# Effect of Profitability, Financial Leverage, and Sales Growth on Financial Distress of Transportation and Logistics Sector Companies Listed on the Indonesia Stock Exchange 2020-2022

Lia Nur Indah, Budi Prasetya<sup>2</sup>, Eva Purnamasari

Business Administration, Semarang State Polytechnic Jl. Prof. H. Soedarto, S.H., Tembalang, Semarang, Kode Pos 50275, Jawa Tengah, Indonesia

Abstract: The problem of financial distress experienced by transportation and logistics sector companies listed on the Indonesia Stock Exchange (IDX) during the COVID-19 pandemic became a problem in this study. This study analyzed the effect of profitability, financial leverage, and sales growth on financial distress. Transportation and logistics sector companies listed on the IDX consecutively from 2020 to 2022 are the population in this study, where the total population is 26 companies. The census or saturated sample is the sampling method used in this study. The analysis of this study uses a logistic regression model processed with S.P.S.S. 25. This study shows that profitability and financial leverage significantly affect financial distress. Meanwhile, sales growth has no significant effect on financial distress.

Keywords: Financial Distress, Financial Leverage, Profitability, and Sales Growth

# Pengaruh Profitabilitas, Financial Leverage, dan Pertumbuhan Penjualan terhadap Financial Distress pada Perusahaan Sektor Transportasi dan Logistik yang terdaftar di Bursa Efek Indonesia Tahun 2020-2022

#### Abstrak

Permasalahan financial distress yang dialami perusahaan sektor transportasi dan logistik yang terdaftar di Bursa Efek Indonesia (BEI) pada masa pandemi COVID-19 menjadi permasalahan dalam penelitian ini. Penelitian ini menganalisis pengaruh profitabilitas, financial leverage, dan sales growth terhadap financial distress. Perusahaan sektor transportasi dan logistik yang terdaftar di BEI secara berturut-turut pada tahun 2020 hingga 2022 menjadi populasi dalam penelitian ini, dimana jumlah populasinya adalah 26 perusahaan. Sensus atau sampel jenuh adalah metode pengambilan sampel yang digunakan dalam penelitian ini. Analisis penelitian ini menggunakan model regresi logistik yang diolah dengan S.P.S.S. 25. Penelitian ini menunjukkan bahwa profitabilitas dan financial leverage berpengaruh signifikan terhadap financial distress. Sedangkan sales growth tidak berpengaruh signifikan terhadap financial distress.

Kata Kunci: Financial Distress, Financial Leverage, Profitabilitas, dan Pertumbuhan Penjualan

#### INTRODUCTION

The outbreak of COVID-19 from 2019 to 2022 has impacted not only the health sector but also the sector of go public companies, one of which is a company in the transportation and logistics sector. Transportation and logistics sector companies have an essential role in Indonesia, where these sector companies drive all community activities and support the operational activities of other industrial sectors (Dinas Pekerjaan Umum dan Penata Ruang, 2021). The Minister of Transportation stated that the transportation and logistics sector companies were the most severely affected by Covid-19 compared to other business sectors, where in this sector, there was a decline in profits starting from 30%. Disruption of the transportation system has shocked the logistics business sector because the basis of the logistics sector is transportation (Desfika, 2020). The Large-Scale Social Restrictions (P.S.B.B.) policy and lockdown implemented by the government have resulted in people limiting their mobility. In addition, this also resulted in the cessation of several industrial activities due to delays in the export-import process, so logistics support activities had to be stopped as well.

Changes in economic conditions from year to year affect company performance, including go-public companies. Companies will experience losses that lead to financial distress and even bankruptcy when the company is not managed correctly and cannot compete. Based on Platt & Platt (2007) in Syuhada et al. (2020), financial distress is defined as the stage of declining company finances before bankruptcy occurs. Conditions of financial distress become a signal for investors in making decisions. If the company's financial condition is weak, it will result in a loss of stakeholder trust.

During the Covid-19 pandemic, more than half of the companies in the transportation and logistics sector experienced financial distress. In 2020, out of 26 companies, 19 companies experienced financial distress, 13 companies experienced the same conditions in

2021, and 14 companies experienced these conditions in 2022 (Indonesia Stock Exchange, 2023). Therefore, companies must analyze financial health or predict potential financial distress to avoid bankruptcy. Actions that companies can take to predict the occurrence of financial distress are to measure the performance of financial ratios through the company's financial reports. Measurement of financial performance can provide overview of whether or not the company's financial condition is healthy. The financial ratios used in this study are profitability, financial leverage, and sales growth. This study aims to determine the effect of profitability, financial leverage, and sales growth partially on financial distress.

The profitability ratio measures a company's capability to generate profit (Kasmir, 2017, p.196). Based on the financial reports of each company uploaded on the IDX's official website, during the pandemic, the average company in the transportation and logistics sector had a low ability to generate profits. This is indicated by the average profitability value each year which is still below the industry standard. In 2020, the company's profitability value was -0.059, 0.063 in 2021 and 0.031 in 2022. Meanwhile, according to Kasmir (2008: 201) in Heri Winarno (2019), the industry standard for the profitability ratio value is 30%. The results of previous studies by Giovanni et al. (2020), Rahma (2020), and Syuhada et al. (2020) show that profitability affects financial distress. This differs from the research results of Maulana & Suhartati (2022) and Saputri (2019), which state that profitability does not affect financial distress.

The leverage ratio measures how much a company's assets are funded by debt (Kasmir, 2017, p. 151). This ratio is used to identify whether a company can meet all of its obligations. If the amount of debt is not balanced with income, the company has a high chance of facing financial distress. Based on the company's financial reports uploaded on the IDX website, the average value of the

financial leverage of companies in the transportation and logistics sector shows a figure above the industry average, where in 2020, the average company's financial leverage reached 0.638, in 2021 it reached 0.569 and in 2022 of 0.555. Meanwhile, according to Kasmir (2017, p. 157), the industry average value for the financial leverage ratio is 35%. This means that the average company finances its operational activities with debt. Research by Giarto & Fachrurrozie (2020), Lubis & Patricia (2019), and Syuhada et al. (2020) shows that financial leverage affects financial distress. Meanwhile, Dianova & Nahumury (2019) and Saputri (2019) show that financial leverage does not affect financial distress.

The sales growth ratio describes the company's ability to increase the level of sales of its products. The high level of sales growth also illustrates the high level of profit. Therefore, a high level of sales growth can represent a healthy financial condition or avoidance of financial distress. Based on each company's financial statements, the sales growth value at the beginning of the pandemic was -0.180. In 2021 it rose to 0.058, and 2022 it decreased again to 0.413. The average value of fluctuating sales growth indicates that the Covid-19 pandemic has affected company's sales growth. Research conducted by Dianova & Nahumury (2019) and Giarto & Fachrurrozie (2020) shows that sales growth does not affect financial distress. Meanwhile, research by (Damajanti et al., 2021; Saputra & Salim, 2020; Wibowo & Susetyo, 2020) states that sales growth affects financial distress.

This study uses three theories, namely signal theory, agency theory, and pecking order theory. Signal theory describes the factors that companies to share certain encourage information with outsiders. Financial statements of companies experiencing financial distress will provide information regarding losses or deterioration in the company's financial condition managers can take action before liquidation occurs.

Agency theory describes the contractual bond between shareholders as management principals and as (Fitrianingsih, 2021). This theory describes the separation of interests between the company's owners and managers, which aims to achieve efficiency and effectiveness by employing professional agents to manage the company. Financial statements are a form of agent accountability, where the report is made in the context of reporting the company's financial condition during a specific period. The use of agency theory in this study is financial statements that contain information profitability ratios, financial leverage, and sales growth which can help principals or investors monitor the company's financial condition and reduce asymmetric information.

The pecking order theory describes the stages of financing where companies first use internal funding sources, debt as a second source, and issuing new ordinary shares as the last source (Brusove et al., 2018) (Annabila & Rasyid, 2022). When the company's capital and profits can cover the company's operational costs, the company should not be in debt. However, the company can apply for debt when the internal sources are insufficient. Financial leverage shows a relationship that fits with this theory. Financial leverage arises because of debt from third parties. The higher the ratio, the higher the creditor funds used by the company.

#### RESEARCH METHODS

This research is quantitative research utilizing secondary data collected by the documentation method. Researchers collect and examine secondary data in the form of financial ratios uploaded on the Indonesia Stock Exchange (IDX) official website. The type of data used is panel data. Transportation and logistics sector companies listed consecutively from 2020 to 2022 on the IDX are the population in this study. The research sample was taken using the census sample method so that the entire study population was

used as a sample. Logistic regression is an analytical technique in this study. According to Ghozali (2018) in Wibowo & Susetyo (2020), logistic regression is an analytical technique for measuring the effect of the independent variable on the dependent variable. In this case, the independent variable is dummy (non-

metric). The following is the logistic regression equation in this study:

$$Ln\left(\frac{P}{1-p}\right) = \beta_0 + \beta_1 Pro + \beta_2 LF + \beta_3 PP + e$$

The Table 1 is the operational definition of each variable.

Table 1. Operational Definitions Of Variables

Variable	Definition	Indicator
Financial Distress (Y)	Platt and Platt (Syuhada et al., 2020) define financial distress as a stage of declining financial conditions before bankruptcy	Springate method. The data is then categorized, where companies that
Profitability (X1)	The profitability ratio is a ratio to measures a company's capability in collecting profits (Kasmir, 2017, p. 196)	The data is taken from the Return on Assets (ROA) for 2020-2022.
Financial Leverage (X2)	The financial leverage ratio is a ratio to measure a company's ability to pay off its debts (Kasmir, 2017, p. 151)	The data is taken from the Debt to Asset Ratio for 2020-2022.
Sales Growth (X3)	Sales growth is a ratio that describes how much a company can increase its sales compared to total sales (Kasmir 2016: 107).	The data is taken from the total sales value for 2020-2022.

Source: developed in research, 2023

# FINDINGS AND DISCUSSION

### **Descriptive Statistical Analysis**

The Table 2 are the findings of the descriptive statistical analysis in this study.

Table 2. Descriptive Statistical Analysis

Variable	N	Minim um	Maxi mum	Mean	Std. Deviation
Profitability	78	580	2.072	.01186	.289906
Financial Leverage	78	.084	3.139	.58724	.544623
Sales Growth	78	840	5.039	.09726	.682994
Financial Distress	78	0	1	.59	.495
Valid N (listwise)	78				

Source: processed secondary data, 2023

Through the descriptive statistical test, profitability has a mean value of 0.01186, a standard deviation of 0.289906, a minimum value of -0.580, and a maximum value of 2.072. Financial leverage has a mean value of 0.58724, a standard deviation of 0.544623, a minimum value of 0.084, and a maximum value of 3.139. Sales growth has a mean value of 0.09726, a standard deviation of 0.682994,

a minimum value of -0.840, and a maximum value of 5.039. The mean value of financial distress is 0.59, a standard deviation of 0.495. The minimum value of financial distress is 0, which means the company is not experiencing financial distress, and the maximum value is 1, which means the company is experiencing financial distress.

### Multicollinearity Test

Table 3. Correlation Matrix Table

		Correlatio	n Matrix		
		Const ant	Profita bility	Financial Leverage	Sales Growth
Ste	Constant	1.000	225	630	.194
p 1	Profitability	225	1.000	263	091
	Financial Leverage	630	263	1.000	575
	Sales Growth	.194	091	575	1.000

Source: processed secondary data, 2023

The multicollinearity test functions to determine whether there is a correlation between variable X (Ghozali, 2018, p. 107). The multicollinearity test scores indicate no

symptoms of multicollinearity because the correlation matrix between independent variables is less than 0.90.

## Logistic Regression Analysis Overall Model Fit Test

**Table 4. -**2log Likelihood (Block 0)

Iteration History <sup>a,b,c</sup>					
Iteration		-2 Log likelihood	Coefficients		
			Constant		
Step 0	_ 1	105.605	.359		
	2	105.604	.363		
	3	105.604	.363		

- a. Constant is included in the model.
- b. Initial -2 Log-Likelihood: 105.604
- c. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Source: processed secondary data, 2023

**Table 5**. -2log Likelihood (Block 1)

	Iteration History <sup>a,b,c,d</sup>						
Iteratio	on	-2 Log	Coefficients				
		likelihood	Constant	Profitability	Financial	Sales Growth	
					Leverage		
Step	1	76.795	100	-2.588	.936	616	
1	2	53.903	347	-8.673	1.842	954	
	3	37.517	502	-18.615	2.918	-1.670	
	4	27.865	642	-32.767	4.146	-2.535	
	5	23.110	693	-50.835	5.244	-3.068	
	6	21.269	603	-70.148	5.959	-3.252	
	7	20.846	506	-84.604	6.297	-3.237	
	8	20.811	470	-90.188	6.379	-3.170	
	9	20.811	466	-90.803	6.386	-3.160	
	10	20.811	466	-90.809	6.386	-3.160	
	11	20.811	466	-90.809	6.386	-3.160	

a. Method: Enter

Source: processed secondary data, 2023

Based on Tables 4 and 5, the comparison between the value of -2Log likelihood in block number 0 with the value of -2Log likelihood in block number 1 shows a decrease, which means that the overall regression model in this study fits the data.

### **Regression Model Feasibility Test**

The feasibility of the regression model was measured by the Hosmer and Lemeshow's Goodness Fit Test as Table 6.

**Table 6.** Uii Hosmer And Lemeshow's

Hosmer and Lemeshow Test					
Step	Chi-square	Df	Sig.		
1	1.604	8	.991		

Source: processed secondary data, 2023

Table 6 shows a significance value of 0.991 > 0.05, so the regression model is feasible and can predict the observed value.

#### **Classification Table Test**

This test is carried out to see the accuracy of classification predictions in the classification table. The Table 7 is the result of the classification table test:

b. The constant is included in the model.

c. Initial -2 Log-Likelihood: 105.604

d. Estimation terminated at iteration number 11 because parameter estimates changed by less than .001.

Table 7. Classification Table

Financial Di Not Experiencing Financial Distress	Predicted istress Experiencin g Financial	Percentage
Not Experiencing	Experiencin	Darcantaga
	•	Darcantaga
	Distress	Correct
30	2	93.8
2	44	95.7
		94.9
		30 2

Source: processed secondary data, 2023

Table 7 shows many companies that did not experience financial distress. As many as 32 companies, with 30 companies, do not experience financial distress. Meanwhile, the analysis results of the two companies originally predicted to experience financial distress showed that these two companies did not experience such conditions. The accuracy of this analysis classification shows a figure of 93.8%.

In addition, the classification table also shows 46 companies experiencing financial distress, with 44 companies experiencing these conditions. Meanwhile, two companies suspected not to experience financial distress after analyzing the results of observations show that these two companies are experiencing the same conditions. The accuracy of this analysis classification shows a figure of 95.7%, while the accuracy of the overall analysis classification reaches 94.9%.

### **Logistic Regression Results**

This test is intended to assess the size of the influence of variable X on variable Y. The Table 8 is the result of logistic regression analysis.

Table 8. Logistic Regression Analysis

	Variables in the Equation								
-		В	S.E.	Wald	df	Sig.	Exp(B)		C.I.for P(B)
							_	Lower	Upper
Step 1 <sup>a</sup>	Profitability	90.809	34.56 4	6.902	1	.009	.000	.000	.000
	Financial Leverage	6.386	2.526	6.394	1	.011	593.70 3	4.206	83811.0 36
	Sales Growth	-3.160	2.943	1.152	1	.283	.042	.000	13.588
	Constant	466	1.001	.217	1	.642	.628		
a. V	ariable(s) entered	d on step 1:	Profitabili	ty, Financ	ial Le	verage, S	ales Growth	<b>1.</b>	

Source: processed secondary data, 2023

Based on the table 8, the logistic regression model can be arranged as follows:

$$Ln\left(\frac{P}{1-p}\right) = -0.466 - 90.809X_1 + 6.386X_2 - 3.160X_3 + e$$

The constant value of -0.466 explains that if the independent variable is assumed to remain unchanged, the chance for the company to experience financial distress is -0.466 or decreases by 0.466. The coefficient of the profitability variable shows the number -90.809, which means that if the value of profitability increases by one unit, the chances of the company experiencing financial distress will decrease by 90.809, assuming the value of financial leverage and sales growth do not change.

The variable coefficient of financial leverage is 6.386, which means if the value of financial leverage increases by one unit, the chances of the company experiencing financial distress will increase by 6.386, assuming that the value of profitability and sales growth does not change. The variable coefficient of sales growth shows the number -3.160, which means that if the value of sales growth increases by one unit, the chances of the company experiencing financial distress will decrease by 3.160, assuming that the value of profitability and financial leverage does not change.

### **Hypothesis Test (Wald Test)**

This test intends to identify the dependent variable's influence in partially explaining the independent variables. Table 7 shows that the significance value of the profitability variable is 0.009 <0.05, which means that there is a significant influence between profitability and financial distress. Thus, H1, which states that profitability affects financial distress, is accepted. The significant value of the financial leverage variable is 0.011 < 0.05, which means that the financial leverage variable has a significant effect on financial distress. Thus H2, which states that financial leverage affects financial distress, is accepted. The significant value of the sales growth variable is 0.283 > 0.05, meaning there is no significant effect of the sales growth on financial distress. Thus H3, which states that sales growth affects financial distress, is rejected.

#### **Omnibus Test**

The Omnibus test is conducted to find out whether the dependent variable simultaneously affects the independent variable.

Table 9. Omnibus Test

Omnibus Tests of Model Coefficients					
		Chi-square	Df	Sig.	
Step 1	Step	84.794	3	.000	
	Block	84.794	3	.000	
	Model	84.794	3	.000	

Source: processed secondary data, 2023

The significance value in Table 9 is 0.000 <0.05, which means simultaneously the profitability, financial leverage, and sales growth variables affect financial distress.

# Coefficient of Determination (Nagelkerke Square)

The coefficient of determination in this study is presented in the Table 10.

**Table 10.** *Model Summary* 

Model Summary						
-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square				
20.811 <sup>a</sup>	.663	.894				
	-2 Log likelihood	-2 Log likelihood Cox & Snell R Square				

a. Estimation terminated at iteration number 11 because parameter estimates changed by less than .001.

Source: processed secondary data, 2023

The Nagelkerke R Square value in Table 10 shows the number 0.894, which means the independent variable can explain the dependent variable by 89.4%, and other variables outside this study explain the remaining 10.6%.

# The Effect of Profitability on Financial Distress

Based on the analysis results, the profitability variable has a significance level of 0.009 with a regression coefficient of -90.809. Thus, profitability has a negative and significant effect on financial distress conditions. Therefore, the greater profitability value, the lower the chances of the company experiencing financial distress. The size of the company's profitability indicates the amount of profit received by the company. The greater the profit obtained indicates that the company can finance its operational activities and return the investment value from investors with these profits. These results also illustrate that the company's assets are managed effectively because the profitability ratio proxied by ROA can assess how effectively management can optimize its assets to collect profits.

# The Effect of Financial Leverage on Financial Distress

The analysis results show a significant level of financial leverage of 0.011 with a regression coefficient of 6.386. Therefore, financial leverage has a positive and significant effect on financial distress. The greater the value of financial leverage, the greater the chance for a company to experience

financial distress. A high financial leverage ratio shows the company's high assets financed by debt. The high level of debt will also result in the high interest that the company must pay. Therefore, companies with high financial leverage have a high chance of experiencing financial distress.

# The Effect of Sales Growth on Financial Distress

Based on the analysis results, the sales growth variable's significance level is 0.283. Therefore, sales growth does not affect financial distress. This shows that sales growth cannot be used as a factor directly affecting financial distress. Sales growth cannot affect a company's financial distress because other factors are more directly influencing a company's financial distress. In addition, sales growth does not affect financial distress because the high or low profit earned from sales can still cover the company's operational costs. High profits can be obtained because the cost of goods sold tends to be low, and the amount of profit is greater than the amount of debt and interest owned. This can cause the company to avoid financial distress.

## The Effect of Profitability, Financial Leverage, and Sales Growth on Financial Distress Conditions Simultaneously

The omnibus test results show a significance value of 0.000. This means that the independent variables of profitability, financial leverage, and sales growth simultaneously affect the dependent variable, namely financial distress.

# CONCLUSIONS AND RECOMMENDATIONS

#### Conclusion

This concludes research that profitability financial leverage and significantly affect financial distress, where profitability has a negative effect while financial leverage has a positive effect. Meanwhile, sales growth did not affect the condition of financial distress. The results of the omnibus test show that profitability, leverage, and sales simultaneously affect the condition of financial distress. The independent variable contributes 89.4% in influencing the dependent variable, and other variables outside the research influence 10.6%.

#### Research Implication

In this study, the theoretical implications are as follows:

profitability variable significantly influences financial distress. These results are in line with the research of Rahma (2020), Syuhada et al. (2020), and Wibowo & Susetyo (2020), which state that profitability has a negative and significant effect on financial distress. The financial leverage variable has a significant influence on financial distress. This shows the same results as research conducted by Lubis & Patricia (2019) and Syuhada et al. (2020), which state that financial leverage has a positive and significant effect on financial distress. The sales growth variable has no significant effect on financial distress. These results are consistent with research by Dianova Nahumury (2019)and Giarto Fachrurrozie (2020), which state that sales growth does not affect financial distress.

Meanwhile, the managerial implication of this study is that there is a significant effect of profitability and financial leverage on financial distress, so it is important for company management to maintain the stability of the value of these two ratios. The results of this study are related to agency theory, pecking order theory, and signaling theory. Companies, especially agents, need to

maintain the effectiveness and efficiency of company management so that company assets can be used to produce a high level of profitability. On the side of companies that have achieved high profits, companies can reduce their leverage level. Therefore, this can be a good signal for stakeholders.

#### Recommendation

It is strongly suggested to company management always to pay attention to profitability ratios and financial leverage. This is due to these two variables significantly affecting the company's financial distress. The company is expected to be able to maintain the company's profitability at an optimal level and a minimum level of financial leverage. High profitability and low financial leverage can illustrate the company's ability to manage assets properly and indicate a healthy financial condition. Thus, it can maintain stakeholder trust.

Future researchers are expected to examine other variables not used in this study. Future researchers are also expected to be able to examine the conditions of financial distress in different company sectors and different periods so that the research produces a broader picture in predicting the company's financial distress.

#### REFERENCES

Annabila, N., & Rasyid, R. (2022). Pengaruh Leverage, Likuiditas, Arus Kas Operasi, dan Sales Growth terhadap Financial Distress. Jurnal Multiparadigma Akuntansi, IV.

Damajanti, A., Wulandari, H., & Rosyati. (2021). Pengaruh Rasio Keuangan terhadap *Financial Distress* pada Perusahaan Sektor Perdagangan Eceran di Bursa Efek Indonesia Tahun 2015-2018. *SOLUSI: Jurnal Ilmiah Bidang Ilmu Ekonomi, 19*.

Dianova, A., & Nahumury, J. (2019).

Investigating the Effect of Liquidity,
Leverage, Sales Growth and Good

- Corporate Governance on Financial Distress. Journal of Accounting and Strategic Finance, 2(2), 143–156. https://doi.org/10.33005/jasf.v2i2.49
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS* 25 (A. Tejokusumo, Ed.; 9th ed.). Badan Penerbit Universitas Diponegoro.
- Giarto, R. V. D., & Fachrurrozie, F. (2020). The Effect of Leverage, Sales Growth, Cash Flow on Financial Distress with Corporate Governance as a Moderating Variable. Accounting Analysis Journal, 9(1), 15–21. https://doi.org/10.15294/aaj.v9i1.31022
- Giovanni, A., Utami, D. W., & Yuzevin, T. (2020). Leverage dan Profitabilitas dalam Memprediksi Financial Distress Perusahaan Pertambangan Periode 2016-2018. *Journal of Business and Banking*, 10(1), 151. https://doi.org/10.14414/jbb.v10i1.2292
- Heri Winarno, S. (2019). Analisis NPM, ROA, dan ROE dalam Mengukur Kinerja Keuangan. *Jurnal STEI Ekonomi*, 28(02), 254.
- Kasmir. (2017). *Analisis Laporan Keuangan* (10th ed.). PT RajaGrafindo Persada.
- Lubis, N. H., & Patricia, D. (2019). Pengaruh Activity Ratio, Leverage dan Firm Growth terhadap Financial Distress (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di BEI Periode 2013-2017). Jurnal Kajian Manajemen Dan Wirausaha, 01(01).
- Maulana, J., & Suhartati. (2022). Pengaruh Return on Asset (ROA) dan Ukuran Perusahaan terhadap Financial Distress Pada Perusahaan Sub Sektor Kimia yang

- Terdaftar Di Bursa Efek Indonesia. *LAND JOURNAL*, 3.
- Rahma, A. (2020). Analisis Pengaruh Profitabilitas, *Leverage*, dan Likuiditas terhadap *Financial Distress. Jurnal Akuntansi Berkelanjutan Indonesia*, *3*(3). http://openjournal.unpam.ac.id/index.php/JABI
- Saputra, A. J., & Salim, S. (2020). Pengaruh Profitabilitas, Leverage, Firm Size, dan Sales Growth terhadap Financial Distress. Jurnal Multiparadigma Akuntansi Tarumanagara, 2(1), 262–269.
- Saputri, L. (2019). Accounting Analysis Journal The Effect of Leverage, Liquidity, and Profitability on Financial Distress with the Effectiveness of the Audit Committee as a Moderating Variable. Accounting Analysis Journal, 8(1), 38–44.
  - https://doi.org/10.15294/aaj.v8i1.25887
- Syuhada, P., Muda, I., & Rujiman. (2020). Pengaruh Kinerja Keuangan dan Ukuran Perusahaan terhadap *Financial Distress* pada Perusahaan Property dan Real Estate di Bursa Efek Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 8(2), 319–336. https://doi.org/10.17509/jrak.v8i2.22684
- Wibowo, A., & Susetyo, A. (2020). Analisis
  Pengaruh Profitabilitas, Likuiditas,
  Operating Capacity, Sales Growth
  terhadap Kondisi Financial Distress pada
  Perusahaan Manufaktur Terdaftar di
  Bursa Efek Indonesia Tahun 2015-2018.
  Jurnal Ilmiah Mahasiswa Manajemen,
  Bisnis Dan Akuntanis.
  https://doi.org/https://doi.org/10.32639/ji
  mmba.v2i6.687