

Research Article

Factors Predicting Financial Distress Retail Industry in Indonesia

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Abstract: The Indonesian retail industry has experienced significant changes during the 2020-2023 period, starting with the Covid-19 pandemic in early 2020. Although it is gradually showing signs of recovery, the companies have felt a huge impact, such as many stores closing, increasing operational costs, and decreasing consumer spending, which are challenges for retail business actors to maintain their business continuity. This study aims to determine the factors that can be predictors of the financial distress of retail industry companies in Indonesia. The sample in this study was retail industry companies listed on the Indonesia Stock Exchange for the 2019-2023 period and had complete financial reports, resulting in 10 companies. Data analysis uses the logistic regression method. The results of the study show that the debt-to-equity ratio (DER) and return on asset (ROA) have a significant effect, while the current ratio (CR), total asset turnover (TATO), and operational cash flow margin (OCF margin) do not have a significant effect on financial distress. Thus, retail industry companies can utilize debt as a financing strategy to accelerate growth and need to focus on efficient asset utilization so that they can increase revenue and profit margins in order to achieve better financial performance and reduce the risk of financial distress.

Keywords: Retail Industry; Current Ratio (CR); Total Asset Turnover (TATO); Debt to Equity Ratio (DER); Return on Asset (ROA)

1. Introduction

Financial distress is a condition of a corporation facing difficulties in mainly meeting its financial obligations, either to internal or external stakeholders, such as remuneration to employees, incentives for the boards, or liabilities to suppliers. Financial distress will surely have a significant impact to the companies' sustainability, therefore it is crucial to identify the prediction parameters. The Indonesian retail industry has experienced significant changes during the 2020-2023 period, starting with the Covid-19 pandemic in early 2020.

WHO declared a global health emergency on January 30, 2020, in response to the coronavirus (COVID-19) that was causing sickness. On March 2, 2020, two individuals who were proven to have contracted the COVID-19 virus from a Japanese, marked the beginning of the COVID-19 pandemic in Indonesia. As of April 9th, the epidemic had spread to 34 provinces, with South Sulawesi, East Java, and DKI Jakarta being the most vulnerable. Numerous campaigns and prevention distribution efforts were conducted [2]. Although the government's assistance emergency helped lessen the worst effects, the COVID-19 pandemic's waves and the countermeasures that followed have been extremely upsetting for

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the world economy. Different industries are more or less sensitive to the COVID-19 shock as it lasts longer [3]. When a plague happens, studies show that we need to take action to slow down the rapid increase of COVID cases. This will help keep the number of cases steady and reduce the strain on healthcare services. In response, many countries told shops, schools, and non-essential businesses to close, along with other places where people usually meet. Because many industries are not currently active, for example, many people in the retail and travel industries have lost their main source of income or are now unemployed [4] .

The COVID-19 pandemic in Indonesia caused a big drop in sales for retail businesses. Many retail businesses have to close because they can't make a profit anymore. According to data from the Indonesian retailer association, Aprindo, around 1,200 retail stores closed during the nine months of the pandemic in 2020. From January to March 2021, 90 retail stores shut down. This means that by March 2021, about 1,300 stores shut down [2] .

During the COVID-19 outbreak, some retail businesses managed to survive by using digital platforms and online marketplaces in Indonesia. They can change what they sell by creating new products. For example, they used to sell bags and clothes, but then they switched to selling cloth masks. Other industries that stayed strong during the COVID-19 pandemic include those that provide essential services like electricity, clean water, farming, raising animals, growing plants, and fishing. Similarly, businesses that are good at selling online continue to do well. This is because they use digital marketing, which has changed how we do business and serve customers. Even though computers and technology have been around for many years, digital transformation is still seen as new and important for retail businesses, especially because of the COVID-19 pandemic [2] .

Financial distress is metric important that allows company evaluate performance, health finances, and prospects continuity life they compared to with competitor [5] . Agency theory helps us understand the relationships between lenders and borrowers, especially during times of instability [6], [7] . During a struggling economy, lenders become more cautious, making it harder to get loans, as we saw during the financial crisis in 2008.[8] . Banks and financial institutions lend money to people and businesses, but they worry that some might not be able to pay it back. Because of this, they may raise interest rates and make it harder to get loans. [9] . When it's harder to get loans, businesses owned by bad actors struggle to keep money coming in. This makes it even harder for them to manage their finances. Lenders are more careful about giving loans when things are uncertain, which makes it harder for businesses to get the money they need. [5] .Companies that avoid financial difficulties are usually strong and show good financial performance, which can be seen in their financial ratios [10] . This research shows how financial ratios affect financial distress in the Indonesian retail industry from 2019 to 2023.

2. Preliminaries or Related Work or Literature Review

Many studies have been conducted on financial distress, but several previous research results show inconsistency. The outcome of study showed [10], [11] explain that CR has an effect on financial distress. The higher the CR, the more the firm is able to pay off its current liabilities and the firm must be able to manage the use of current assets so that it can avoid financial distress. However, research by [12]–[14] confirmation that CR has no effect on

financial distress. A high CR rate indicates the availability of funds that are not used optimally for the benefit of the company and are usually in the form of receivables. When the CR value is high, it does not imply that the company will avoid financial distress and conversely, a low CR value does not necessarily mean that the firm will involve financial distress.

The research outcome of [12], [15] explain that TATO has an effect on financial distress. A firm's high sales volume can maximize assets effectively to generate sales, but if the company does not pay attention to the costs incurred when generating sales, it is possible for the firm to face financial distress. On the other hand, research by [11], [16] revealed that TATO has no effect on financial distress. The high or low TATO value does not guarantee that the company is free from financial distress. A high TATO value illustrates the increasing efficacy of the firm in utilizing its assets to obtain sales that are predictable to offer benefits to the company. However, a high TATO value does not guarantee that the company will avoid financial distress because if the company cannot efficiently incur the costs, it will impact the income that the firm cannot pay its obligations, and experience financial distress.

Consistent with research by [11], [17], DER has an effect on financial distress. The higher the DER, the greater the composition of the company's long-term liabilities, which can increase the risk of default. DER will have a negative impact because the more manageable liabilities the firm has, the greater the debt burden that must be paid and can result in the firm's financial distress. This is different from research by [12], [14], [18], [19] which revealed that DER has no effect on financial distress. The firm's high liabilities can still be managed well by the company as a basis of operational funds for the firm. If the firm uses its debt as an increase in capital to help the company's operational activities, it will create large profits so that the company can manage its debt and be free from financial distress.

Research conducted by [10], [20] explains that ROA has an effect on financial distress. High ROA provides an opportunity for companies to experience reduced financial distress. Companies with good ROA will attract investors to analyze the financial situation based on the profits obtained in paying obligations and providing dividends so that they can predict the company's financial condition. However, the outcome of this study contradict the study of [21]–[23] which revealed that ROA has no result on financial distress. This can happen for the company has sufficient equity to bear the risk and has large total assets to control its expenses. Changes in company profits that tend to be stable do not have too big an impact on financial distress.

[23], [24] revealed the results of research on operating cash flow affecting financial distress. Cash flow from operating activities is a measure that determines whether a firm's business activities are able to generate cash that can be used to pay instalments and monitor the firm's operational performance. If a company has a large operating cash flow, the company's profit will increase and have an impact on increasing the company's value so that it avoids financial distress. The inequality of results is shown in the studies of [12], [14], [19] which explain that operating cash flow has no effect on financial distress. If a company has long-term loans based on poor investment, the company's operating cash flow cannot cover it so that it has no effect on financial distress.

Theory Signalling

Signal is an achievement occupied by corporation management that gives stakeholders an indication of in what way organization assessments the company's prospects. According to [25] signalling theory is a theory that explains how companies give signals to external parties, also in the method of positive signals or negative signals that are reflected in the economic reports published by the firm. An optimistic signal indicates that the firm's presentation is good so that stakeholders will receive good news, conversely, a negative signal indicates that the firm's presentation is declining or in a bad situation so that investors will receive bad news. Signal theory explains the reasons wherefore firms have the need to prepare certain news to outside groups based on the asymmetry of information between company management and external parties [26]. The importance of information published by the company has an impact on investor decisions as external parties where investors need complete, relevant, accurate, and timely information to consider whether to spend their stocks in the firm concerned. Signal theory is closely related to financial distress because in this situation the company must provide information to the market such as investors, creditors, and other stakeholders to reduce uncertainty related to their financial condition. The signals given by companies can influence their decisions regarding further investments, loans, or cooperation with other companies.

Financial Distress

Financial distress occurs when a business faces funding problems [27]. According to [11], financial distress is defined as a period of worsening financial conditions reflected in the company's inability or unavailability of funds to pay its maturing obligations [28]. A firm is said to be experiencing funding problems if: 1) it experiences financial distress for two consecutive years; 2) shows bad operating income, bad net income, bad book value of equity; 3) the firm is unable to meet its financial obligations by violating debt requirements accompanied by the elimination or reduction of dividend financing. Financial distress is an early indication that a company is experiencing financial difficulties which can be caused by economic problems, declining performance, poor management, and lack of supervision of financial conditions. Financial distress can be predicted through measurements with economic presentation indicators reflected in the firm's financial reports. Some of the variables used to forecast financial distress are liquidity, activity, solvency, profitability, and cash flow. The liquidity ratio measures the firm's capacity to chance short-period debts that are due [29]. The liquidity ratio used is the CR. Activity proportions are used to calculate the effectiveness of a firm in using its assets [29]. The activity ratio used is TATO. The solvency or leverage ratio is a ratio that measures how far a company's assets are financed by debt [29]. The solvency ratio used is the DER. The profitability ratio is a ratio that shows the company's ability to earn profit or gain [29]. The productivity ratio used is ROA. The cash flow ratio shows the firm's capacity to pay current obligations using its net cash flow. The cash flow ratio used is cash flow from operating activities.

3. Method

The population in this study is Retail Industrial Companies listed on the Indonesia Stock Exchange for the 2019-2023 period. Using a purposive sampling method for retail companies with complete financial reports, 10 companies were obtained as samples (Table 1). The

dependent variable in this study is financial distress on a nominal scale. The number 0 is a non-financial distress company, while the number 1 is a company that indicates financial distress. A company is financially distressed if the Net Operating profit is negative [30]. The independent variables in this study are the liquidity ratio using CR, the activity ratio using TATO, the solvability ratio using DER, the profitability ratio using ROA, and the cash flow ratio using OCF Margin. An explanation of each variable can be seen in Table 2. CR, TATO, DER, ROA, and OCF margins were used from 2020-2023 (4 years). The number of observation data in this study was 40 data observations (10 sample companies X 4 years), and the data was analyzed using the logistic regression method.

Table 1. Sample Company's Name

No.	Company's name
1.	PT Midi Utama Indonesia
2.	PT Supra Boga Lestari
3.	PT Estika Tata Tiara
4.	PT FKS Multi Agro
5.	PT Hero Supermarket
6.	PT Matahari Putra Prima
7.	PT Tigaraksa Satria
8.	PT Wahana Pronatural
9.	PT Wicaksana Overseas International
10.	PT Sumber Alfaria Trijaya

Table 2. Operational Variable

No.	Variable	Description	Scale
1.	Independent Variable:		
	X ₁ : CR	$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$	ratio
	X ₂ : TATO	$TATO = \frac{\text{Sales}}{\text{Total Assets}}$	ratio
	X ₃ : DER	$DER = \frac{\text{Total Liabilities}}{\text{Total Equity}}$	ratio
	X ₄ : ROA	$ROA = \frac{\text{Earning After Tax}}{\text{Total Assets}}$	ratio
	X ₅ : OCF Margin	$OCF\ Margin = \frac{\text{Operating cash flow}}{\text{Current liabilities}}$	ratio
2.	Dependent Variable	Y: Financial Distress 0= non-distress 1= distress	Nominal

4. Results and Discussion

Result

This study analyses the influence of CR, TATO, DER, ROA, and OCF margin on financial distress in retail industrial companies listed on the IDX. The first test is to test whether the model fits the observation data. The results of the Goodness Fit Model with the Hosmer and Lemeshow test (Table 3) show a Sig. 0.819 > 0.05, it can be concluded that the model fits the observation data. Next, the Overall Model Fit test was carried out to test whether the model formed was a good model. The Overall Model Fit results show a decrease of -2 Log Likelihood at step 0 and step 1, amounting to 32.12 (Table 4), so it can be concluded that the logistic regression model used in the research is good. The results of the Omnibus Tests of Model Coefficients (table 5) show a Chi² goodness of fit test value of 32.121 and

degree of freedom = 5 with sig. equal to $0.000 < 0.05$. These results show that the CR, TATO, DER, ROA, and OCF margin variables can explain the occurrence of financial distress in retail companies listed on the IDX.

Table 3. *Goodness Fit Model* (Hosmer & Lemeshow test)

Chi ²	Sig.
4.400	.819

Table 4. Overall Model Fit Test

Step	-2 Log Likelihood
0	54.548
1	22.427

Table 5. Omnibus Tests

		Chi ²	df	Sig.
Step 1	Step	32.121	5	.000
	Block	32.121	5	.000
	Model	32.121	5	.000

The magnitude of the influence of the CR, TATO, DER, ROA, and OCF margin variables which can explain the occurrence of financial distress conditions from the Nagelkerke R² results (Table 6) is 74.2%, the remaining 25.8% can be explained by other variables such as the inflation rate, unemployment rate, or dividend payout and reinvestment. The logistic regression model can predict 91.3% of non-distressed companies and 82.4% of distressed companies, so the overall accuracy of the logistic regression model is 87.5% (Table 7).

Table 6. Nagelkerke R²

Step	-2 Log likelihood	Nagelkerke R ²
1	22.427 ^a	.742

Table 7. Classification Table

		Predicted		Percentage Correct
Observed		Financial Distress non-distress	Distress	
Step 1	Financial Distress	21	2	91.3
	Non-distress Distress	3	14	82.4
Overall Percentage				87.5

The results of logistic regression testing of the influence of CR, TATO, DER, ROA, and OCF margin on the financial distress conditions of retail companies on the IDX with $\alpha = 0.05$ show that DER (sig. $0.004 < 0.05$) and ROA (sig. $0.002 < 0.05$) have a negative significant effect to financial distress conditions. CR (sig. $0.517 > 0.05$), TATO (sig. $0.380 > 0.05$), and OCF margin (sig. $0.958 > 0.05$) do not have a significant effect on financial distress conditions (table 8).

Table 8. Variables in the Equation

		B	Sig.
Step 1	CR	.927	.517
	TATO	.886	.380
	DER	-.214	.004
	ROA	-41.243	.002
	OCF Margin	.125	.958
	Constant	-3.081	.104

Discussion

The liquidity ratio proxied by CR in this study as a ratio that evaluates the company's capacity to pay off short-term liabilities using its current assets does not have significant effect on the financial distress condition of retail companies on the IDX. The result of this study is in line with studies of [12]–[14], [27], [31] which shows that there is no significant effect of CR on the condition of financial distress. CR is not a factor that can predict the financial distress of retail companies in Indonesia. When a company faces financial difficulties in paying off its overdue debts, the company can take out new loans to pay off these debts.

The activity ratio proxied by TATO in this study as a ratio that measures the company's effectiveness in managing its assets to generate sales does not have a significant effect on the financial distress condition of retail companies on the IDX. The result of this study is in accordance with studies of [11], [16], [32] which shows that there is no significant influence of TATO on the Company's financial distress condition. TATO does not affect the financial distress conditions of retail companies in Indonesia, even though the company has a high level of asset turnover, but if the sales volume is dominated by credit sales which can increase the company's receivables, then it is necessary to consider the costs arising from these credit sales. In addition, in retail companies, company assets dominated by inventory require time to be converted into cash.

The solvency ratio proxied by DER in this study is a ratio that measures the size of the company's use of debt compared to the company's equity, which has a significant negative effect on the financial distress condition of retail companies on the IDX. The result of this study is in line with the study of [33] which shows that there is a significant negative influence of DER on the company's financial distress condition. The greater the DER, the smaller the possibility of retail companies in Indonesia experiencing financial distress. Optimal debt levels and effective debt management for expansion can increase company value and provide good financial signals to investors and creditors.

The profitability ratio proxied by ROA in this study is a ratio that measures the company's capability to manage its assets to gain profits and has a significant negative effect on the financial distress condition of retail companies on the IDX. The result of this study is in line with studies of [17], [34] which shows that there is a significant negative influence of ROA on the company's financial distress condition. The results of this study show that profitability is a determining factor in the company's financial distress. A greater ROA shows that the use of company assets can generate profits that can be used to finance the company's operational activities, pay company obligations, and can be used for investment so that it can help the company avoid financial difficulties. The results of this research are also in accordance with the Resource Based View Theory which emphasizes the importance of internal resources, namely the company's ability to generate profitability so that it can achieve competitive advantage and financial stability so that the company can avoid financial distress.

The cash flow ratio proxied by OCF margin in this study, as a ratio that measures a company's ability to pay off its short-term debt using its operating cash flow, does not have a significant effect on the financial distress condition of retail companies on the IDX. The results of this study is in line with the results of studies of [14], [31] which shows that there is no significant influence of OCF margin on the company's financial distress condition. Companies with low OCF margins do not necessarily experience financial distress. If the

company can manage its cash flow, the company will still be capable of fulfilling its short-term debts and can avoid financial distress. On the other hand, a large OCF margin does not guarantee that the company will avoid financial distress. If the company has long-term loans and the investments made cannot meet financial needs, the company may experience financial distress.

5. Conclusions

The results of this study found that DER and ROA can be used as predictors of financial distress in the retail industry in Indonesia, while CR, TATO, and OCF Margin do not have a significant effect on financial distress, so they can be stated as not being predictors. Based on the findings that increasing DER can reduce the likelihood of financial distress, this opens up opportunities for retail companies to utilize debt as a financing strategy with the right approach. Debt needs to be managed with careful planning, including long-term debt arrangements that are generally more flexible in terms of payments. Debt can be used for expansion, such as opening new branches or products, and to increase the company's competitiveness by improving customer experience, such as the omnichannel shopping experience that is currently popular in the retail industry. Proper use of debt allows companies to accelerate growth so that they can increase revenue and profit margins. The results of the study also found that increasing ROA will reduce the likelihood of financial distress; this shows that retail companies need to focus on efficient asset management. Asset efficiency means that companies can generate more profit from the assets they own. Retail companies need to maintain optimal inventory levels, avoid asset waste, reduce unnecessary operating costs, and launch new products that have large profit margins. By doing these things, retail companies will be able to increase their competitiveness in the market so that they can achieve better financial performance and reduce the risk of financial distress. Further research can use macroeconomic variables such as inflation rate and unemployment rate, or variables related to efficiency ratio such as dividend payout and reinvestment.

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References

- [1] M. Kustiyono, M. Rachmawati, and A. Aziz, "Covid-19 pandemic: Its effect on retail business growth in Indonesia," **Bus. Account. Res.**, vol. 6, no. 1, pp. 515–520, 2022, doi: 10.29040/ijebars.v6i1.4550.
- [2] E. Archanskaia, E. Canton, A. Hobza, P. Nikolov, and W. Simons, "The asymmetric impact of COVID-19: A novel approach to quantifying financial distress across industries," **Eur. Econ. Rev.**, vol. 158, 2023, doi: 10.1016/j.eurocorev.2023.104509.
- [3] G. S. Keenan et al., "The association between COVID-19 related income loss and diet quality: The mediating role of distress," **Appetite**, vol. 200, no. June, p. 107570, 2024, doi: 10.1016/j.appet.2024.107570.
- [4] F. Hawach and I. Requejo, "Financial distress likelihood of European SMEs in times of economic policy uncertainty: The role of family ownership and performance aspirations," **Int. Rev. Financ. Anal.**, vol. 105, 2025, doi: 10.1016/j.irfa.2025.104418.
- [5] M. Giannetti, "Do better institutions mitigate agency problems? Evidence from corporate finance choices," **J. Financ. Quant. Anal.**, vol. 38, no. 1, pp. 185–212, 2003, doi: 10.2307/4126769.
- [6] M. Martynova and L. Renneboog, "What determines the financing decision in corporate takeovers: Cost of capital, agency problems,

- or the means of payment?," **J. Corp. Financ.**, vol. 15, no. 3, pp. 290–315, 2009, doi: 10.1016/j.jcorpfin.2008.12.004.
- [7] V. Ivashina and D. Scharfstein, "Bank lending during the financial crisis of 2008," **J. Financ. Econ.**, vol. 97, no. 3, pp. 319–338, 2010, doi: 10.1016/j.jfineco.2009.12.001.
- [8] A. Demirgüç-Kunt, M. S. M. Peria, and T. Tressel, "The global financial crisis and the capital structure of firms: Was the impact more severe among SMEs and non-listed firms?," **J. Corp. Financ.**, vol. 60, 2020, doi: 10.1016/j.jcorpfin.2019.101514.
- [9] F. T. Kristanti, S. Rahayu, and A. N. Huda, "The Determinant of Financial Distress on Indonesian Family Firm," **Procedia - Soc. Behav. Sci.**, vol. 219, pp. 440–447, 2016, doi: 10.1016/j.sbspro.2016.05.018.
- [10] A. Atina and E. Rahmi, "Analisis Rasio Keuangan dan Ukuran Perusahaan Terhadap Kondisi Financial Distress Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2015-2017," **J. Ecogen**, vol. 2, no. 3, pp. 387–398, 2019, doi: 10.24036/jmpe.v2i3.7410.
- [11] A. Damajanti, H. Wulandari, and R. Rosyati, "Pengaruh rasio keuangan terhadap financial distress pada perusahaan sektor perdagangan eceran di Bursa Efek Indonesia Tahun 2015-2018," **Solusi J. Ilm. Bid. Ilmu Ekon.**, vol. 19, no. 1, pp. 29–44, 2021, doi: 10.26623/slsi.v19i1.2998.
- [12] A. H. N. Arnita and I. Ida, "Rasio keuangan prediktor kondisi financial distress di masa pandemi covid-19 pada perusahaan properti dan real estate," **J. Manag. Bus. Rev.**, vol. 21, no. 1, pp. 82–103, 2024, doi: 10.34149/jmbr.v21i1.478.
- [13] M. Muzharoatiningsih and U. Hartono, "Pengaruh rasio keuangan, sales growth, dan ukuran perusahaan terhadap financial distress pada sektor industri barang konsumsi di BEI periode 2017-2020," **J. Ilmu Manaj.**, vol. 10, no. 3, pp. 747–758, 2022, doi: 10.26740/jim.v10n3.p747-758.
- [14] D. Sudaryanti and A. Dinar, "Analisis prediksi kondisi financial distress menggunakan rasio likuiditas, profitabilitas, financial leverage dan arus kas," **J. Ilm. Bisnis dan Ekon. Asia**, vol. 13, no. 2, pp. 101–110, 2019, doi: 10.32812/jibeka.v13i2.120.
- [15] E. Firdianto and S. Utiyati, "The effect of profitability, liquidity, leverage, and activity on financial distress," **J. Manag. Sci. Res.**, vol. 10, no. 9, pp. 1–21, 2021. [Online]. Available: https://jurnal.unipasby.ac.id/index.php/majalah_economic/article/view/1020
- [16] N. Aisyah, F. Kristanti, and D. Zutilisna, "Pengaruh rasio likuiditas, rasio aktivitas, rasio profitabilitas, dan rasio leverage terhadap financial distress (Studi kasus pada perusahaan tekstil dan garmen yang terdaftar Di Bursa Efek Indonesia Tahun 2011-2015)," **eProceedings Manag.**, vol. 4, no. 1, 2017. [Online]. Available: <https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/4419>
- [17] I. Z. Muflihah, "Analisis Financial Distress Perusahaan Manufaktur Di Indonesia dengan Regresi Logistik," **Maj. Ekon.**, vol. XXII, no. 2, pp. 254–269, 2017.
- [18] R. Erayanti, "The effect of liquidity, profitability, and leverage on financial distress prediction," **JRAP J. Account. Tax. Res.**, vol. 6, no. 1, pp. 38–50, 2019, doi: 10.35838/jrap.2019.006.01.4.
- [19] V. Venisa and I. Widjaja, "The effect of cash flow, profitability and solvency on financial distress," **J. Manag. Entrep.**, vol. 4, no. 2, pp. 507–515, 2022, doi: 10.24912/jmk.v4i2.18258.
- [20] N. Sholikha, D. Febrianti, I. Megasyara, and A. Imawan, "Analysis of the influence of operating cash flow, profitability, sales growth, firm size, and leverage on predicting financial distress conditions," **Sci. J. Econ. Manag. Business, Account.**, vol. 14, no. 2, 2024, doi: 10.37478/als.v14i02.4542.
- [21] J. N. Istiantoro and N. K. Indrawati, "Pengaruh Rasio Keuangan Terhadap Kondisi Financial Distress (Studi Pada Perusahaan Tekstil dan Garmen yang Terdaftar di BEI)," **J. Ilm. Mahasiswa FEB**, vol. 3, no. 2, pp. 1–13, 2016.
- [22] R. D. Kumalasari, D. Hadiwidjojo, and N. K. Indrawati, "The Effect of Fundamental Variables and Macro Variables on the Probability of Companies to Suffer Financial Distress A Study on Textile Companies Registered in BEI," **Eur. J. Bus. Manag.**, vol. 6, no. 34, pp. 275–285, 2014.
- [23] D. Nurhayati, R. Dewi, and R. Fajri, "The influence of financial ratios on financial distress in the food and beverage industry on the Indonesia stock exchange for the 2017-2019 period," **Ekon. J. Econ. Bus.**, vol. 5, no. 1, pp. 59–64, 2021, doi: 10.33087/ekonomis.v5i1.197.

- [24] F. Julius, R. Anugerah, and A. Sofyan, "Pengaruh financial leverage, firm growth, laba dan arus kas terhadap financial distress (Studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2010-2014)," **J. Online Mhs. Bid. Ilmu Ekon.**, vol. 4, no. 1, 2017. [Online]. Available: <https://jom.unri.ac.id/index.php/JOMFEKON/article/view/12689>
- [25] E. F. Brigham and J. F. Houston, **Dasar-Dasar Manajemen Keuangan**, 14th ed. Jakarta: Salemba Empat, 2018.
- [26] D. Bergh, B. Connely, D. Ketchen, and L. Shannon, "Signaling theory and equilibrium in strategic management research: An assessment and a research agenda," **J. Manag. Stud.**, vol. 51, no. 8, pp. 1334–1360, 2014, doi: 10.1111/joms.12097.
- [27] S. Azky, E. Suryani, and N. A. A. Tara, "Pengaruh Rasio Keuangan Terhadap Financial Distress Pada Perusahaan Jasa Sub Sektor Restoran, Hotel & Pariwisata Yang Terdaftar Di Bursa Efek Indonesia," **JMM Unram - Master Manag. J.**, vol. 10, no. 4, pp. 273–283, 2021, doi: 10.29303/jmm.v10i4.691.
- [28] I. Fahmi, **Analisis Laporan Keuangan**, 4th ed. Bandung: Alfabeta, 2014.
- [29] Kasmir, **Analisis Laporan Keuangan**. Jakarta: Raja Grafindo Persada, 2016.
- [30] T. W. Antikasari and D. Djuminah, "Memprediksi financial distress dengan binary logit regression perusahaan telekomunikasi," **J. Keuang. dan Perbank.**, vol. 21, no. 2, pp. 265–275, 2017, doi: 10.26905/jkdp.v21i2.654.
- [31] V. Carolina, E. I. Marpaung, and D. Pratama, "Analisis rasio keuangan untuk memprediksi kondisi financial distress (Studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2014-2015)," **J. Akunt.**, vol. 9, no. 2, pp. 137–145, 2017, doi: 10.28932/jam.v9i2.481.
- [32] L. Sianturi, A. Nopiyanti, and A. Setiawan, "Pengaruh Likuiditas, Cash Flow, Dan Operating Capacity Terhadap Financial Distress," **Bus. Manag. Econ. Account. Natl. Semin.**, vol. 2, pp. 531–549, 2021.
- [33] M. Ginting, "Pengaruh current ratio dan debt to equity ratio (DER) terhadap financial distress pada Perusahaan Property & Real Estate di Bursa Efek Indonesia," **J. Manaj.**, vol. 3, no. 2, pp. 37–44, 2017. [Online]. Available: <http://ejournal.lmiimedan.net/index.php/jm/article/view/12>
- [34] D. A. Pertiwi, "Pengaruh Rasio Keuangan, Growth, Ukuran Perusahaan Dan Inflasi Terhadap Financial Distress Di Sektor Pertambangan Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2012–2016," **J. Ilmu Manaj.**, vol. 6, no. 3, pp. 359–366, 2018.