indicates the potential for low financial distress or in a healthy financial condition.

This is in line with the research conducted by Rahmawati and Hadiprajitno (2015), whose research results show that earnings before interest and tax to total assets have a significant effect on financial distress. The results of another study by Susilowatia and Simangunsong (2019) show that earnings before interest and tax to total assets have an effect on financial distress.

4. The Effect of Return on Equity on Financial Distress

   The analysis's findings indicate that because businesses are unable to utilise equity to produce profits, return on equity has an impact on financial distress. The increasing Z-Score number denotes that the company's financial distress is low or that its financial situation is good, and the beta value indicates a positive relationship between the quantity of equity and the increase in profits owned by the company.

   This is in line with the research conducted by Sarina, Lubis, and Linda (2020), the results of which show that return on equity has a significant effect on financial distress. The results of another study by Fitrianingsih and Novitasari (2021) show that return on equity has a positive effect on financial distress.

5. The Effect of Debt to Equity Ratio on Financial Distress

   Based on the results of the analysis, the debt to equity ratio has an effect on financial distress caused by increasing debt. The company cannot optimize its debt properly so that the DER value is high. This shows that the large composition of long-term liabilities owned by companies that increase the risk of default will result in lower and smaller Z-Score values, because the smaller the Z-Score value indicates a company's financial distress is getting higher or in a bad financial condition.

   This is in line with research conducted by Sarina and Lubis (2021), whose research results show that the debt to equity ratio has a significant effect on financial distress. Meanwhile, it is inversely proportional to the results of research by Nursidin (2021) showing that the debt to equity ratio has no effect on financial distress.

6. The Effect of Net Profit Margin on Financial Distress

   Based on the analysis's findings, financial distress is unaffected by the net profit margin because the firm's profits are strong and its management is effectively managing the firm as well. Financial distress cannot be affected by the NPM ratio's size. How much profit is made for each capital in a corporation is not explained by net profit margin. This prompts the business to think about additional factors that may contribute to financial distress.

   This is in line with the research that has been conducted by Nurdiwaty and Zaman (2021), the results of his research show that the net profit margin has no partial effect on financial distress. The results of another study by Yuliani and Anggradana (2021) show that net profit margin has a negative effect on financial distress.

V. Conclusion

Based on the results of hypothesis testing and discussion of data, the authors obtain conclusions that can be drawn from this study regarding "Financial Ratios and Financial Distress: Evidence from Indonesian Industrial Subsectors", the following conclusions can be drawn:

1. The Current Ratio has a significant effect on financial distress in industrial sub-sector company listed on the IDX for the 2018-2021 period. H_1 is accepted (p-value of 0.000 <0.05).
2. The Retained Earning to Total Assets has a significant effect on financial distress in industrial sub-sector company listed on the IDX for the 2018-2021 period. H_2 is accepted (p-value of 0.000 < 0.05).
3. The Earnings Before Interest and Tax to Total Assets has a significant effect on financial distress in industrial sub-sector company listed on the IDX for the 2018-2021 period. H_3 is accepted (p-value of 0.000 <0.05).

4. The Return On Equity has a significant effect financial distress in industrial sub-sector company listed on the IDX for the 2018-2021 period. H_4 is accepted (p-value of 0.000 <0.05).
5. The Debt to Equity Ratio has a significant effect on financial distress in industrial sub-sector company listed on the IDX for the 2018-2021 period. H_5 is accepted (p-value of 0.000 <0.05).
6. The Net Profit Margin has no significant effect on financial distress in industrial sub-sector company listed on the IDX for the 2018-2021 period. H_6 is rejected (p-value of 0.000 <0.05).

REFERENCES

[1] Almilia, Kristijadi. (2003). Analysis of financial ratios to predict the financial distress conditions of manufacturing listed on the Jakarta stock exchange, *Indonesian Journal of Accounting and Auditing*, *7(2)*.

[2] Ginting. (2017). The effect of current ratio and debt to equity ratio (DER) on financial distress in property & real estate companies on the Indonesia Stock Exchange, *Journal of Management, 3(2)*, 37-44.

[3] Gumelar, et al. (2021). Financial distress prediction analysis with the Altman Z-score method at PT Waskita Karya Tbk., *Journal of Assets: Accounting and Finance Research, 3(2)*, 84-93.

[4] Hidayat, et al. (2021). Effect of total asset turnover, leverage and profitability on financial distress, *COMPETITIVE Journal of Accounting and Finance, 5(2)*, 180-187.

[5] Kholidah, et al. (2016) Analysis of financial ratios in predicting financial distress in companies in the basic and chemical industry sectors listed on the IDX in 2011-2015. *BISMA: Journal of Business and Management, 10(3)*, 279-291.

[6] M. Mahaningrum. (2020). Effect of financial ratios on financial distress, *E-Journal of Accounting, 30(8)*, 1969-1984.

[7] M. R. Hutauruk. (2021). Financial distress in companies listed on the Indonesia Stock Exchange, *JPS (Journal of Islamic Banking)*, *2(2)*, 237-246.

[8] Moediarso. (2018). The Effect of Bankruptcy on Financial Distress Using the Z-Score Method in Banking on the IDX.

[9] N. Fitrianingsih. (2021). The effect of current ratio, debt ratio, net profit margin and return on equity on financial distress, *Dewantara Accounting*, *5(2)*, 48-61.

[10] Novitasari, et al. (2021). The Effect of Current Ratio, Debt Ratio, Net Profit Margin and Return On Equity on Financial Distress. UST Jogja Journal.

[11] Nurdiwaty, Zaman. (2021). Testing the Effect of Company Financial Ratios on Financial Distress. PETA Journal.

[12] Nursidin. (2021). Pengaruh Debt To Equity Ratio, The Effect of Debt To Equity Ratio, Net Profit Margin and Total Asset Turnover on Financial Distress in Companies on the Jakarta Stock Exchange.

[13] Oktariyani. (2019). Analysis of the effect of the current ratio, DER, TATO and EBITDA on financial distress in manufacturing companies listed on the Indonesian Stock Exchange. *Accounting and Management, 14(1)*, 111-125.

[14] P. Indrati. (2021). Effect of current ratio, net profit margin, debt equity ratio, return on equity on financial distress, *American International Journal of Business Management, 4(10)*, 33-40.

[15] P. Ningsih. (2018) Analysis method of Altman Z score modifications to predict financial distress on the company go public sub sector of the automotive and components, *International Journal of Economics, Business and Accounting Research (IJEBAR), 2(03)*.

[16] Pandegirot, et al. (2019). Analysis of the effect of current ratio, institutional ownership, debt to asset ratio on financial distress conditions in property and real estate companies on the Indonesia Stock Exchange 2013-2017, *EMBA Journal: Journal of Economics, Management, Business and Accounting Research, 7(3)*.

[17] R. Priest. (2012). Analysis of financial ratios to predict the financial distress conditions of manufacturing companies listed on the Indonesia Stock Exchange. *Jember University*.

[18] Restianti, Agutina. (2018). The Effect of Financial Ratios on Financial Distress Conditions in Sub Industrial Sector Company. Accounting Analysis Journal.

[19] Sarina, et al. (2020). Effect of Company Size, Debt to Equity Ratio, Return on Equity and Current Ratio to identify the Financial Distress of Property Companies listed on the IDX for the 2014-2017 Period.

[20] Susilowatia, Simangunsong . (2019). Financial Difficulties, Bankruptcy Analysis, and Its Implications for Stock Prices.

[21] Yuliani, Anggradana. (2021). The Effect of Net Profit Margin, Return On Assets, Liquidity on Financial Distress (Case Study of Agricultural Companies Listed on the Indonesia Stock Exchange Period 2017-2019). Jurnal Ilmiah Akuntansi dan Bisnis.