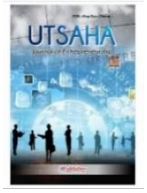

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The Effect of Profitability, Liquidity, Leverage, Sales Growth on Financial Distress in Consumer and Non-Consumer Cyclicals Companies listed on the IDX during the 2019-2021

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ABSTRACT

The ability of a company to compete is determined by the company's performance. If there is a lack of effectiveness in the company's performance, then company leaders can take the right action to ensure that things become more efficient. Moreover, performance measurement is closely related to the company's financial condition. Every company should create and use financial reports in the process of managing the company's finances. Therefore, this research is needed to find out the effect of profitability, liquidity, leverage, sales growth on financial distress in consumer and non-consumer cyclicals companies listed on the IDX during the 2019-2021. The sampling method used in this research is nonprobability sampling by applying purposive sampling technique. The sample used in this research consists of trading companies listed on the Indonesia Stock Exchange (IDX) during the 2019-2021 that are engaged in buying and selling activities without production. The results of this research indicate that (1) the profitability ratio measured using Return on Asset has a positive effect on financial distress; (2) the profitability ratio measured using Return on Equity has a negative effect on financial distress; (3) the liquidity ratio measured using the Current Ratio has no effect on financial distress; (4) the leverage ratio measured using the Debt Equity Ratio has an effect on financial distress; and (5) the sales growth ratio has no effect on financial distress in trading sector companies listed on the IDX during 2019-2021.

Keywords: *Altman Z-Score, Financial Distress, Financial Ratio*

INTRODUCTION

The ability of a company to compete is determined by the company's performance. If there is a lack of effectiveness in the company's performance, then company leaders can take the right action to ensure that things become more efficient. Moreover, performance measurement is closely related to the company's financial condition. Every company should create and use financial reports in the process of managing the company's finances. A financial report is a report that describes the financial position of the accounting process results during a certain period which is used as a communication tool for interested parties (Suteja, 2018). Financial ratio analysis serves as a determinant of company performance used by company management. Meanwhile, financial ratio analysis for investors serves to determine the investment place based on the financial condition of the company that will be used as an investment place (Tyas, 2020).

Financial reports are considered to have good benefits for the company, therefore research will be conducted on the benefits of these financial reports, using one form of research using financial ratios that aim to predict company performance such as bankruptcy and financial distress. Financial distress occurs before bankruptcy or liquidation, therefore companies must be able to predict financial distress in order to anticipate bankruptcy (Rahmayanti & Hadromi, 2017). There are four financial ratios tested in the research conducted by Damajanti, et al (2021), including leverage, liquidity, profitability and sales growth. Meanwhile, the results of this research are that there are three out of four factors that are proven to affect financial distress. While the factor that does not affect financial distress in this research is activity.

Other research that uses financial ratios as a factor that affects financial distress concluded that from four financial ratios used as test variables, only one ratio has an effect on financial distress (Amanda & Tasman, 2019). The result of the research indicated that liquidity, sales growth, and company size have a negative effect on financial distress, while only leverage has a positive effect on financial distress. Moreover, another research conducted by Hadi (2023) found that profitability and pandemic have an effect on financial distress, while liquidity and leverage have no effect on financial distress conditions.

Based on those previous researches, they examines the factors that affects to financial distress as the protection from bankruptcy of the company itself. Since the previous researchers not studies the financial distress in cunsomer and non cunsomer, this research aims to find out the effect of profitability, liquidity, leverage, sales growth on financial distress in consumer and non-consumer cyclicals companies listed on the IDX during the 2019-2021.

LITERATURE REVIEW

Agency Theory

According to Supriyono (2021), agency theory is a contractual relationship between principals and agents. This relationship is conducted for a service in which the authorizer authorizes the agent regarding the best decision making for the principal by prioritizing the interests in optimizing company profits so as to minimize expenses including tax expenses by doing tax avoidance. In addition, if the company has a profit from company management, this will provide a positive signal to investors to support the current management position and provide higher compensation to management. The agency theory is used in this research in order to examine the relationship between management and company owners by observing the level of timeliness of financial report information that will be submitted by management to company owners, that is, by observing the date of financial report submission.

Signalling Theory

Brigham and Houston (2014) stated that signalling theory is a shareholder's perspective on the company's opportunity to increase company value in the future, which information is provided by company management to shareholders. This action is taken by the company in order to signal to shareholders or investors regarding the company's management in assessing the company's future prospects so that it can distinguish between good and bad quality companies. Published company reports can be used as a guideline for shareholders and a consideration in investing. Company management can provide company reports as an internal interest. Investor interest can be maintained by providing information about the company to shareholders. Signalling theory emphasises the importance of company reports that are used as investment decisions (Moeljadi & Supriyati, 2014).

Financial Distress

Financial distress is a company's financial condition that has decreased before the company suffers bankruptcy. This condition is indicated by the company's inability to fulfil its maturing obligations, especially when the company does not have enough operating cash flow to cover its current obligations such as accounts payable or interest payments. If the company is unable to overcome this problem, then the company has the potential to experience bankruptcy. According to Gamayuni in Hantono's research (2019), there are five types of financial distress such following below:

1. Economic failure is a company's revenue situation that cannot cover the company's total costs, such as capital costs.
2. Business failure is a company condition that can stop operational activities in order to reduce losses for creditors.

3. Technical insolvency is a company condition that is unable to fulfill its maturing obligations.
4. Insolvency in bankruptcy is a situation where the book value of total liabilities exceeds the market value of the company's assets.
5. Legal bancrupty is a condition that leads a company to be legally bankrupt.

Financial Ratio

Horne and Wachowicz (2017) state that financial ratios are used to evaluate a company's financial condition and performance. In addition, financial ratios are also useful for evaluating the performance of a company that has been achieved in a certain period of time which can appear in the company's financial report. Basically, the company's past, current, and future financial performance are evaluated using financial ratio calculations (Lithfiyah et al., 2019). There are several financial ratio variables that affect company's financial distress such following below (Damajanti et al., 2021):

1. Profitability

   Profitability is a metric used to assess how successfully the management of the business runs its activities. It indicates how well the business can produce profits over a specific time period in relation to sales, total assets, or ownership capital. The level of profitability describes the company's performance as seen from the company's ability to generate the profits (Loppies et al., 2022).
2. Liquidity

   A corporation's liquidity can serve as a proof of its capacity to fulfill its short-term obligations through smooth operations, therefore the better a company is able to fulfilling those obligations by smooth operations and using smooth assets, then more accurate its liquidity becomes (Amanda & Tasman, 2019). Through comparing the company's smooth operations to its smooth debts, Hanafi and Halim (2014) argue that the liquidity ratio is used to evaluate a company's short-term liquidity capacity. The fact that it needs to implement all other considerations makes this liquidity standard relative rather than absolute (Hery, 2016).
3. Leverage

   One way to evaluate a company's ability to use loans as a source of funding for its various operational activities is through the usage of leverage (Damajanti et al., 2021). According to Fahmiwati et al (2017), income obtained through leverage comes from particular sources of funds that may suffer a constant cost in the form of interest costs, such as debt bonds, bank credits, and so on.
4. Sales Growth

According to Kasmir (2015), sales growth is an overview of the company's ability to maintain its economic position amid economic growth and its business sector. If the company's sales growth rate is high, this indicates the company's success in implementing its product marketing and sales strategies. However, if the sales growth rate is low, it can be assumed that the company is facing financial distress conditions.

The Modified Altman Z-Score Model

Z-Score Altman is an indicator of the potential bankruptcy of a company discovered by Edward I. Altman in 1968. Altman modified the model to reduce the effect of industrial factors by including the variable turnover of assets (X_5). The existence of this modified model, the Z-Score Altman model can be applied to all types of companies, both manufacturing and non-manufacturing.

Hypothesis

The Effect of Profitability on Financial Distress

According to research conducted by Damajanti, et al (2021), researchers investigated the impact of profitability levels on financial distress. The aim is to determine the effect of profitability on financial distress. The findings found that profitability can have a significant effect on financial distress. Erayanti (2019) examines the effect of profitability on the prediction of financial distress. It aims to determine the effect of profitability, especially ROE (Return on Equity) on the financial distress of a company.

H_1 : Profitability has a negative effect on financial distress

The Effect of Liquidity on Financial Distress

The research conducted by Damajanti, et al (2021) examined the effect of liquidity on financial distress. The findings found that this liquidity ratio has a significant effect on financial distress. In this research, the liquidity ratio is measured using the Current Ratio which is used to determine the amount of current assets owned by the company to fulfil short-term debt.

H_2 : Liquidity has a negative effect on financial distress

The Effect of Leverage on Financial Distress

However, Damajanti, et al (2021) investigated the effect of leverage on financial distress and discovered that leverage has a significant effect on financial distress.

H_3 : Leverage has a positive effect on financial distress

The Effect of Sales Growth on Financial Distress

Sales growth is a reflection of a company in maintaining its economic position amid economic growth. The research conducted by Damajanti, et al (2021) examined the effect of sales growth on financial distress as a result, that is, sales growth has a significant effect on financial distress.

H_4: Sales growth has a negative effect on financial distress.

RESEARCH METHODOLOGY

The sampling method used in this research is nonprobability sampling by applying purposive sampling technique. Purposive sampling is a non-random sample selection method, that is widely used in qualitative research for the identification and selection of information-rich cases related to the phenomenon of interest (Palinkas et al., 2015). This technique is used for quantitative research or generalisation studies (Sugiyono, 2017). The sample used in this research consists of trading companies listed on the Indonesia Stock Exchange (IDX) during the 2019-2021 that are engaged in buying and selling activities without production. In this research, researchers use independent variables, such as the value of financial ratios which consist of profitability, liquidity, leverage, and sales growth, while the dependent variable in this research is financial distress.

Statistical Analysis Technique

Descriptive Statistical Test

Descriptive statistics are used to describe quantitative data derived from the financial statement data of trading companies that are the object of research. The purpose of descriptive statistical analysis is to provide an overview of the distribution and characteristics of the research sample data (Ghozali, 2016).

Classical Assumption Test

Normality Test

The normality test is used to determine whether in the regression model there are residual variables that have a distribution with normal values by conducting a statistical analysis of one sample Kolmogorov Smirnov test with the following criteria:

1. One sample of Kolmogorov Smirnov test > 0.05 = Normal
2. One sample of Kolmogorov Smirnov test < 0.05 = Not normal

This normality test can also be used by observation. If the significance value is greater than $\alpha = 0.05$ or 5%, the hypothesis is accepted which indicates that the data is normally distributed, while if the significance value is smaller than alpha, the hypothesis indicates that the data is not normally distributed.

Multicollinearity Test

Multicollinearity test is used to determine the Variance Inflation Factor (VIF) value and tolerance value. If the VIF value < 10 and the tolerance value> 0.1 means that there is no multicollinearity between the independent variables.

Heteroscedasticity Test

Gujarati (2013) defined that homoscedasticity is a condition when the residual value at each prediction value varies and the variation tends to be constant. One way to test for heteroscedasticity is using the Park test. The test is conducted in order to get the correlation value of unstandardised residuals with all independent variables. If the correlation value indicates a significance level greater than 0.05, then there is no heteroscedasticity problem in the regression model. On the other hand, when the significance value is smaller than 0.05, then there is a heteroscedasticity problem in the regression model.

Autocorrelation Test

The autocorrelation test is used to determine the correlation between time series and cross section data. Autocorrelation always occurs with time series data. The existence or non-existence of autocorrelation can be identified using the Durbin-Watson (DW) test.

Multiple Linear Regression Analysis

The regression method aims to determine the relationship between one variable to another variable. The affected variable is called dependent variable, while the affecting variable is called the independent variable. Regression that has one dependent variable and more than one independent variable is called multiple regression (Muhtar & Aswan, 2017). The equation is as follows:

$$Y = \alpha + \beta 1X + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5$$

RESULT AND DISCUSSION

Research Result

Descriptive Statistical Test

Trading companies that are listed on the Indonesia Stock Exchange and only focus on buying and selling activities without producing an item during the 2019-2021, and have conducted an IPO before 2019, do annual financial reports using the rupiah exchange currency regularly during the research period. The results of data collection obtained 70 trading companies that focus on buying and selling activities without having to produce a raw product into one of the ready-to-use goods with a recovery that has fulfilled the criteria desired by the researcher, with three years observations. Therefore, the total samples needed are 193 data.

Classical Assumption Test

This classic assumption test is conducted using four tests consisting of normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test by using the assistance of SPSS version 25 for Windows programme.

Normality Test

In the 1-Sample K-S test, the significance value is the basis for decision making with the criteria that the significance value (Asym. Sig) is more than 0.05, the decision is normal distributed data. It can be seen that the total sample size of 193, that is, with all company data during 2019 to 2021, indicates the Sig. value of 0.00. In accordance with the criteria for normality test, then this value can be interpreted that the data used is not normally distributed.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is an inequality of variance from the residuals of an observation to other observations of the independent variables in a regression model (Ghozali, 2018: 137). The criteria for homoscedasticity in this test is that the residual significant value of the independent variable has a value greater than 0.05 (5%). On the other hand, when the significant residual independent variable has a value smaller than 0.05, it is concluded that there are symptoms of heteroscedasticity.

Table 1. The Result of Heteroscedasticity Test

Coefficients[a]					
Unstandardized Coefficients			Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	0,321	0,161		1,991	0,048
ROA	-0,035	0,047	-0,056	-0,758	0,450
ROE	0,047	0,088	0,045	0,530	0,597
CR	0,000	0,002	-0,005	-0,067	0,947
DER	0,066	0,041	0,140	1,588	0,114
SG	-0,002	0,002	-0,060	-0,819	0,414
a. Dependent Variable: ABS_RES_4					

Source: Processed Data using SPSS 25 (2022)

In this research, researchers used the Park test using the Natural Logarithm formula to avoid heteroscedasticity problems because all variables had significant values above 0.05. Therefore, it can be concluded that in this test, the regression model does not have heteroscedasticity problems.

Multicollinearity Test

The basis for decision making in indicating the lack of multicollinearity is when the VIF value of the independent variable is less than 10 (< 10) and the tolerance value of independent variables is more than 0.10 (> 0.10).

Table 2. The Result of Multicollinearity Test

Coefficients[a]		
	Collinearity Statistics	
Model	Tolerance	VIF
(Constant)		
ROA	0,973	1,027
ROE	0,734	1,363
CR	0,889	1,125
DER	0,669	1,496
SG	0,986	1,014
a. Dependent Variable: FINANCIAL DISTRESS		

Source: Processed Data using SPSS 25 (2022)

Table 2 indicates that the tolerance value of each independent variable in the research, such as ROA, ROE, CR, DER, and SG, has a value greater than 0.10 (10%) and the VIF value has a value smaller than 10. Thus, it can be concluded that the independent variables in this research do not have multicollinearity symptoms.

Autocorrelation Test

In this research, researchers used the Durbin-Watson test to detect the existence of autocorrelation problems. The criteria for decision making for the Durbin-Watson test so that it can be considered passed or there is no autocorrelation problem is if dU < DW < 4 - dU. The following are the results of the autocorrelation test using the Durbin-Watson test on the table 3.

Table 3. The Result of Durbin-Watson Test

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,527[a]	0,278	0,258	0,70826	1,899
a. Predictors: (Constant), SG, DER, ROA, CR, ROE					
b. Dependent Variable: FINANCIAL DISTRESS					

Source: Processed Data using SPSS 25 (2022)

Based on the table above, it can be seen that the resulting Durbin-Watson (DW) value is 1.899. It indicates that there is no correlation between confounding errors during the 2019-2021, and it can be concluded that the regression model is free from autocorrelation problems or the hypothesis is accepted.

Hypothesis Test

Hypothesis testing in this research was conducted by conducting four tests, such as multiple linear regression analysis test, simultaneous test (F-test), partial test (T-test), and coefficient of determination test. The test results are as follows:

Table 4. The Result of Multiple Linear Regression

Coefficients[a]					
Unstandardized Coefficients			Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	2,054	0,209		9,834	0,000
ROA	0,234	0,061	0,243	3,863	0,000
ROE	0,281	0,115	0,224	3,682	0,012
CR	0,001	0,003	0,029	0,435	0,664
DER	-0,350	0,053	-0,497	-6,544	0,000
SG	0,000	0,003	0,006	0,094	0,925
a. Dependent Variable: FINANCIALDISTRESS					

Source: Processed Data using SPSS 25 (2022)

According to the regression equation results, it can be interpreted that the constant value is 2.054. The value of the profitability variable by calculating using ROA and ROE, the significant value of Return on Assets (ROA) indicates a significant value level of 0.000 which means that the significant value is less than 0.05 with a regression coefficient value of 0.290, it can be concluded that the profitability variable has a positive effect on financial distress. The significant value of Return on Equity (ROE) indicates a significant level of 0.000 which means that the significant value is less than 0.05 with a regression coefficient value of 0.061, it can be concluded that ROE has a positive effect on financial distress. Meanwhile, the significant value of the Curent Ratio (CR) is 0.664 which indicates a significant value of more than 0.05 with a regression coefficient value of 0.001, it can be concluded that the curent ratio has no effect on financial distress. The value of Debt Equity Ratio (DER) has a significant value of 0.000 where the significant value is less than 0.05 which also has a regression coefficient value of -0.350 which means that the debt equity ratio has a negative effect on financial distress. Furthermore, sales growth which has a significant value of 0.925, the significant value of sales growth indicates that the significant value is greater than 0.05 with a regression coefficient value of 0.000, it can be concluded that sales growth has no effect on financial distress.

Table 5. The Result of Simultaneous Test

ANOVA[a]					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	36,068	5	7,214	14,380	0,000[b]
Residual	93,804	187	0,502		
Total	129,872	192			
a. Dependent Variable: FINANCIALDISTRESS					
b. Predictors: (Constant), SG, DER, ROA, CR, ROE					

Source: Processed Data using SPSS 25 (2022)

Simultaneous regression test is conducted in order to determine the effect of independent variables together or simultaneously affect the dependent variable. Based on table 5, the F-test on the regression model indicates a significance value of 0.000. Based on the significance value, it can be seen that the probability value of the regression model is smaller than 0.05. Along with the simultaneous test criteria, it can be concluded that the regression model is feasible to be used to predict financial distress, and the variables ROA, ROE, CR, DER, and SG simultaneously affect financial distress.

Table 6. Partial T-Test Results

Coefficients[a]					
Unstandardized Coefficients			Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	2,054	0,209		9,834	0,000
ROA	0,234	0,061	0,243	3,863	0,000
ROE	0,281	0,115	0,224	3,682	0,012
CR	0,001	0,003	0,029	0,435	0,664
DER	-0,350	0,053	-0,497	-6,544	0,000
SG	0,000	0,003	0,006	0,094	0,925
a. Dependent Variable: FINANCIALDISTRESS					

Source: Processed Data using SPSS 25 (2022)

The results of this partial test can be seen by examining the significant value < 0.05, if the significant value is in accordance with these provisions, then the independent variable can individually affect the dependent variable, but if the significant value > 0.05, it can be ascertained that the independent variable individually cannot affect the dependent variable.

Table 7. Determination Coefficient Test Results

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,527[a]	0,278	0,258	0,70826	1,899
a. Predictors: (Constant), SG, DER, ROA, CR, ROE					
b. Dependent Variable: FINANCIALDISTRESS					

Source: Processed Data using SPSS 25 (2022)

Based on table 7, it can be seen that from the test results the coefficient of determination obtained an adjusted R_2 value of 0.258 (25.8%). It can be concluded that the profitability variables calculated using ROA and ROE, liquidity calculated using CR, leverage calculated with DER, and sales growth are able to explain financial distress by 25.8%, while 74.2% is explained by other variables excluding related research.

Research Discussion

The Effect of Profitability on Financial Distress

The research results of the first hypothesis indicate that the profitability variable which can be measured using Return on Asset (ROA) and Return on Equity (ROE) of H_1 is accepted. The calculation of profitability using ROA has a significant value of 0.000, which has a value smaller than 0.05 and the regression coefficient owned by ROA is 0.234 with a positive direction. The calculation of profitability using ROE can be seen from the significant value which indicates 0.012 which means that the value is smaller than 0.05 which is a requirement or condition to determine whether or not the liquidity variable has an effect and has a regression coefficient of 0.061 in a positive direction.

The Effect of Liquidity on Financial Distress

The results indicated that the liquidity variable which can be measured using the Current Ratio (CR) has no effect on financial distress and H_2 is rejected. The ability of the company to be able to increase its liquidity value, the company will be more liquid and healthy so that the company will further reduce the potential for financial distress. However, if the company has low liquidity, the company must be more concerned about the condition of its assets. If the company does not pay careful attention to the condition of its profits and assets, there will be a risk that the company will not be able to pay its short-term debt.

The Effect of Leverage on Financial Distress

The research that has been conducted by researchers indicates that the leverage variable as measured using the Debt Equity Ratio (DER) has an effect on financial distress and H_3 is accepted. It is known because the significance value of leverage is 0.000 which has a smaller value when compared to 0.05 and the regression coefficient value is -0.350 with a negative direction, this causes the leverage variable to affect financial distress.

The Effect of Sales Growth on Financial Distress

The result obtained indicates that the calculation of the sales growth variable does not have an effect on financial distress and H_4 is rejected. However, the significant value is 0.925, which is greater than 0.05, and the value of the regression coefficient is 0.000.

CONCLUSION

Based on this research, the profitability ratio as measured using Return on Asset (ROA) has a positive effect on financial distress in trading sector companies listed on the Indonesia Stock Exchange during 2019-2021. Meanwhile, the profitability ratio as measured using Return on Equity (ROE) has a negative effect

on financial distress in trading sector companies listed on the Indonesia Stock Exchange during 2019-2021. Moreover, liquidity ratio as measured using Current Ratio has no effect on financial distress in trading sector companies listed on the Indonesia Stock Exchange during 2019-2021. On the other hand, sales growth ratio conducted by this research indicates the results obtained that sales growth has no effect on financial distress in trading sector companies listed on the Indonesia Stock Exchange during 2019-2021. The company's ability to sell high will make the company strong against companies in the market, therefore the higher the sales value, the higher the profit the company will get and the company will avoid financial distress.

REFERENCES

Amanda, Y., & Tasman, A. (2019). Pengaruh Likuiditas, Leverage, Sales Growth dan Ukuran Perusahaan Terhadap Financial Distress Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2015-2017. *EcoGen*, *2*(3), 453–462.

Brigham, & Houston. (2014). *Essentials of Financial Management. Dasar-dasar Manajemen Keuangan Terjemahan Ali Akbar Yulianto* (2nd ed.). Salemba Empat.

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*(1), 29–44.

Erayanti, R. (2019). Pengaruh Likuiditas, Profitabilitas dan Leverage terhadap Prediksi Financial Distress. *JRAP: Jurnal Riset Akuntansi Dan Perpajakan*, *6*(1).

Fahmiwati, N., Luhgiatno, & Widaryanti. (2017). Analisis Pengaruh Rasio Keuangan terhadap Financial Distress (Studi Kasus pada Perusahaan Sektor Perdagangan Ecer di Bursa Efek Indonesia periode 2012-2015). *Jurnal Akuntansi Dan Bisnis*, *3*(1).

Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Badan Penerbit Universitas Diponegoro.

Gujarati, D. N. (2013). *Dasar-dasar Ekonometrika* (5th ed.). Salemba Empat.

Hadi, D. A. S. W., Miqdad, M., & Wardayati, S. M. (2023). Effects of Profitability, Liquidity, Leverage, and the Pandemic on Financial Distress. *Wiga : Jurnal Penelitian Ilmu Ekonomi*, *13*(1), 1–9. https://doi.org/10.30741/wiga.v13i1.876

Hanafi, M. M., & Halim, A. (2014). *Analisis Laporan Keuangan* (7th ed.). UPP AMP YKPN.

Hantono. (2019). Memprediksi Financial Distress dengan menggunakan Model Altman Score, Grover Score, Zmijewski Score (Studi Kasus pada Perusahaan Perbankan). *Jurnal Riset Akuntansi Going Concern*, *14*(1), 168–180.

Hery. (2016). *Analisis Laporan Keuangan Integrated and Comprehensive Edition*. Grasindo.

Horne, J. C. V., & Wachowicz, J. M. (2017). *Prinsip-prinsip Manajemen Keuangan* (13th ed.). Salemba Empat.

Kasmir. (2015). *Analisis Laporan Keuangan* (1st ed.). PT Raja Grafindo Persada.

Lithfiyah, E., Irwansyah, & Fitria, Y. (2019). Analisis Rasio Keuangan. *Akuntabel*, *16*(2), 189–196.

Loppies, L., Entatoning, A., & Esomar, M. J. . (2022). Current Ratio and Debt to Equity Ratio to The Profitability of Food and Beverage Companies Listed on Indonesia Stock Exchange (IDX). *Utsaha (Journal of Entrepreneurship)*, *1*(2).

Moeljadi, & Supriyati, T. S. (2014). Factors Affecting Firm Value: Theoretical Study On Public Manufacturing Firms In Indonesia. *South East Asia Journal of Contemporary Business, Economics and Law*, *5*(2), 6–15.

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).

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Rahmayanti, S., & Hadromi, U. (2017). Analisis Financial Distress Pada Perusahaan Manufaktur Yang Terdaftardi Bursa Efek Indonesia. *Jurnal Akuntansi & Ekonomika*, *7*(1), 53–63.

Sugiyono. (2017). *Metode penelitian dan pengembangan untuk bidang pendidikan, manajemen, sosial, teknik : Research and development* (3rd ed.). Alfabeta.

Supriyono, R. A. (2021). *Akuntansi Keperilakuan* (Ketiga). Gadjah Mada University Press.

Suteja, I. G. N. (2018). Analisis Kinerja Keuangan dengan Metode Altman Z-Score pada PT Ace Hardware Indonesia Tbk. *Jurnal Moneter*, *5*(1), 12–17.

Tyas, Y. I. W. (2020). Analisis Rasio Keuangan untuk menilai Kinerja Keuangan pada Elzatta Probolinggo. *Ecobuss: Jurnal Ilmiah Ilmu Ekonomi Dan Bisnis*, *8*(1), 28–39.