

Kathryn Sugara

Accounting, Universitas Multi Data Palembang, Indonesia

Trisnadi Wijaya

Accounting, Universitas Multi Data Palembang, Indonesia

Email Correspondence: kathryn@mdp.ac.id

ABSTRACT

Any company can experience financial distress, especially if the country is experiencing an economic crisis, so management must monitor the company's financial situation. Financial distress is defined as a sustained decline in a company's financial performance over a specific time period. Financial distress will lead to bankruptcy if the source is not addressed immediately. The purpose of this research is to determine the impact of various financial ratios on financial distress in property and real estate companies. Purposive sampling was used to select the research sample. As a data analysis technique, multiple regression analysis is used in this study. The findings revealed that the liquidity, profitability, and activity ratios all have an effect on financial distress, but the leverage ratio has no effect. Simultaneously, all financial ratios have an effect on financial distress.

KEYWORDS: Financial Distress, Property, Real Estate Companies, Indonesia Stock Exchange



Introduction

Every company is founded with the hope of generating large profits so that it can develop in the long run and avoid financial difficulties or even bankruptcy. However, not all businesses can withstand the ever-changing economic conditions. Because of this, not all expectations are met. Many companies that have been in operation for a long time are forced to liquidate or disband because they are experiencing financial distress or financial difficulties that will lead to bankruptcy. Currently, competition among companies is increasing, which results in higher costs to be borne and incurred by the company. When a company is unable to compete, it will face financial difficulties because the profit earned by the company is insufficient to cover the costs that must be borne by the company. If the company's operating profit continues to suffer losses, the company will face financial difficulties, and if no improvements are made, the company may face bankruptcy.

Financial distress is a decline in the financial condition of a company prior to liquidation or bankruptcy (Platt & Platt, 2002). Financial distress occurs as a result of the company's inability to maintain stability and manage its financial performance, resulting in operational losses. Financial distress can occur due to a variety of factors, including cash flow issues caused by profits earned by the company from operational activities that are insufficient to meet all of the company's obligations. Another factor contributing to the company's financial distress is the amount of debt it carries. The company's low income forces it to borrow in order to cover the company's operating costs shortage, but the company's income is not proportional to the debt it carries. Over time, operational losses will push the company to the brink of bankruptcy.

In theory, Figure 1 depicts the process of a company's financial distress as it progresses from healthy to unhealthy. The process of financial distress begins with a decrease in income of more than 20%, which is referred to as "early impairments" in the figure below. Even though its income has decreased, the company is still able to pay its debts at this point. When the company's operating cash flow is negative, it enters this stage. It indicates that the company will be unable to meet its future obligations. During the failure process, the company struggles to return the given capital at a consistently lower rate of return than the rate of return on similar investments. Then it goes into the default cycle. If the company continues to fail to pay its obligations or interest, it will file for bankruptcy. Following the default process, the company will enter the insolvency stage, where the company's performance is already negative due to a lack of liquidity, causing the entity to be unable to meet its debts. Bankruptcy is the final stage of financial distress and occurs when the total liability payable exceeds the asset's fair value.



Figure 1. Integral Process of Financial Distress

Source: (Outecheva, 2007)

Financial distress data can be used as an early warning sign of impending bankruptcy, allowing management to take immediate action to prevent problems before they arise. The continuous decline in the company's financial performance over a certain period of time will endanger the business's sustainability, resulting in the delisting of its shares from the stock exchange. According to Rule Number I-I concerning the Elimination of the Listing (Delisting) and Relisting Shares regulated in the Decree of the Board of Directors of PT. Jakarta Stock Exchange Number: Kep-308/BEJ/07-2004, the IDX may write off the securities of a listed company if it experiences conditions, or events, which significantly negatively affect the business continuity of the listed company, either financially or legally, or on the sustainability of its status. The listed company cannot show adequate indications of recovery. Between 2017 and 2020, 24 companies were delisted from the IDX, with real estate and property companies accounting for 20.83 percent of them (Cekdollarmu, 2021). This phenomenon makes it very interesting to investigate why many property and real estate companies are delisting between 2017 and 2020. Based on these conditions, potential investors can conduct an analysis to determine financial distress in a company from the start. Potential investors can use this analysis to help them make investment decisions in a company.

Financial ratios are a tool for measuring financial distress that can be calculated using data from a company's financial statements. The financial ratio analysis of the company can show the company's financial status during a specific period that reflects the company's performance. Financial ratio analysis is future-oriented, which means that it can be used to assess financial performance and future business results (Munawir, 2016). Financial ratios can be used to forecast the occurrence of financial distress and bankruptcy. Liquidity ratios, profitability ratios, solvency ratios (leverage), and activity ratios are examples of financial ratios.

A company's liquidity is a critical factor that must be considered when making decisions, because liquidity is related to the company's ability to meet its financial obligations. Liquidity ratio is a ratio used to assess a company's ability to meet obligations that must be met immediately (Kodrat & Herdinata, 2009). Liquidity is also used to assess a company's financial performance in meeting short-term obligations such as salaries, operating costs, short-term debt, raw materials, and other items that must be paid immediately (Mustahgfiroh & Lisiantara, 2021). If the company only relies on debt for funding, it will incur even more liabilities in the future and be vulnerable to financial difficulties. The greater the company's liquidity, the better and safer it will be. The current ratio can be used to assess a company's liquidity. The current ratio is a ratio used to assess a company's ability to meet all of its short-term obligations.

Another financial ratio to consider is the leverage ratio. Leverage ratio is a ratio that measures how much of a company's assets are financed by debt. Companies that have more debt than capital are said to have a high level of leverage. Furthermore, leverage can demonstrate the company's ability to meet its financial obligations if the company is later liquidated. The greater the leverage, the greater the risk of investment (Mustahgfiroh & Lisiantara, 2021). The greater the total assets owned by the company, the more likely it is that the company will be able to pay off its obligations in the future, avoiding financial problems. The debt-to-equity ratio is used in this study to assess the company's leverage by comparing the amount of debt to the amount of equity.

The profitability ratio is the next ratio that can predict the occurrence of financial distress. Profitability ratio is a ratio used to assess a company's ability to seek profit or profit over a specific time period (Kasmir, 2018). This ratio compares a company's ability to earn a profit to its sales, own capital, and assets. The greater a company's profitability, the greater its ability to generate high profits and reduce the possibility of bankruptcy. This ratio also measures the effectiveness of a company's management. This is demonstrated by the profit generated from sales and investment income. Return on Assets (ROA) is a popular measure of profitability ratios. Return on assets (ROA) is a measure of a company's ability to generate profits with the total number of assets available to it.

The activity ratio is the final financial ratio to consider. Activity ratio is a ratio used to measure the extent to which a company uses its resources to support company activities, with the goal of optimizing the use of these resources so that the company can achieve the best possible results (Fahmi, 2020). The higher the turnover rate of the company's resources, the better the company uses its resources. If the company cannot maximize asset turnover, it will be difficult to achieve maximum results and may cause the company to go bankrupt. Total Assets Turn Over is a ratio used to determine how effective asset utilization is in generating sales. The higher the asset turnover rate, the better the company utilizes its assets.

Signal theory can explain the relationship between financial ratios and a company's financial distress. The signal theory proposes how a company should send signals to users of financial statements. Profit is a signal that managers send to the market; if managers are confident in the company's prospects, they want to communicate with investors, who are expected to pick up on the signal and rate the company higher. The financial statements show the company's performance and financial condition. Financial statements that show positive long-term profits indicate that the company is performing well and has healthy financial conditions. This relates to the dividend distribution to shareholders. It can also be seen from the cash flow value of the company. Long-term high cash flow indicates that the company can pay its creditors. Users of financial statements may interpret this positively. In contrast, a negative profit on the financial statements indicates that the company is in financial distress.

Based on the problem's background and the previously discussed literature review, the framework theory in this research is as follows:



Figure 2. Framework Theory

Source: Researcher, 2022

The following hypotheses will be tested in this study:

- H1: Liquidity ratio has an effect on financial distress.
- H2: Leverage ratio has an effect on financial distress.
- H3: Profitability ratio has an effect on financial distress.
- H4: Activity ratio has an effect on financial distress.

Method

This study is classified as quantitative research. Quantitative research is a type of research in which the specifications are systematic, well-planned, and clearly structured from the start to the creation of the research design. Quantitative research methods can be defined as research methods based on the philosophy of positivism that are used to examine specific populations

or samples, sampling techniques are generally carried out randomly, data collection employs research instruments, and data analysis is quantitative or statistical in nature with the goal of testing hypotheses that have been established (Sugiyono, 2010). A causal associative approach is used in this study. Causal associative research seeks to identify the relationship between two or more variables (Sugiyono, 2010). This research will allow us to develop a theory that can be used to explain, predict, and control a symptom. A causal relationship occurs when one variable (independent) influences the other variable (dependent).

Purposive sampling was used in this study to collect samples. Purposive sampling is a datasource sampling technique that takes certain factors into account. The following are the sampling criteria used in this study: (1) Property and real estate companies that have listed on the Indonesian Stock Exchange for the 2019-2020 fiscal year. (2) Companies that use the Indonesian rupiah currency in their annual financial statements. (3) Companies that submit financial reports for the 2019-2020 fiscal year accompanied by independent auditor reports. A sample of 49 companies is obtained from the population of property and real estate companies and the three sample selection criteria listed above, for a total of 98 data points.

The secondary data used in this study came from the company's financial statements, which were published on the Indonesia Stock Exchange website as well as the issuer's company. Secondary data is any data source that does not directly provide data to data collectors, such as other people or documents (Sugiyono, 2010). Multiple regression analysis with EViews software was used to analyze the data in this study. Classical assumption tests, such as the multicollinearity test, normality test, autocorrelation test, and heteroscedasticity test, were also performed during the multiple regression analysis process. The hypothesis test consists of the F and t tests, followed by analysis and interpretation, which results in conclusions and recommendations.

Result

The results of the normality test can be seen in Figure 3.



Figure 3. Normality Test Results

Source: EViews Output, 2022

Based on the output of the normality test using the Jarque-Bera method, Figure 2 shows that the p-value of 0.000000 is smaller than 0.05, so that the residuals are not normally distributed. Because the residuals are not normally distributed, the outlier data is excluded from the test so that the number of observations becomes 85. The results of the normality test after the outlier data is removed can be seen in Figure 4.





Source: EViews Output, 2022

Based on Figure 4 above, it can be seen that the p-value of 0.285822 is greater than 0.05 so that the residuals are declared normally distributed.

The results of the multicollinearity test can be seen in Table 1.

	•		
Variance Malan Faolas			
0210 07/20122 Time 13 21			
Sample 185			
Included Obutrvatals 85			
	Coefnoer4	Ununeend	Cralett0
Vanatlo	Vananot	NF	I1F
С	0 097989	5 104492	NA
CR	0 001365	1932546	1075239
DER	0 047312	2 270776	1 165129
ROA	0000729	1 158902	1 142882
TATO	1649326	3546094	1 090223

Source: EViews Output, 2022

Based on the output of the multicollinearity test in Table 1, it can be seen that all independent variables have a Centered VIF value of less than 10, so it is concluded that there is no multicollinearity problem among the independent variables in the regression model.

The results of the heteroscedasticity test can be seen in Table 2.

Table 2. Heteroscedasticity Test Results

Hotorosired asboty T	est ARCH			
F-sUbsts	1 528102	P100 F(182)	0	2199

Obs*R.squared	1536735	Frog Crw-Squar•111	0	2151
Test Egrabon				
Ooptod • nt Vanabla RESC.2				
Method Lout Squares				
0214 07/2002 Time 13 30				
Sample (actusle0) 285				
1010.1011:10bSereaalS 84 /	Aar adjustments			
Variat48	Coetbaent	SW Error	ISlaSsrac	Pro0
С	1 341093	0 290390	4618256	0 0000
RESC•2(.1)	0.135364	0109504	1236164	0 2199
R.3403fed	0.018294	Iltanclop•MonI vas	1	551448
Adjusted R.squato0	0.006322	SO oltpoodenlyar	2	163468
SE < Impression	2 156618	flats info catoon	4	398481
Sum 39U410010510	381 3822	Schwan allonon	4	456358
Log bkehtiocx5	.182 7362	HannamOuinn alter	4	421747
F.sLibsbc	1.528102	DurbinVat:cc stat		2005985
12700(F.sLs0s00	0219927			

Source: EViews Output, 2022

Based on the output of the heteroscedasticity test using the ARCH method in Table 2, it can be seen that the p-value of 0.2151 is greater than 0.05, so it can be concluded that there is no problem in the regression model.

The results of the autocorrelation test can be seen in Table 3.

0 606544	Yuan atounciontrar	2 348860		
0 586872	So aocuntiont vac	1 987375		
1277387	/Jtatiu wto cntonon	3 384533		
130 6374	Sauna anon:u	3 528218		
•138.8426	Hannan-Gunncuter	342323		
30.83166 0000000	Durt4n-Wation slat	1 364611		
	0 606544 0 586872 1277387 130 6374 • 138.8426 30.83166 0000000	0 606544Yuan atounciontrar0 586872So aocuntiont vac1277387/Jtatiu wto cntonon130 6374Sauna anon:u•138.8426Hannan-Gunncuter30.83166Durt4n-Wation slat0000000		

Table 3. Autocorrelation Test Results

Source: EViews Output, 2022

Based on the output of the autocorrelation test using the Durbin-Watson method in Table 3, it can be seen that the Durbin-Watson value of 1.364611 is still between-2 and +2. A Durbin-Watson value between -2 and +2 means that there is no autocorrelation problem (Santoso, 2015).

After all classical assumption tests have been passed, the hypothesis is tested using multiple regression analysis. The results of multiple regression analysis can be seen in Table 4.

Table 4. Multiple Regression Analysis Results

```
OtpendenlVanaalt FO Yaw* LeastSwami
Oale 074843 Tome 1255 Sample 85
Include(looser/Sons 85
```

Vanable	Ceacion1	Sla Error	181abstc	Moe
С	0 537757	0313032	1 717896	0 0897
CR	0278288	0 036951	7 531249	0 0000
DER	-0058605	0213513	-0269435	0 7883
ROA	0 127843	0 027001	4334694	0 0000
ТАТО	6 991961	1910321	3660093	0 0005
Racpmred	0 606544		Mean dependent nr	2 348860
Ad.P14011R4C/Ltiled	0586832		90. dormiont ft	1983335
SE of regrusson	1233383		Mute info canon	3 384533
Sum squared Mild	130 6374		Sennaalbum	3528216
Log imelfamel	-138.8426		Kinnameluwm OW	3442323
F.3L15SIC	30.83165		DurtinNfatten slat	134611
pm5(F.sl1636e)	0000000			

Source: EViews Output, 2022

Based on Table 4, the multiple linear regression equation that can be formulated is as follows: FD = 0.537757 + 0.278288 CR - 0.058606 DER + 0.127843 ROA + 6.991961 TATO(1) Where:

FD = Financial Distress CR = Current Ratio DER = Debt to Equity Ratio ROA = Return on Asset Ratio TATO = Total Asset Turnover Ratio

Based on Table 4, the value of adjusted R square is 0.586872. This means that 58.6872% of the variation in the financial distress variable can be explained by the variables of the liquidity ratio, leverage ratio, profitability ratio, and activity ratio, while the remaining 41.3128% is explained by other variables that are not included in the regression model. Based on Table 4, it can be seen that the F-statistic value of 30.83165 is greater than the F-critical of 2.4859 and the p-value is 0.000000 is smaller than 0.05, so it can be concluded that the variables of liquidity ratio, leverage ratio, profitability ratio, and activity ratio simultaneously have a significant effect on financial distress.

Discussion

Based on Table 4, it can be seen that the Current Ratio variable has a t-statistic value of 7.531249 and a p-value of 0.0000. Because the t-statistic value of 7.531249 is greater than the t-critical of 1.9901 and the p-value of 0.0000 is smaller than 0.05, it can be concluded that the liquidity variable has a significant effect on financial distress. A high liquidity ratio indicates that a company can meet short-term obligations with its current assets. This demonstrates that the company's financial condition is still strong enough to pay off maturing short-term obligations. As a result, a high level of liquidity reduces the possibility of financial distress in the company. The results of this study support the research findings (Ginting, 2017), (Muhtar & Aswan, 2017), (Chrissentia & Syarief, 2018), (Shidiq & Khairunnisa, 2019), (Izzah et al., 2021),

(Swara, 2021), (Rinofah et al., 2022). However, the results of this study contradict the research findings (Kusuma & Sumani, 2017), (Simanjuntak et al., 2017), (Asfali, 2019), (Ayuningtiyas & Suryono, 2019), (Christella & Osesoga, 2019), (Natalia & Sha, 2021), (Oktaviani & Sembiring, 2021), (Silvia & Yulistina, 2022) which did not find any significant effect between the liquidity ratio and financial distress.

Based on Table 4, it can be seen that the Debt to Equity Ratio variable has a t-statistic value of -0.269435 and a p-value of 0.7883. Because the value of t-statistic |-0.269435| smaller than t-critical 1.9901 and p-value 0.7883 greater than 0.05, it can be concluded that the leverage ratio has no significant effect on financial distress. Companies in financial distress typically have debt that is nearly equal to or greater than their total assets, and some even have debt that is greater than their total assets. An increase in DER has no effect on the likelihood of a company experiencing financial distress. A high DER value does not always mean the company will experience financial distress in the future. If the DER value is high but not followed by a high operating expense value, the company can avoid financial distress. Furthermore, if the company can properly manage and control debt, there is no risk of financial distress. The results of this study support the research findings (Ayuningtiyas & Suryono, 2019), (Shidiq & Khairunnisa, 2019), (Swara, 2021), (Rinofah et al., 2022), (Silvia & Yulistina, 2022). However, the results of this study contradict the research findings (Ginting, 2017), (Kusuma & Sumani, 2017), (Muhtar & Aswan, 2017), (Simanjuntak et al., 2017), (Audina & HS, 2018), (Chrissentia & Syarief, 2018), (Christella & Osesoga, 2019), (Asfali, 2019), (Christine et al., 2019), (Abdillah, 2020), (Izzah et al., 2021), (Natalia & Sha, 2021), (Oktaviani & Sembiring, 2021) which found a significant effect of the leverage ratio on financial distress.

Based on Table 4, it can be seen that the Return on Asset Ratio variable has a t-statistic value of 4.734694 and a p-value of 0.0000. Because the t-statistic value of 4.734694 is greater than the t-critical of 1.9901 and the p-value of 0.0000 is smaller than 0.05, it can be concluded that the profitability ratio has a significant effect on financial distress. This means that a company's high and low profits will have an impact on its financial distress. The high profitability ratio of the company indicates that the return on investment from the company's assets is very good. The profit generated by the company is sufficient to fund the company's operations and allows investors to recoup their investment. This also demonstrates that the company's financial situation is stable and far from dire. The company's increasing profits will demonstrate that its financial performance is improving, putting it further away from financial distress. The results of this study support the research findings (Muhtar & Aswan, 2017), (Ayuningtiyas & Suryono, 2019), (Christella & Osesoga, 2019), (Christine et al., 2019), (Abdillah, 2020), (Swara, 2021), (Izzah et al., 2021), (Natalia & Sha, 2021), (Oktaviani & Sembiring, 2021), (Rinofah et al., 2022), (Silvia & Yulistina, 2022). However, the results of this study contradict the research findings (Kusuma & Sumani, 2017), (Simanjuntak et al., 2017), (Asfali, 2019) which did not find a significant effect between the profitability ratios on financial distress.

Based on Table 4, it can be seen that the Total Asset Turnover Ratio variable has a t-statistic value of 3.660097 and a p-value of 0.0005. Because the t-statistic value of 3.660097 is greater than the t-critical of 1.9901 and the p-value of 0.0005 is smaller than 0.05, it can be concluded that the activity ratio has a significant effect on financial distress. This demonstrates that utilizing assets owned by the company in the company's operational activities can reduce the possibility of the company being in financial distress. In other words, if the company will be vulnerable to financial distress. The results of this study support the research findings (Simanjuntak et al., 2017), (Swara, 2021), (Rinofah et al., 2022). However, the results of this study contradict the research findings (Asfali, 2019), (Shidiq & Khairunnisa, 2019), (Izzah et al., 2021) which did not find any significant effect between the activity ratio on financial distress.

Conclusion

Based on the findings and discussion above, the following are the study's conclusions:

- 1. The liquidity ratio has a significant effect on financial distress based on the results of partial hypothesis testing.
- 2. The leverage ratio has no significant effect on financial distress based on the results of partial hypothesis testing.
- 3. The profitability ratio has a significant effect on financial distress based on the results of partial hypothesis testing.
- 4. The activity ratio has a significant effect on financial distress based on the results of partial hypothesis testing.

Reference

- Abdillah, N. (2020). Pengaruh Rasio Leverage, Profitabilitas, dan Ukuran Perusahaan terhadap Financial Distress. *Prosiding Business Management, Economic, and Accounting National Seminar*, 1, 1077–1088.
- Asfali, I. (2019). Pengaruh Profitabilitas, Likuiditas, Leverage, Aktivitas, Pertumbuhan Penjualan terhadap Financial Distress Perusahaan Kimia. *Jurnal Ekonomi Dan Manajemen*, 20(2), 56–66.
- Audina, B. P., & HS, S. (2018). Pengaruh Financial Leverage, Struktur Modal dan Total Asset Growth terhadap Financial Distress pada Perusahaan Subsektor Pulp dan Kertas yang Terdaftar di Bursa Efek Indonesia. *Oikonomia: Jurnal Ilmu Manajemen, 14*(1), 76–90. https://doi.org/10.47313/oikonomia.v14i1.515
- Ayuningtiyas, I. S., & Suryono, B. (2019). Pengaruh Likuiditas, Profitabilitas, Leverage dan Arus Kas terhadap Kondisi Financial Distress. *Jurnal Ilmu Dan Riset Akuntansi*, 8(1), 1–17.
- Cekdollarmu. (2021). *Perusahaan Delisting dari BEI Tahun 2017 2020*. https://www.cekdollarmu.eu.org/2021/01/Perusahaan Delisting dari BEI.html

- Chrissentia, T., & Syarief, J. (2018). Analisis Pengaruh Rasio Profitabilitas, Leverage, Likuiditas, Firm Age, dan Kepemilikan Institusional terhadap Financial Distress (pada Perusahaan Jasa Non Keuangan yang Terdaftar di Bursa Efek Indonesia Tahun 2014-2016). SiMAk, 16(1), 45–61. https://doi.org/10.35129/simak.v16i01.11
- Christella, C., & Osesoga, M. S. (2019). Pengaruh Leverage, Profitabilitas, Kepemilikan Institusional, Likuiditas, dan Ukuran Perusahaan terhadap Financial Distress: Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2014-2016. *ULTIMA Accounting*, *11*(1), 13–31.
- Christine, D., Wijaya, J., Chandra, K., Pratiwi, M., Lubis, M. S., & Nasution, I. A. (2019). Pengaruh Profitabilitas, Leverage, Total Arus Kas dan Ukuran Perusahaan terhadap Financial Distress pada Perusahaan Property dan Real Estate yang Terdaftar di Bursa Efek Indonesia Tahun 2014-2017. *Jesya: Jurnal Ekonomi & Ekonomi Syariah*, 2(2), 340–351. https://doi.org/10.36778/jesya.v2i2.102
- Fahmi, I. (2020). Analisis Laporan Keuangan (7th ed.). Alfabeta.
- Ginting, M. C. (2017). Pengaruh Current Ratio dan Debt to Equity Ratio (DER) terhadap Financial Distress pada Perusahaan Property & Real Estate di Bursa Efek Indonesia. *Jurnal Manajemen*, 3(2), 37–44.
- Izzah, L. N., Rahman, A., & Mahsina. (2021). Pengaruh Likuiditas, Profitabilitas, Leverage, dan Aktivitas terhadap Kondisi Financial Distress. *EkoBis: Jurnal Ekonomi & Bisnis*, 2(1), 70–81. https://doi.org/10.46821/ekobis.v2i1.214
- Kasmir. (2018). Analisis Laporan Keuangan (11th ed.). Rajawali Pers.
- Kodrat, D. S., & Herdinata, C. (2009). *Manajemen Keuangan: Based on Empirical Research*. Graha Ilmu.
- Kusuma, E., & Sumani. (2017). Pengaruh Likuiditas, Leverage dan Profitabilitas terhadap Financial Distress (Z-Score) Perusahaan Property, Real Estate, dan Manufaktur Periode 2014-2016. Jurnal Manajemen, 14(1), 1–16.
- Muhtar, M., & Aswan, A. (2017). Pengaruh Kinerja Keuangan terhadap Terjadinya Kondisi
 Financial Distress pada Perusahaan Telekomunikasi di Indonesia. *JBMI (Jurnal Bisnis, Manajemen, Dan Informatika)*, 13(3). https://doi.org/10.26487/jbmi.v13i3.1712
- Munawir. (2016). Analisa Laporan Keuangan (4th ed.). Liberty.
- Mustahgfiroh, I., & Lisiantara, G. A. (2021). Financial Distress pada Perusahaan Real Estate dan Property yang Terdaftar di Bursa Efek Indonesia (BEI). *Jurnal Akuntansi Dan Pajak*, 22(2), 808–816.
- Natalia, C., & Sha, T. L. (2021). Pengaruh Likuiditas dan Sales Growth terhadap Financial Distress. *Jurnal Multiparadigma Akuntansi*, *4*(1), 40–49.
- Oktaviani, E., & Sembiring, F. M. (2021). Pengaruh Likuiditas, Leverage, Profitabilitas dan Ukuran Perusahaan terhadap Financial Distress: Studi pada Perusahaan Sub Sektor Wholesale di BEI Periode 2014-2020. *Reviu Akuntansi, Manajemen, Dan Bisnis*, 1(2), 127– 144. https://doi.org/10.35912/rambis.v1i2.944

Outecheva, N. (2007). Corporate Financial Distress: An Empirical Analysis of Distress Risk.

University of St.Gallen.

- Platt, H. D., & Platt, M. B. (2002). Predicting Corporate Financial Distress: Reflections on Choice-Based Sample Bias. *Journal of Economics and Finance*, *26*(2), 184–199.
- Rinofah, R., Sari, P. P., & Juliani, T. (2022). Pengaruh Kinerja Keuangan terhadap Financial Distress: Studi pada Perusahaan Sub Sektor Industri Barang Konsumsi Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020. Al-Kharaj : Jurnal Ekonomi, Keuangan & Bisnis Syariah: Jurnal Ekonomi, Keuangan & Bisnis Syariah, 4(3), 726–744. https://doi.org/10.47467/alkharaj.v4i3.719
- Santoso, S. (2015). *Menguasai Statistik Parametrik*. Elex Media Komputindo.
- Shidiq, J. I., & Khairunnisa. (2019). Analisis Rasio Likuiditas, Rasio Leverage, Rasio Aktivitas, dan Rasio Pertumbuhan terhadap Financial Distress Menggunakan Metode Altman Z-Score pada Sub Sektor Tekstil dan Garmen di BEI Periode 2013-2017. *JIM UPB*, 7(2), 209–219.
- Silvia, D., & Yulistina. (2022). Pengaruh Current Ratio, Return on Asset, Debt to Asset terhadap Financial Distress selama Masa Pandemi. *Global Financial Accounting Journal*, 6(1), 89– 99.
- Simanjuntak, C., Titik K., F., & Aminah, W. (2017). Pengaruh Rasio Keuangan terhadap Financial Distress (Studi pada Perusahaan Transportasi yang Terdaftar di Bursa Efek Indonesia Periode 2011-2015). *E-Proceeding of Management*, *4*(2), 1580–1587.

Sugiyono. (2010). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta.

Swara, R. A. D. (2021). Pengaruh Rasio Keuangan terhadap Financial Distress pada Perusahaan
Sub Sektor Bangunan Konstruksi yang Terdaftar di Bursa Efek Indonesia Tahun 20172019. Jurnal Syntax Admiration, 2(10), 1960–1968.
https://doi.org/10.46799/jsa.v2i10.328