Determinants of Financial Distress and the Role of Firm Size the Variables are CR, DAR, to FD and FS as Moderation

Zeze Zakaria Hamzah[1], Hari Gursida[2], Yohanes Indrayono[3]

[1] Universitas Pakuan, zeze.zakaria@dewantara.ac.id
[2] Universitas Pakuan, hg.gursida@gmail.com
[3] Universitas Pakuan, yindrayono@yahoo.com

Article Info	ABSTRACT
	The objective of this study is to determine the elements that account for the impact of financial ratios on financial difficulty. This will be achieved by treating firm size as a moderating variable that either enhances or diminishes the independent variable in connection to the dependent variable during the Covid-19 pandemic. The survey comprised a total of 263 companies. Observations were carried out consistent with the specified criteria, resulting in a total sample size of 40 companies. This study use regression as the data analysis technique. 1) Finding shows current ratio has adverse effect to financial distress. 2) The debt-to-asset ratio positively affects financial stability. 3) The significance of the current ratio on financial difficulty is reduced with the size of the firm. 4) The debt-to-asset ratio during financial crises is influenced by the size of the firm.
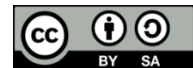
Corresponding Author:

Name: Zeze Zakaria Hamzah
Institution: Universitas Pakuan
Email: zeze.zakaria@dewantara.ac.id

1. INTRODUCTION

Commencing in Great Britain, the Industrial Revolution subsequently spread to Western Europe, North America, Japan, and other regions across the globe. The Industrial Revolution in Britain brought about a significant transformation in the process of producing goods, which was first done by human labor and then replaced by machine power. Especially now with the Industrial Revolution 4.0 which applies information systems, it will have an effect on the minimal role of humans as operators. The Industrial Revolution can be felt by all countries, all people and of course all companies. This Industrial Revolution must be interpreted positively by companies. Companies must adapt quickly to the changes that exist. Because change is a certainty so that something can survive if it makes changes. One way is that companies must dare to take opportunities in this technological development.

In addition to the Industrial Revolution, there are many extraordinary events that can create a financial crisis. The economic crisis in 1965-1967, the monetary crisis of 1997-1998, the financial crises of 2008-2009 and the COVID-19 pandemic in 2020 have both contributed to financial challenges faced by numerous corporate entities globally. The Industrial Revolution 4.0 launched through the Making Indonesia 4.0 Roadmap continues to run. For example, the manufacturing sector is encouraged to transform using digital

technology throughout the industrial value chain. This moment should be utilized as well as possible by Indonesia, which has advantages in terms of strong demand factors, a strong institutional framework, and good global trade and investment [1].

Some companies have tried to adopt industry 4.0 including PT Sri Rejeki Isman (Sritex subsidiary) Sukoharjo, changing the work pattern of spinning yarn which was previously done by human labor replaced by using industry 4.0 technology, PT Unilever Indonesia, has used Automated Guided Vehicle machines for its warehousing system, PT Suzuki Indomobil Motor, using robots in car assembly and PT Astra Daihatsu Motor, also partially using 4.0 technology. From some of these industrial companies, it is mentioned that they do not entirely apply the 4.0 technology in operating their production machines, only at a maximum range of less than 40%. Many factors are not directly applied as a whole, including the high investment spent on changes in industrial machinery, market demand which is relatively not massively surging [2].

PT Alam Sutera Realty Tbk (ASRI) experienced the most significant decline in performance, with net losses of Rp 512.5 billion after making a net profit of Rp 158.8 billion in the previous reporting year. Furthermore, PT Ciputra Development Tbk (CTRA)'s profit fell 42.8% from Rp 296.4 billion to Rp 169.5 billion in 2020. Furthermore, PT Pakuwon Jati Tbk (PWON) experienced a considerable decline in profit of 64.7%, resulting in a total profit of Rp 1.4 trillion in 2019 and Rp 482.6 billion in 2020 [3].

In the special note, details such as the company's bankruptcy petition, request for Postponement of Debt Payment Obligations (PKPU), negative equity in the most recent financial report, unfair opinion (Adverse) from a public accountant, statement of non-expression of opinion (Disclaimer) from a trained public accountant, lack of financial report submission from the listed company, and absence of business income are all provided [4].

Some signs of a financial problem in a company can be summarised as follows. These include corporate failure or business failure in meeting financial objectives inside a firm, economic failure, which is the breakdown of the broader economic system in a nation or area, The phenomenon of a firm experiencing bankruptcy insolvency—a failure to pay short-term commitments that impacts the failure to pay long-term liabilities as well—causes technical insolvency when the corporation is unable of settling its immediate financial commitments. Legal bankruptcy, or bankruptcy brought on by legal issues or other major infractions committed by the corporation, necessitates the court declaring the company bankrupt in the end [5].

Indicators to determine financial difficulties include delays in delivery of goods orders, decreased product quality, loss of customer confidence, and inability to meet operational costs and company losses [6]. Numerous financial ratios may be used to assess financial success A liquidity margin is a measure of statistical significance used to evaluate a corporation's capability to repay its short-term borrowed funds. The current ratio, or current ratio (CR), is the ratio of current assets to current liabilities for a given entity. A larger ratio signifies that the enterprise has a bigger capacity to fulfil its short-term financial obligations. But, an excessively high percentage also suggests that the company's working capital is not productive, which drives up expenses and, naturally, reduces earnings. If this pattern persists, it will lead to financial issues. This is by several studies such as [7]–[13] which state that current ratio (CR) affects financial distress.

A corporation that has a lot of leverage will be under pressure from the economy. The leverage exchange idea, which was proposed by Brigham and Houston, is a tradeoff theory that contends that businesses swap the tax advantages of debt financing for the risks associated with possible bankruptcy [14]. An escalation in debt levels leads to elevated levels of financial distress, consistent with the trade-off framework [15]. Most companies experience financial difficulties because they face solvency problems, namely their total assets are not enough to pay all debts [16]. The debt to assets ratio (DAR) has an impact on the incidence of

financial distress. Likewise, [16]–[22] state that leverage affects financial distress.

The success of the business is also significantly influenced by the firm size, or FS, or company size factor. In several studies, for example [23] Depending on firm sizing, the influence of both liquidity and profitability on financial distress may be limited. Consistent with the study undertaken by [24], it states that company size moderates liquidity on financial distress [24].

A multitude of studies have been undertaken employing financial parameters to evaluate the structural soundness of a corporation. This study aims to determine the extent of COVID-19's impact on financial distress by examining the variables of Current Ratio and Debt to Asset Ratio, with firm size as a moderating factor.

2. LITERATURE REVIEW

2.1 Trade-off Theory

stated that For the simple reason that profitable businesses will always want to lower their tax burden by taking on more debt, which will lower the total amount of taxes the business must pay [25]. Debt utilization can lessen financial hardship, but only to a limited extent. After then, utilizing debt will actually make things more difficult financially since the increased advantages of using debt are not offset by the increased costs associated with having financial troubles.

The trade-off hypothesis, as proposed by Brigham and Houston, is a capital structure theory that delineates the trade-off between the tax advantages derived from debt financing and the challenges arising from the danger of bankruptcy [26].

2.2 Theory Value of the Firm

Increasing the firm's value is a company's primary goal, according to the Theory of the Firm [27].

Theory of the firm is thus also closely related to the behavior of managers in determining their capital structure or also related to managerial decisions about debt. Therefore, it is evident that when the firm chooses to pursue future investment prospects, it is necessary to consider the presence of easily payable debt. This approach helps to optimize the value of the company, as evidenced by a high market to book value.

2.3 Financial Distress

Financial distress is defined as a decline or even a condition of decline [28]. According to [29], the term "financial distress" refers to a wide range of circumstances in which businesses encounter financial problems. These circumstances are sometimes referred to as failure, insolvency, default, and bankruptcy. If a business realizes that its finances are precarious, it will treat its shareholders as creditors.

Because of these conditions trigger shareholders to exit the company. If the company fails to solve the financial condition, then it is a warning that financial difficulties lead to bankruptcy.

Meanwhile, [29] Applying Multiple Discriminate Analysis (MDA) to forecast bankruptcy probability in a small sample of companies, Altman developed the Z-Score model. This model is a weighted average of key financial ratios: Working Capital to Total Assets (WC/TA), Retained Earnings to Total Assets (EAT/TA), Earnings Before Interest & Taxes to Total Assets (EBIT/TA), Market Value to Total Liabilities or Total Assets (MV/TA), and Sales to Total Assets (Sales/TA). MDA provides a more comprehensive measurement by comparing these financial ratios.

2.4 Current Ratio

Research indicates that experts use the current ratio as a substitute for the liquidity ratio to assess the company's ability to fulfill its obligations [30]. This is because the current ratio can use the assets available to the corporation to meet its commitments. If the company's current assets exceed its liabilities, then it can be said that it has fulfilled its responsibilities. Businesses that can pay their bills on time are less likely to run into financial trouble.

According to [25] the current ratio is a financial metric used to evaluate a

company's ability to meet its short-term obligations or loans that are nearing maturity when considered collectively. Additionally, the current ratio and short-term debt are factors that influence the current ratio number [31] states that the current ratio is the proportion of a company's current assets to its current fixed obligations. Research by [7], [12], [32]–[35] states that current ratio affect the financial distress.

2.5 Debt to Equity Ratio

The debt-to-asset ratio is a matrix that tells us how much of our total capital comes from loans [25]. According to [36] the debt to asset ratio is a metric used to quantify the proportion of total debt into total assets [32]. This ratio displays the amount of debt utilized to fund the assets that the business uses to run its operations [37]. The higher the DAR ratio, the more reliant the business is on outside parties (creditors), and the higher the costs associated with the debt (interest) that the business must pay.

The theory conveyed by Brigham and Houston, Debt ratio is a ratio used to calculate how far funds are provided by creditors [6]. The riskier the firm and the riskier the creditors' demands for more compensation, as shown by the greater ratio. A debt to equity ratio (DER) evaluates the proportion of a company's financing that comes from debt and its ability to repay debts using equity. A higher Debt-to-Equity Ratio (DER) signifies that the overall debt of the corporation exceeds its total equity capital, therefore augmenting the financial

obligations imposed on the company by external parties, namely creditors. The debt to asset ratio quantifies the percentage of total assets that are funded by the creditors of the company [38]. Research conducted by Kebede et al (2024). Ogachi et al (2020), Susdaryo et al (2021), Dwiantari & Artini, (2021) stated that debt to assets [19], [35], [36], [37]

2.6 Firm Size

Quantitative findings from random forest algorithms using SHAP values indicate a higher likelihood of insolvency and financial hardship for firms facing difficulties in obtaining funding, younger companies, and companies burdened with significant debt. Furthermore, the scale of the organization and the level of expertise possessed by its managers also exert influence on the manifestation of financial failure [39]. The major influential factors of economic distress in Ethiopia include liquidity, profitability, leverage, firm size, capital adequacy, managerial efficiency, cash generation capability, inflation, and interest rate [40].

Key financial indicators for crisis forecasting include return on capital employed, cash flow against total liabilities, asset turnover ratio, fixed assets over total assets, debt service to equity ratio, and enterprise size (logarithmic total assets) [41]. Company size significantly impacts financial difficulty [42]. Some studies confirm that company size affects financial distress [43], while others suggest it has no effect [44].
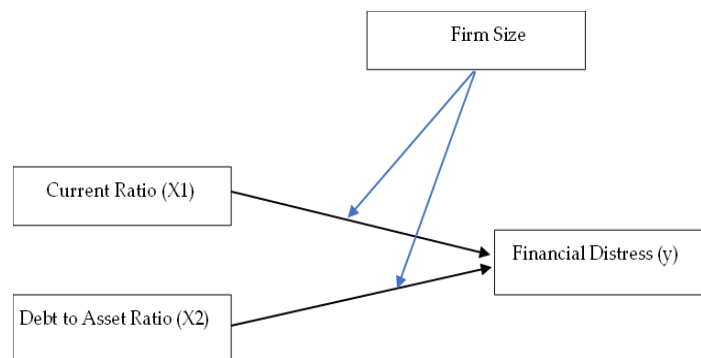
2.7 Framework and Hypothesis

Figure 1. Research Model

Based on the conceptual framework, the following hypothesis is formed:

H1	:	The current ratio exerts a detrimental impact on financial distress.
H2	:	The debt-to-asset ratio contributes positively to financial distress.
H3	:	The size of a firm might minimize the impact of the current ratio on financial distress.
H4	:	Firm size can modulate the impact of the debt-to-asset ratio on financial distress.

3. METHODS

3.1 Research Approach

This study is categorized as quantitative causality research, which involves using statistical techniques or other quantification methods to obtain results [45]. Causation research focuses on establishing quantitative relationships between two or more variables, highlighting how the independent variable influences the dependent variable [46]. The objective is to investigate the influence of financial ratios on financial distress, with firm size acting as a moderating variable to either enhance or diminish the positive relationship between the independent and dependent variables. The study utilizes three categories of variables: financial distress characteristics assessed using Z-Score calculations, leverage variables represented by the debt to asset ratio (DAR), and liquidity variables represented by the current ratio (CR).

3.2 Population and Sample

Population is the entire set of characteristics of the object under study, or the entire analysis / result reduction unit, which is limited by certain criteria. This research period was conducted from 2018 to 2023 with a total population of 263 companies. From this population, observations were made in accordance with the following selection criteria and a total of 40 companies were sampled.

3.3 The Data

Quantitative statistics are used in this study. The quantitative information is taken from secondary data acquired by doing searches on the Indonesia Stock Exchange and other representative corporate websites to get information on each of these metrics.

The data presented in this study underwent processing using Microsoft Excel and Eviews 13 software using panel data moderation regression. Microsoft excel is used to find and calculate financial ratios. Eviews 13 software is used to process data. Software eviews 13 to make comparisons during the study period, Prior to and during the COVID-19 pandemic.

Combined panel data is formed by combining time series with cross-section data. Data having one or more variables that will be monitored in a single observation unit over a predetermined amount of time are called time series data. Cross section, on the other hand, is observation data collected at a single moment from several observation units [41].

Panel data was chosen for this study because it covers a large number of organizations and a period of time spanning several years. First, as this study covers a five-year time range, specifically from 2018 to 2023, the usage of time series data is proposed. Next, since this study employed data from several firms as research samples, the cross section itself was used.

$$Y_{ti} = \alpha + b1X1_{ti} + b2X2_{ti} + e$$
$$Y_{ti} = \alpha + b1X1_{ti} + b2X2_{ti} + b6X11_{ti} + b7X2Z_{ti} + e$$

Description:

Y	=	Dependent variable (Financial Distress)
A	=	Constant
X1	=	Current Ratio
X2	=	debt to asset ratio
Z	=	Firm Size
e	=	error term
t	=	time
i	=	company

4. RESULTS AND DISCUSSION

4.1 Results

a. Analysis Multicollinearity Test

The multicollinearity test is employed to determine whether the regression model has detected a significant relationship among the independent variables.

With the Variance Inflation Factor (VIF) approach, this test may be determined. The following is known decision making [42]. A Variance Inflation Factor (VIF) value above 10 indicates multicollinearity, while a VIF below 10 indicates the absence of multicollinearity. The multicollinearity test results of this study are shown in the following table:

Table 1. Multicollinearity Test

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
X1CR	0.001583	1.354415	1.271133
X2DAR	1.950220	5.060129	2.252995
ZFS	129.4082	328.7594	1.081887
C	181.2297	346.4023	NA

The Findings of the Multicollinearity Test using the Variance Inflation Factor (VIF) technique in Table 1 indicate that there is no issue of multicollinearity, as the centered VIF value of each independent variable is below 10.

b. Chow Test

As can be observed from the results of choosing the model, the Chow test is used to choose between the fixed effect model (FEM) and the common effect model (CEM) in panel data regression. It is well known that the following is how decisions are made [43]:

H_0 rejected	=	CEM model selected (prob > 0.05)
H_0 accepted	=	FEM model selected (prob < 0.05)

The results of the Chow test, which compares the fixed effect model (FEM) with the common effect model (CEM) to see which is better, are shown below.

Table 2. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	103.992162	(65,321)	0.0000
Cross-section Chi-square	1225.088307	65	0.0000

Source: Eviews 9 Workfile

The Chow test results in Table 2 show a probability value of 0.0000. The CEM is chosen if the cross-section chi-square value is more than 0.05, while the fixed effect model (FEM) is used if the cross-section chi-square value is below 0.05, as is the case with a value below 0.0000.

c. Hausman Test

The Hausman test is used to evaluate the random effect model (REM) and the fixed effect model (FEM), the two statistical models selected for panel data regression. It is well known that the following is how decisions are made. [43]:

H_0 rejected	=	REM model chosen (prob > 0.05)
H_0 accepted	=	FEM model selected (prob < 0.05)

This section presents the findings of the Chow test, which evaluates the Fixed Effect Model (FEM) and the Random Effect Model (REM) to ascertain their respective superiority.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.

Cross-section random	1.721910	4	0.7867

The estimation results of the Hausman test, shown in Table 3, depict a random cross-section of 0.7867. The above statistics clearly indicate that the cross-section random value is 0.7867, which is greater than 0.05. Therefore, the null hypothesis (H0) is statistically valid, and the Random effect model (REM) is the suitable approach to use.

Table 4. Panel data regression results of common effect model (CEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
_1CR	13.02992	46.65841	0.279262	0.7802
_2DAR	92.85028	23.93200	3.879754	0.0001
FSXCR	-1.097872	1.378208	-0.796594	0.4262
FSXDAR	-3.538456	1.010607	-3.501318	0.0005
C	298.1865	72.74044	4.099321	0.0001
R-squared	0.349775	Mean dependent var		315.9732
Adjusted R-squared	0.343123	S.D. dependent var		980.3030
S.E. of regression	794.5156	Akaike info criterion		16.20589
Sum squared resid	2.47E+08	Schwarz criterion		16.25616
Log likelihood	-3203.766	Hannan-Quinn criter.		16.22580
F-statistic	52.58249	Durbin-Watson stat		0.067222
Prob(F-statistic)	0.000000			

Based on the results of the common effect model (CEM) panel data regression, the relative coefficients of each variable—the dependent variable, financial hardship; the independent variable, CR; the moderating variable, FS—are calculated. Given the data in Table 4.8, the panel data regression can be calculated in the following manner:

$$Y = 298.4756 + 11.78392X1 + 93.38113X2 + 11.43670\ X1Z -1.065089X1Z- -3.560209X2Z+ e$$

Description:

Y	=	financial distress (FD)
α	=	Constant
X1	=	current ratio (CR)
X2	=	debt to asset ratio (DAR)
X1Z	=	Firm Size (FS)
X1Z	=	Interaction between CR and FS
X2Z	=	Interaction between DAR and FS
e	=	Error

From the regression equation it can be concluded that:

a) The constant (C) is 298.4756 which states that if the amount of variable X consisting of CR, DAR and the moderating variable FS is 0, the value of variable Y, FD is 298.4756. The current ratio (CR) coefficient is 11.78392 which means that every 1 unit increase in the CR variable will result in an increase in the FD value of 11.78392 assuming that the independent variable is constant.

b) The coefficient of debt to asset ratio (DAR) is 93.38113 which means that each increase of 1 unit of DAR variable will result in an increase in FD of 93.38113 with the assumption that the independent variable is constant.

c) The return on assets (ROA) coefficient is 0.336114 which means that every 1 unit increase in the ROA variable will result in an increase in FD of 0.336114 with the assumption that the independent variable is constant.

d) The CR coefficient with FS moderation is -1.065089 which states that every 1 unit increase in the CR variable moderated by FS will result in a decrease in FD by 1.065089 with the assumption that the independent variable is constant.

e) The DAR coefficient with FS moderation is -3.560209 which states that every 1 unit increase in the DAR variable moderated by FS will result in a decrease in FD by 3.560209 with

the assumption that the independent variable is constant.

d. Significance Test t

In this partial hypothesis testing, it is carried out with the aim of testing the effect of the independent variables CR, DAR on the dependent variable FD. The variable that moderates Fixed effects can independently or partially attenuate the impact of the independent variable on the dependent variable. According to [44], the foundation for decision making is established as follows:

If the calculated t_count number is less than the critical t_table value, then the null hypothesis H1 is rejected, indicating that the independent variable does not depend on the dependent variable.

If the true value of t_hitung is greater than the critical value of t_tabel, then the null hypothesis H1 is accepted, indicating that the independent variable has an impact on the dependent variable.

If the probability t-statistic value is greater than α 0.05, the null hypothesis H1 is rejected, indicating that the independent variable does not have any impact on the dependent variable.

The t table calculation is obtained by calculating n - k - 1 = 240 - 7 - 1 = 232, t table = 1.651448. Based on the partial t significance test results in Table 4.9 above, the following conclusions can be drawn:

1. Table 4 shows that the current ratio (CR) variable has a t_count value of [0.279262] < t_table of 1.651448 with a probability level of 0.7802 < 0.05, so H_1 is rejected, which means that the current ratio (CR) has no negative effect on financial distress (FD).
2. Table 4 shows that the debt to asset ratio (DAR) variable has a t_count value of [3.879754] > t_table of 1.651448 with a probability level of 0.0001 <0.05, so H_2 is accepted, which means that the debt to asset ratio (DAR) has a negative effect on financial distress (FD).

3. FS-moderated CR testing Table 4 shows that the current ratio (CR) variable moderated by FS has a t_count value of -0.796594 < t_table of 1.651448 with a probability level of 0.4262 < 0.05, so H_3 is rejected, which means that FS does not moderate the effect of CR on FD.
4. FS-moderated DAR test Table 4 shows that the debt to asset ratio (DAR) variable moderated by FS has a t_count value of -3.501318> t_table of 1.651448 with a probability level of 0.0001 <0.05, so H_4 is rejected, which means that FS does not moderate the effect of DAR on FD.

e. Test Coefficient of Determination (R^2)

The coefficient of determination (R^2) is a statistical test used to quantify the extent to which a model can account for the fluctuations observed in the dependent variable. Coefficients of determination (R^2) measuring the ability of the dependent variables to be best explained by the regressors. According to [44] the decision making is as follows:

Based on the coefficient of determination test value (R^2 test) approaching 1, the analysed data produced precise results. An analysis of the data revealed inaccurate results as the coefficient of determination test value (R^2 test) is close to zero. The Adjusted R^2 value, estimated to be 34.97%, is calculated by using the R^2 test results presented in Table 4.15. Hence, it can be concluded that 66.03% of the impact on FD can be attributed to components not considered in this study. The remaining independent variables, CR, DAR, and FS moderation variables, may account for 34.97% of the explanation or characterization of FD.

4.2 Discussion

The results of this study are in line with the results of research conducted by Kisman (2019), Cladera et al (2021), Santosa et al., (2020) Difoasih & Sihombing (2023), Khaliq et al., (2014) Oktavian & Handoyo (2023), Ceylan, (2021) [10], [14], [17], [28], [29], [31], [43].

Financial distress is less likely to occur if the company's liquidity in the form of CR rises. On the other hand, there will likely be more financial turmoil if the company's liquidity in the form of CR declines. This demonstrates that there is a higher chance of financial trouble the lower the CR score.

Since the sample firms have a high average CR, which indicates that they can generally pay off their sizable amount of short-term debt, it is plausible that CR has no influence on FD. A company's likelihood of defaulting is reduced when it has strong liquidity since it indicates that it can pay off its short-term debt. A company's liquidity level is a good indicator of its financial health since it shows that it has enough liquid assets to pay its debts and is thus less likely to have financial distress.

The results of this study are different from research conducted by Sehgal at.all (2021), Ogachi (2020), Susdaryo et al. (2021), Dwiantari & Artini (2021) [19], [36], [37], [40] where As a result of the company's increased risk of future inability to pay its obligations, which leads to bankruptcy, academics conclude that a company's potential for financial issues increases with its debt load. In the trade-off theory, actually a high capital structure does not always result in low or falling profits, if the company has debt as long as the capital structure is not optimal, it will not necessarily result in losses in the company, even profits increase. When a company increasingly uses the amount of short-term debt or long-term debt, there is a risk of difficulty making payments at a specified time or in the future because the company's debt is higher than the assets owned, so the company is unable to generate more profit to pay debts and interest. So that the higher the level of capital structure, the higher the financial distress.

This research is the same as research conducted by Mujiani and Jum'atul (2020), Ashsifa et al. (2023), Henryanto Wijaya (2022), Mujiani (2020), Rahmadianti & Asyik (2021) and Tania (2020) which state that FS strengthens the influence of CR on FD. Current Ratio (CR) is the company's ability to meet its current obligations, so that the adequacy of current assets to meet the company's current obligations will have a good impact on financial performance and can reduce the risk of default. However, if the CR value is too large, which is more than 2.0, it can cause a lot of current assets to settle in the company and has a risk of not being used optimally. This will have an impact on the lower profits that will be obtained, which in turn will have an impact on symptoms of bankruptcy or financial distress (FD).

This research is in line with research conducted by Dewantari (2023), Lela et al (2021), (Hardiyanto, et al, 2014), Safitri et al, (2023), Kariani (2017), Henryanto Wijaya (2021), Lela et al (2021), Safitri et al (2023) and Aginio Bimantio, M., & Ichsanuddin Nur, D. (2023). A high ratio value means that more money is being borrowed to finance investments in business assets. A corporation that uses excessive amounts of debt runs the risk of falling into the category of extreme leverage, or extreme debt, which means that it is ensnared in a high degree of debt and finds it challenging to repay. As a result, the business should weigh the benefits of taking on several loans and the sources from which those benefits might be drawn. The company's position improves with a decreased debt ratio. Because, it means that only a small portion of the company's assets are financed with debt. Smaller company sizes tend to have more debt. This is because small companies still have opportunities for higher growth. For small companies, they will make more loans in order to increase company growth.

5. CONCLUSION

The examination of the variables influencing financial distress yielded the following findings:

1. Based on the analysis's findings, hypothesis 1, which claims that the current ratio has a detrimental impact on financial hardship from 2018 to 2023, is denied. A company's likelihood of defaulting is reduced when it has strong liquidity since it indicates that it can pay off its short-term debt. A company's liquidity level is a good indicator of its financial health since it shows that it has enough liquid assets to pay its debts and is thus less likely to have financial distress.

2. The study accepts Hypothesis 2, which claims that financial distress is positively impacted by the debt to asset ratio. Due to the fact that financial hardship is negatively impacted by the debt to asset ratio (DAR) variable from 2018 to 2023 (FD). This is due to the possibility of difficulties in paying payments at a certain time or in the future if a firm employs a large amount of debt, whether it be long-term or short-term, since the company's debt exceeds its assets. But the amount of debt the business has is utilized to reduce the likelihood of financial difficulties; for example, the business pays past-due debt and uses debt to boost output.

3. Accepted is hypothesis 3, which claims that from 2018 to 2023, business growth will mitigate the impact of current ratio on financial hardship. Large companies are able to finance management initiatives or acquire assets from outside the organization, increasing the company's ability to incur significant liabilities down the road. In the event that the firm possesses an excess of assets or assets that are not needed and do not generate revenue, its liquidity will decline, which will only lead to future obligations. An excessive amount of responsibility will cause financial distress.

4. Hypothesis 4 states that firm size moderates the debt to asset ratio on financial distress for the period 2018 to 2023 is accepted. The smaller the company size, the more likely it will have more debt. This is because small companies still have opportunities for higher growth. For small companies, they will make more loans in order to increase company growth. companies with a large scale have higher assets when compared to companies with a small scale. Companies with a large scale have greater assets to cover their debts. The imbalance between the amount of company capital and the amount of accounts payable can be bad for the company. Too much debt can result in a large interest expense and burden the company.

5.1 Research Implications

a. Theoretical Implications
   1. Current ratio is not always considered liquid, but needs further analysis of the composition of current assets.
   2. High debt to asset ratio is not always a risk of financial distress, because increasing debt at a certain point is one way to avoid financial distress.

b. Managerial Implications
   1. The company should further analyze the composition of its current assets.
   2. The company can increase debt at a certain point to avoid financial distress.

ACKNOWLEDGEMENTS

REFERENCES

[1] M. G. Ayu, "Kementerian Perindustrian Terapkan Revolusi Industri 4.0," *Cyberhub*, 2022.

[2] N. Helmi, "REVOLUSI INDUSTRI 4.0 DAN PENGARUHNYA BAGI INDUSTRI DI INDONESIA," *Kementerian Pertahanan Republik Indonesia*, 2019.

[3] M. E. Fadliansyah, "Laba Perusahaan Properti Anjlok hingga 60%, Bagaimana di Semester II? Artikel ini telah tayang di Katadata.co.id dengan judul 'Laba Perusahaan Properti Anjlok hingga 60%, Bagaimana di Semester II?' , https://katadata.co.id/finansial/makro/5f342f918d36a/la," *Kata Data*, 2020.

[4] Bareksa, "Demi Lindungi Investor, BEI Terapkan Notasi untuk Emiten Bermasalah," *bareksa*, 2018.

[5] R. R. Gamayuni, "Analisis Ketepatan Model Altman sebagai Alat untuk Memprediksi Kebangkrutan," *J. Akunt. dan Keuang.*, vol. 16, no. 2, 2011.

[6] I. P. Sari, A. Susbiyani, and A. A. Syahfrudin, "Analisis Faktor-Faktor yang Mempengaruhi Kondisi Financial Distress pada Perusahaan yang Terdapat di BEI Tahun 2016-2018 (Studi Empiris pada Perusahaan Manufaktur Sub Sektor yang Terdaftar di Bursa Efek Indonesia)," *J. Ilm. Akunt. dan Humanika*, vol. 9, no. 2, 2019.

[7] D. F. Santosa, L. Anggraeni, and K. Pranowo, "Determinan Financial Distress Perusahaan Subsektor Ritel di Bursa Efek Indonesia," *J. Apl. Bisnis dan Manaj.*, vol. 6, no. 1, p. 128, 2020.

[8] D. Rusli and T. B. Dumaris, "Pengaruh Manajemen Modal Kerja Terhadap Financial Distress Dengan Ukuran Perusahaan Sebagai Variabel Kontrol Pada Perusahaan Sektor Pertambangan," *J. Akunt. Dan Manaj.*, vol. 17, no. 2, pp. 1–10, 2020.

[9] A. Mahaningrum and N. Merkusiwati, "Pengaruh rasio keuangan pada financial distress," *E-Jurnal Akunt.*, vol. 30, no. 8, p. 1969, 2020.

[10] T. Mutiara and D. Septyanto, "Analisis faktor-faktor yang mempengaruhi tingkat financial distress sebelum dan selama pandemi covid-19," *J. Bisnis Dan Manaj.*, pp. 69–87, 2022.

[11] N. Noviyani and E. Yulianti, "Faktor Penentu Financial Distress pada Perusahaan Sektor Pertanian yang Terdaftar di BEI Periode 2015-2019," *Stud. Ilmu Manaj. dan Organ.*, vol. 3, no. 2, pp. 315–326, 2022.

[12] G. Difoasih and P. Sihombing, "Financial Distress Solutions through Improved Financial Performance and GCG with CSR as moderating variable for consumer services companies," *J. Manaj. (Edisi Elektron.*, vol. 14, no. 1, pp. 156–171, 2023.

[13] A. A. Lestari and D. E. Kusrini, "Analisis Financial Distress Menggunakan Regresi Data Panel," in *Seminar Nasional Official Statistics*, 2021, vol. 2021, no. 1, pp. 264–273.

[14] N. Umdiana and H. Claudia, "Struktur modal melalui trade off theory," *J. Akunt. Kaji. Ilm. Akunt.*, vol. 7, no. 1, p. 52, 2020.

[15] N. Abdioğlu, "The Impact of Firm Specific Characteristics on The Relation Between Financial Distress And Capital Structure Decisions," *J. Bus. Res. - Turk*, vol. 11, no. 2, pp. 1057–1067, 2019, doi: 10.20491/isarder.2019.655.

[16] R. Crespí-Cladera, A. Martín-Oliver, and B. Pascual-Fuster, "Financial distress in the hospitality industry during the Covid-19 disaster," *Tour. Manag.*, vol. 85, p. 104301, 2021.

[17] H. D. Platt and M. B. Platt, "Financial distress comparison across three global regions," *J. Risk Financ. Manag.*, vol. 1, no. 1, pp. 129–162, 2008.

[18] B. P. V. Ninh, T. Do Thanh, and D. V. Hong, "Financial distress and bankruptcy prediction: An appropriate model for listed firms in Vietnam," *Econ. Syst.*, vol. 42, no. 4, pp. 616–624, 2018.

[19] Z. Kisman and D. Krisandi, "How to predict financial distress in the wholesale sector: Lesson from Indonesian Stock Exchange," *J. Econ. Bus.*, vol. 2, no. 3, 2019.

[20] R. V. D. Giarto and F. Fachrurrozie, "The effect of leverage, sales growth, cash flow on financial distress with corporate governance as a moderating variable," *Account. Anal. J.*, vol. 9, no. 1, pp. 15–21, 2020.

[21] R. A. Dwiantari and L. G. S. Artini, "The effect of liquidity, leverage, and profitability on financial

distress (case study of property and real estate companies on the idx 2017-2019)," *Am. J. Humanit. Soc. Sci. Res.*, vol. 5, no. 1, pp. 367–373, 2021.

[22] Y. I. Savery, H. Haninun, and R. Riswan, "FINANCIAL PERFORMANCE TO DETERMINE FINANCIAL DISTRESS CONDITIONS," *J. Manag. ACCOUNTING, Gen. Financ. Int. Econ. ISSUES*, vol. 3, no. 2, pp. 598–611, 2024.

[23] I. Ashsifa, M. T. Kuncoro, and N. R. Salisa, "Analisis Rasio Keuangan Terhadap Financial Distress Dengan Ukuran Perusahaan Sebagai Variabel Moderasi," *TECHNOBIZ Int. J. Bus.*, vol. 6, no. 1, pp. 21–28, 2023.

[24] S. Mujiani and W. Jum'atul, "Ukuran Perusahaan sebagai pemoderasi faktor-faktor yang mempengaruhi Financial Distress," *J. Akunt. Dan Keuang.*, vol. 2, no. 2, pp. 149–165, 2020.

[25] N. M. Nugraha, B. T. Fitria, D. Puspitasari, and E. Damayanti, "Does Earning Per Share (EPS) Affected By Debt To Asset Ratio (DAR) And Debt To Equity Ratio (DER)?," *PalArch's J. Archaeol. Egypt/Egyptology*, vol. 17, no. 10, pp. 1199–1209, 2020.

[26] L. Syafa'ah, "Good Corporate Governance and Leverage of Financial Performance: Literatur Review," *IPTEK J. Proc. Ser.*, no. 1, pp. 259–265, 2021.

[27] D. Salvatore, "Ekonomi manajerial dalam perekonomian global," *Jakarta: Salemba Empat*, 2005.

[28] H. D. Platt and M. B. Platt, "Predicting corporate financial distress: Reflections on choice-based sample bias," *J. Econ. Financ.*, vol. 26, no. 2, pp. 184–199, 2002.

[29] R. S. Hamzah and M. L. Annisa, "Altman's Z"-Scores for financial distress predictions among food and beverages industry in Indonesia," *Own. Ris. dan J. Akunt.*, vol. 6, no. 1, pp. 1056–1068, 2022.

[30] S. Aslamiah, S. Karyatun, and K. Digdowiseiso, "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," *J. Syntax admiration*, vol. 4, no. 4, pp. 583–596, 2023.

[31] H. Agha, Mba, and Mphil, "Impact of Working Capital Management on Profitability and Sustainable Growth," *Eur. Sci. J.*, vol. 10, no. 1, pp. 374–381, 2014.

[32] A. Khaliq, B. H. M. Altarturi, H. M. T. Thaker, M. Y. Harun, and N. Nahar, "Identifying Financial distress firms: a case study of Malaysia's government linked companies (GLC)," *Int. J. Econ. Financ. Manag.*, vol. 3, no. 3, pp. 141–150, 2014.

[33] E. Oktavian and S. Handoyo, "The Effect of Leverage, Profitability, Liquidity Ratio, and Inflation towards Financial Distress: Study From the Manufacturing Industry in Indonesia," *Int. J. Manag. Sci. Appl.*, vol. 2, no. 1, pp. 11–27, 2023.

[34] N. Indriaty, D. Setiawan, and Y. A. Pravasanti, "The effects of financial ratio, local size and local status on financial distress," *Int. J. Econ. Bus. Account. Res.*, vol. 3, no. 01, pp. 38–42, 2019.

[35] I. E. Ceylan, "The impact of firm-specific and macroeconomic factors on financial distress risk: A case study from Turkey," *Univers. J. Account. Financ.*, vol. 9, no. 3, pp. 506–517, 2021.

[36] H. Siagian, Z. J. H. Tarigan, and F. Jie, "Supply chain integration enables resilience, flexibility, and innovation to improve business performance in COVID-19 era," *Sustainability*, vol. 13, no. 9, p. 4669, 2021.

[37] Q. U. Zaman, W. Akhter, M. Abdul-Majid, S. I. U. Hassan, and M. F. Anwar, "Does bank affiliation affect firm capital structure? Evidence from a financial crisis," *J. Econ. Adm. Sci.*, vol. 39, no. 1, pp. 150–174, 2023.

[38] L. J. Gitman, R. Juchau, and J. Flanagan, *Principles of managerial finance*. Pearson Higher Education AU, 2015.

[39] İ. Bozkurt and M. V. Kaya, "Foremost features affecting financial distress and Bankruptcy in the acute stage of COVID-19 crisis," *Appl. Econ. Lett.*, vol. 30, no. 8, pp. 1112–1123, 2023.

[40] E. Abdu, "Financial distress situation of financial sectors in Ethiopia: A review paper," *Cogent Econ.*

Financ., vol. 10, no. 1, p. 1996020, 2022.

[41] B. A. Tri and N. Prawoto, "Analisis Regresi Dalam Penelitian Ekonomi & Bisnis: Dilengkapi Aplikasi SPSS & Eviews," *Jakarta PT RajaGrafindo Persada*, 2016.

[42] I. Ghozali, "Application of multivariete analysis with program IBM SPSS 23." VIII Printing. Semarang: Publishing Agency Diponegoro University, 2016.

[43] V. A. RATNASARI, "Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderasi: Kasus Pada Perusahaan Pertambangan Di Indonesia," 2021.

[44] I. Ghozali, *Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi*. Semarang: Badan Penerbit Universitas Diponegoro, 2013.