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# Financial Distress Affected By Leverage And Sales Growth

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**Abstract:** Financial distress is a stage of a decline in the financial condition experienced by a company that occurred before it goes bankrupt or liquidated. This off course greatly affects the development of the company. This study aims to find out Financial Distress Affected by Leverage and Sales Growth in metal and similar industrial sub-sector companies listed on the Indonesia Stock Exchange in 2018-2020. The research sample consisted of 13 companies from 17 sub-sector companies of the metal and similar industries listed on the Indonesia Stock Exchange in 2018-2020. The sampling method was carried out using purposive sampling with certain criteria. Data was collected by secondary method and analyzed by E-views 9. The results showed that the leverage and sales growth had a positive and significant effect on financial distress. However, partially the leverage has no and no significant effect on financial distress, while sales growth has a positive and significant effect on financial distress**.**

**Keywords:** Leverage, Sales Growth, Financial Distress

## INTRODUCTION

Financial Distress occurs where the company is experiencing financial difficulties and is threatened not to be able to maintain its business continuity, in this condition the company experiences a decline in the financial condition experienced by the entity that occurred before going bankrupt. If the company experiences financial difficulties, it can make it difficult for stakeholders such as investors (shareholders), potential investors and creditors to invest or provide loans to the company and if the company does not find a solution, it is certain that the company cannot continue its business or go bankrupt. In this study, the company is said to be experiencing Financial Distress if the company suffers losses in two consecutive periods.

The economic impact of the Corona Virus (Covid-19) was experienced by several countries including Indonesia in 2019-2020. It was reported from Kontan.co.id that a number of manufacturing companies from the rubber gloves and glass industry sector went out of

business because they could not bear the high production costs and were pressured by the soaring price of industrial gas. The Ministry of Energy and Mineral Resources (ESDM) noted that glove factories such as PT. WRP Buana Multicorpora, PT. Indiglove, PT. Mandiri Inti Buana, PT. Smart Gloves, PT. Abergummi Medical, PT. Latec Dynamics Rhythm, PT. Citra latex Lestari, PT. Gotong Royong and PT. Hamko Pratika closes production and several rubber glove industry players then invest in Vietnam.

Gas prices for the glove industry at the plant gate during the period 2014 - 2019 increased by 31.6% to US$ 9.95% - US$ 10.89% per mmbtu. As a result, last year's domestic glove production capacity fell 29.4% to 23.6 million poong per day. On the other hand, imports of gloves reached US$ 30.65 million, up 48.9% compared to the 2014 record of US$ 20.59 million. Four glass factories were also recorded to have closed production in the span of 2014-2019, the four including KIG Jakarta, Iglass Surabaya, which has been operating for 30 years, FNG Jakarta and Samudera Kudus. In the same period, glass industry production fell 38.2 percent to 0.77 million tons per day as gas prices rose 21.2% to US$ 9.16 per mmbtu. Glass imports from Malaysia then increased 12.7 percent to US$ 101.8 million last year. "The Indonesian glass industry was previously one of the two largest in the Southeast Asia region, but the high gas price has made Indonesia lose to Malaysia," said Minister of Energy and Mineral Resources Arifin Tasrif in a Virtual RDP with Commission VII, Monday (4/5). (Kontan.co.id - Jakarta).

The Indonesian Ministry of Finance (Kemenkeu) released a number of State-Owned Enterprises (BUMN) which is listed as vulnerable to bankruptcy. From the data, it is known that the various industrial and agricultural sectors have the worst performance. The Director General of State Assets at the Ministry of Finance, Isa Rahmawati, said that one of the reasons why many state-owned enterprises in various industries and agriculture were in the red zone was the lack of current assets in these companies. In addition, the profit before interest and tax (EBIT) of various industrial SOEs and Pertamina Kantongo is not sufficient to deal with economic pressures. Therefore, the government will provide additional capital in the form of State Capital Participation (PMN) to SOEs experiencing Financial Distress. So that it becomes a stimulus for the company's financial performance, armed with this assessment, the Ministry of Finance can be more careful in providing PMN. This is because the main purpose of the capital injection is to create leverage from any money that the government injects into SOEs. Finance Minister Sri Mulyani Indrawati said, indications of poor financial performance can be seen from the Altman Z-score index. The average score of SOEs in various industries is at level 0, while agricultural SOEs are negative at 0.4. That means, state-owned companies in both sectors are in the red zone. "Other sectors are still relatively safe, on average in the yellow and green zones," Sri Mulyani said in a working meeting with Commission XI DPR, Monday (2/12/18). Z-Score to assess the vulnerability of the financial condition of SOEs, for a red stamp or Financial Distress means the company's financial condition before bankruptcy occurs. (Kontan.co.id - Jakarta).

The activities and performance of a company are strongly influenced by market economic conditions in the current and future periods. For the time being, the fluctuation in economic conditions that is difficult to predict is a bankrupt abyss for the company if it cannot adapt well. One of the signs for a company that has the potential to go bankrupt is Financial Distress (financial difficulties), starting from protracted and unresolved financial problems. Financial Distress is a broad concept in which companies face financial difficulties. It would be better if the company could anticipate and prevent bankruptcy earlier during Financial Distress. Ali (in Rahayu and Sopian, 2017) Financial Distress is a company's financial condition at the stage of decline before liquidation or bankruptcy occurs in the company. Financial Distress needs to be developed, it is important for a company to know the condition of Financial Distress so that companies are alert and take action in order to protect company assets so as not to fall into the bankruptcy trap (Liana and Sutrisno, 2014). Jimming and Wei Wei (in Rahayu and Sopian, 2017) generally research on bankruptcy,

failure and Financial Distress using financial ratios to predict the condition of the company in the future. The financial ratios used in this study are leverage, and sales growth that may occur in Financial Distress.

Financial distress is influenced by the leverage, there are several conditions that make companies have to choose debt as their source of company funds. Even though this choice has consequences, these consequences are considered to be smaller than the benefits derived from using debt. This calculation is referred to as the leverage (leverage), the leverage refers to the fixed assets and sources of funds used by the company, with consequences in the form of fixed costs or fixed expenses that must be incurred by the company due to such use. The indicator in the study to measure the leverage is the debt to equity ratio (DER). The greater the leverage the greater the obligations of the company. The size of the fixed obligations leads to the possibility of the company being in financial distress.

The leverage is used to measure how much the company uses debt as its capital to finance the running of the company. Companies that have a high leverage mean that the company uses more debt to finance the company's operations. The result of using too much debt is bankruptcy, because debt will cause interest costs to be borne by the company. This will result in companies tend to experience financial distress. Srikalimah's research (2017) states that the leverage has a very low and insignificant effect in predicting financial distress in manufacturing companies listed on the Indonesia Stock Exchange. Sari's research (2019) states thatleverage do not have a positive effect on financial distress, and Purba's research (2016) states thatleverage have a significant effect on financial distress. Another factor that affects financial distress is sales growth; a ratio that measures the company's sales growth by calculating the difference in sales value over a period, sales growth is a type of ratio that describes the company's ability to maintain its economic position in the midst of economic growth and its business sector. Sales growth reflects the company's ability to increase its sales from time to time and measures how well the company is doing in maintaining its economic position. The higher the value of the sales growth rate, it illustrates that the company has succeeded in carrying out its activities. This means that the greater the profit generated has an impact on increasing the company's cash flow, so that it affects the company's good financial condition. Companies with good financial conditions may not experience financial distress (financial distress).

The condition of the company can be said to be good if it shows the higher the company's sales growth, the less likely the company is to experience financial distress. This is because the company's high sales growth rate illustrates that the company can maintain its position and is in good condition, so it can be said that there is little possibility of financial distress. Yudiawati's research (2016) states that sales growth has a significant negative effect on financial distress. Researchers Nurhayati (2019) and Muflihah (2017) state that sales growth has no effect on financial distress.

Research on Financial Distress has been carried out by several previous researchers using financial ratios. Financial ratios are numbers obtained from the comparison of one item of financial statements with other items that have a relevant relationship. Financial ratios are useful in predicting business bankruptcy in the one to five year period before the business actually goes bankrupt (Nasser and Aryati, 2000). The financial ratios that are often used include liquidity, solvency, profitability, activity, and sales growth. Muflihah (2017) conducted research on financial ratio analysis to predict the financial distress condition of manufacturing companies listed on the Indonesia Stock Exchange for the period 2011-2015. The results showed that sales growth and current ratio had no significant effect on the financial distress of manufacturing companies listed on the BEI, while the debt ratio and return on assets had a significant effect on the financial distress of manufacturing companies listed on the IDX.

Srikalimah (2017) conducted research on financial ratio analysis to predict the financial distress condition of manufacturing companies listed on the Indonesia Stock Exchange for

the period (2009-2013). The results showed that the leverage (leverage) had no significant effect on the financial distress of manufacturing companies listed on the IDX, while profitability and liquidity had a significant effect on the financial distress of manufacturing companies listed on the IDX. This study was conducted to re-examine several factors in previous studies that affect the company's financial distress, because in previous studies the results obtained were different. Based on the background and previous research that has been disclosed above, the author intends to conduct research with the title: **"Financial Distress Affected By Leverage and Sales Growth**".

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Harahap (2011), explains that the method of positive accounting theory begins with a scientific theory or model that is currently applicable or generally accepted. The development of positive theory cannot be separated from dissatisfaction with normative theory (Watts and Zimmerman, 1986). Furthermore, it is stated that the rationale for analyzing accounting theory in a normative approach is too simple and does not provide a strong theoretical basis. Furthermore, Watts and Zimmerman (1986) developed a positive approach that was more oriented towards empirical research and justified various accounting techniques or methods currently used or looked for new models for the development of accounting theory in the future. Positive accounting theory refers to the company's financial statements so that this theory is related to research, namely financial distress.

Financial distress is the stage of declining financial conditions experienced by a company that occurred before going bankrupt or liquidating. Financial distress can be predicted based on the company's inability or the unavailability of a fund to pay its maturing obligations. Financial distress occurs because the company's liabilities are greater than the company's wealth (assets), size and profit. A small cash flow makes the company unable to maximize the company's operations which results in a decrease in profit or loss so that its existence is threatened.

Positive accounting theory relates to the leverage in the company. Fakhrudin H.M. (2008:109), the leverage (leverage) is a policy carried out by a company in terms of investing funds or obtaining sources of funds accompanied by a fixed burden or cost that must be borne by the company. Not only operating cash flow, the size of the debt level will certainly affect financial distress, there are several conditions that make companies have to choose debt as their company's source of funds. Although this choice has consequences, these consequences are considered to be smaller than the benefits derived from using debt. The leverage refers to the fixed assets and sources of funds used by the company, with consequences in the form of fixed costs or fixed expenses that must be incurred by the company as a result of such use. This positive accounting theory related to the company's progress can be seen from the level of increase in sales growth, this illustrates the company's ability to maintain its economic position in the midst of economic growth and its business sector. Kasmir (2016:107) defines sales growth as showing the extent to which the company can increase its sales compared to total sales as a whole. Sales growth reflects the company's ability to increase its sales from time to time and measures how well the company is doing in maintaining its economic position. The higher the value of the sales growth rate, it illustrates that the company has succeeded in carrying out its activities.

This means that the greater the profit generated has an impact on increasing the company's cash flow, so that it affects the company's good financial condition. Companies with good financial conditions may not experience financial distress (financial distress).

Setyorini and Ardiati (2006:77) in Selinvia, S., & Sugiyanto, S. (2020), Financial distress which consists of liquidity difficulties to the potential for bankruptcy of the company, is caused by many things, both from outside and from within the company. Although the

causes of financial difficulties are very diverse, but most of the causes are due to a series of wrong management decisions that make the company's condition worse.

Carolina, et al (2017) financial distress is the stage of declining financial condition experienced by a company that occurred before going bankrupt or liquidating. Financial distress can be predicted based on the company's inability or the unavailability of a fund to pay its maturing obligations.

Sugiyanto, S., & Fitria, J. R. (2020) Leverage scale is the ratio with the value of external capital that the company has used from operations as company costs. A scale ratio that measures by comparing how much wealth a company owns comes from equity equity. Managerial ownership is as a moderator to strengthen or weaken the proportion of shares. Measuring continues percentage.

Indawati, I., & Anggraini, A. (2019) Financial leverage is the use of a source of funds that has a fixed burden with the hope that it will provide additional profits that are greater than the fixed costs so that it will increase the profits available to shareholders. Financial Leverage arises because of fixed financial charges that must be issued by the company. These fixed financial obligations do not change with changes in EBIT levels and must be paid regardless of the level of EBIT achieved by the company.

Indawati, I., & Anggraini, A. (2019) The company's growth is highly expected by the company's internal and external parties, because good growth signals the company's development. From the investor's point of view, the growth of a company is a sign that the company has a profitable aspect, and investors will also expect the rate of return from the investment made to show good development.

Anggraini, A., & Tirtawati, D. I. (2021), Sales growth describes changes in sales increase or decrease from year to year which can be seen from each company's income statement. A good company can be viewed from the aspect of sales from year to year which continues to increase. This will have an impact on increasing company profits so that the company's internal funding also increases.

## METHODS

This research is a descriptive quantitative study that aims to determine financial distress is influenced simultaneously by the leverage and sales growth. The analysis in this study uses the logistic regression method, where logistic regression is one of the statistical analysis methods used to model the relationship of the independent variable to the dependent variable with nominal or ordinal data scale. The research location is the Indonesia Stock Exchange which provides information on the company's financial statements by accessing the official website of the Indonesia Stock Exchange, namely www.idx.co.id. This study takes data from the financial statements of manufacturing companies, especially in the metal and similar industrial sectors listed on the Indonesia Stock Exchange during 2015-2020.

The population in this study is the Metal and Similar Manufacturing Industry Sector Listed on the IDX for the 2015-2020 periods with a total of 78 companies. The data needed are financial reports and annual reports issued by the company for the 2015-2020 periods. The sampling technique that will be used in this research is using purposive sampling. Purposive sampling is research sampling that is limited to certain types that can provide the desired information, on the grounds that only those who have or meet several criteria determined by the researcher.

The data collection technique used in this study uses a literature study through books, articles, and other tools related to this research and uses documentation sourced from data on the financial statements of the Metal and Sector Manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015.-2020 period. The data analysis method used is statistical analysis method using E-views 9 software.

In simple terms, panel data can be defined as a data set in which the behavior of a cross-sectional unit (eg individual, firm, country) is observed over time. (Ghozali, 2017). This panel data regression is used to see the effect of the independent variable data on the dependent variable. In making panel data regression, three approaches can be used, namely:

1. Common Effect Model
2. Fixed Effect Model
3. Random Effect Model

To test the suitability or goodness of the three methods in the estimation technique with the panel data model, the Lagrange Multiplier Test, Chow Test and Hausman Test are used (Ghozali, I & Ratmono, 2017).

**Multiple Regression Analysis**

This multiple regression analysis method was performed on the proposed model using E-Views version 9 software that predicts the relationship between the independent variable and the dependent variable. The multiple regression analysis equation is: Y = +β1X1 +β2X2 + 3X3 + e

**Coefficient of Determination Test ($R^2$)**

Ghozali (2017), the coefficient of determination (R2) is used to measure how far the model's ability to explain the variation of independent variables. The coefficient of determination is used because it can explain the goodness of the regression model in predicting the dependent variable.

## RESULT AND DISCUSSION

**Statistical Analysis Results Description**

Descriptive statistics are statistics that describe (description) data as seen from the minimum value, maximum value, mean, and standard deviation of each variable.

**Table 1.** Statistical Analysis Results Description

| | Financial Distress | Leverage | Sales Growth |
|---|---|---|---|
| Mean | 1.461208 | 0.530890 | 0.003805 |
| Median | 0.972206 | 0.539100 | -0.051050 |
| Maximum | 8.436895 | 1.447500 | 0.858900 |
| Minimum | 0.342171 | 0.133100 | -0.677000 |
| Std. Dev. | 1.528298 | 0.288319 | 0.305690 |
| Skewness | 2.459351 | 0.429786 | 0.572244 |
| Kurtosis | 9.073003 | 2.709972 | 3.352179 |
| Jarque-Bera | 198.4937 | 2.674685 | 4.660115 |
| Probability | 0.000000 | 0.262543 | 0.097290 |
| Sum | 113.9742 | 41.40940 | 0.296800 |
| Sum Sq. Dev. | 179.8484 | 6.400829 | 7.195376 |
| Observations | 78 | 78 | 78 |

Descriptive statistical test results describe or explain individual variables without a relationship between the dependent variable and the independent variable.

1. Financial Distress

The results from this descriptive statistical analysis show that the minimum value is 0.342171, the maximum value is 8.436895. The table above shows the average (mean) of 1.461208, while the standard deviation value is 1.528298 which is above the average value, meaning that Financial distress has a high level of data variation, so it can be said that the data variation is biased or heterogeneous.

2. Leverage
   The results of this descriptive statistical analysis show that the minimum value is 0.133100, the maximum value is 1.447500. The table above shows the average (mean) of 0.530890, while the standard deviation value is 0.288319 which is below the average value, meaning that the debt level has a low level of data variation, so it can be said that the data variation is good or homogeneous.
3. Sales Growth
   The results of this descriptive statistical analysis show that the minimum value is -0.677000, The maximum value is 0.858900. The table above shows the average (mean) of 0.003805, while the standard deviation value is 0.305690 which is above the average value, meaning that sales growth has a high level of data variation, so it can be said that the data variation is biased or heterogeneous.

**Panel Data Test Results**

Panel data is a combination of time series and cross section data.

**Results of the CEM Model Approach**

This approach only combines cross section data and time series data without looking at the differences between time and individuals.

**Table 2.** Results of the CEM Model Approach

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.877977 | 0.348480 | 2.519452 | 0.0139 |
| Leverage | 1.089459 | 0.577756 | 1.885674 | 0.0632 |
| Sales Growth | 1.274092 | 0.544924 | 2.338110 | 0.0220 |

Based on the table of panel data regression results using the common effect model (CEM) it can be seen that the linear equations of panel data regression are as follows:

$$\mathbf{Y = 0.877977 + 1.089459X_1 + 1.274092X_2}$$

**Results of the FEM Model Approach**

Fixed Effect is a technique for estimating panel data by using dummy variables to capture differences in intercepts.

**Table 3.** Results of the FEM Model Approach

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1.614058 | 0.302438 | 5.336822 | 0.0000 |
| Leverage | -0.291054 | 0.560734 | -0.519059 | 0.6055 |
| Sales Growth | 0.438417 | 0.180804 | 2.424817 | 0.0182 |

Based on the table of panel data regression results using the fixed effect (FEM) model, it can be seen that the linear equation for panel data regression is as follows:

$$Y = 1.614058 - 0.291054X_1 + 0.438417X_2$$

**Results of the REM Model Approach**

Random Effect is used to overcome the weakness of the fixed effect method which results in reduced degrees of freedom which in turn reduces parameter efficiency (Ghozali, 2017).

**Table 4.** Results of the REM Model Approach

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1.441874 | 0.400765 | 3.597802 | 0.0006 |
| Leverage | 0.033021 | 0.500391 | 0.065991 | 0.9476 |
| Sales Growth | 0.474025 | 0.180491 | 2.626312 | 0.0105 |

Based on the table of panel data regression results using the random effect (REM) model, it can be seen that the linear equations of panel data regression are as follows:

$$Y = 1.441874 + 0.033021X_1 + 0.474025X_2$$

**Results of Data Analysis Phase**

There are three kinds of tests that can be used, namely the Chow Test, Hausman Test and Lagrange Multiplier Test.

**Table 5.** Chow Test Result

| Effects Test | Statistic | d.f. | Prob. |
|---|---|---|---|
| Cross-section F | 55.404966 | (12,63) | 0.0000 |
| Cross-section Chi-square | 190.863928 | 12 | 0.0000 |

Based on the results of the table above, it can be seen that the probability value of the F cross-section is 0.0000 and the chi-square cross-section probability value is 0.0000 both have a value of <0.05, it can be concluded that the more appropriate model to use is the fixed effect model than the common effect model.

**Table 6.** Hausman Test Results

| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|---|---|---|---|
| Cross-section random | 12.892548 | 2 | 0.0016 |

Based on the table above, it shows that the probability value of a random cross-section is 0.0016 or <0.05, which means that the research model used in the Hausman test is a fixed effect model rather than a random effect model.

**Table 7.** Lagrange Multiplier (LM) Test Results

| Test | Statistic | d.f. | Prob. |
|---|---|---|---|
| Breusch-Pagan LM | 87.38578 | 78 | 0.2188 |
| Pesaran scaled LM | -0.289369 | | 0.7723 |
| Pesaran CD | 1.351298 | | 0.1766 |

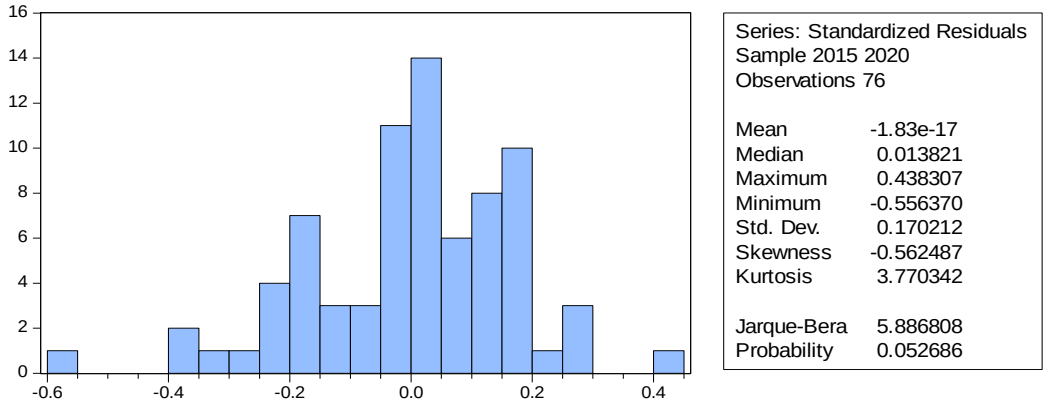
Based on the table above, it shows that the Breusch pagan values both 0.2188> 0.05, it can be concluded that the data fit with the common effect model.

**Classic assumption test**

The analytical tool used in this study is multiple linear regression analysis, it is necessary to test the classical assumptions used in this study, including:

**Normality test**

The results of the normality test on the research data using Eviews-9 are shown in Figure 4.1 as follows:




Source: Output Eviews 9, 2021

**Figure 1.** Normality Test Results

From Figure 4.1 it can be seen that the probability value of the J-B statistic is 5.886808. Because the probability value of p is 0.052686 <0.05, it can be assumed that the normality test is normally distributed.

**Multicollinearity Test Results**

The results of the multicollinearity test on the research data using Eviews-9 are shown in table 4.8 as follows:

**Table 8.** Multicollinearity Test Results

| | Financial Distress | Leverage | Sales Growth |
|---|---|---|---|
| Financial Distress | 1.000000 | 0.210885 | 0.259163 |
| Leverage | 0.210885 | 1.000000 | 0.021013 |
| Sales Growth | 0.259163 | 0.021013 | 1.000000 |

The data from the multicollinearity test in table 4.8 can be concluded that there are no symptoms of multilinearity between the independent variables. This is because the correlation value between independent variables is 0.259163 and 0.210885, respectively, where the value is < 0.80.

**Autocorrelation Test Results**

The results of the autocorrelation test on the research data using Eviews-9 are shown in table 4.9 as follows:

**Table 9.** Autocorrelation Test Results

Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.922913 | Mean dependent var | 1.461208 |
| Adjusted R-squared | 0.905783 | S.D. dependent var | 1.528298 |
| S.E. of regression | 0.469109 | Akaike info criterion | 1.495077 |
| Sum squared resid | 13.86397 | Schwarz criterion | 1.948290 |
| Log likelihood | -43.30800 | Hannan-Quinn criter. | 1.676506 |
| F-statistic | 53.87564 | Durbin-Watson stat | 1.771773 |
| Prob(F-statistic) | 0.000000 | | |

The results with the least squares method obtained the Durbin-Watson stat of 1.771773 where the value is between the criteria (1.55-2.45) so that with the provisions in the Durbin Watson test interpretation guide table, this regression model has no autocorrelation.

**Heteroscedasticity Test Results**

The results of the heteroscedasticity test on the research data using Eviews-9 are shown in table 4.10 as follows:

**Table 10.** Heteroscedasticity Test Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.032932 | 0.067480 | 0.488034 | 0.6273 |
| Leverage | 0.183939 | 0.125474 | 1.465950 | 0.1478 |
| Sales Growth | -0.038255 | 0.040751 | -0.938740 | 0.3516 |

The results of the heteroscedasticity test show that all the probability values of the independent variables X1 = 0.1478, X2 = 0.2516, are greater than the significant level of 0.05 so that it is concluded that there is no heteroscedasticity.

**Panel Data Multiple Linear Regression Analysis Results**

The results of the multiple linear regression analysis of panel data in this research data using the Fem model with the Eviews-9 application are shown in table 4.11 as follows:

**Table 11.** Panel Data Multiple Linear Regression Analysis Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 1.614058 | 0.302438 | 5.336822 | 0.0000 |
| Leverage | -0.291054 | 0.560734 | -0.519059 | 0.6055 |
| Sales Growth | 0.438417 | 0.180804 | 2.424817 | 0.0182 |

From the table above, the regression equation is determined, namely:

$$\mathbf{Y = 1.614058 - 0.291054X_1 + 0.438417X_2}$$

From the equation it can be explained that:

1. Constant
   The constant value in the regression equation is 1.614058 indicating that if the independent variable is 0, then the financial distress variable has a value of 1.614058
2. Leverage
   The regression coefficient for financial distress variable is -0.291054 which means that if other variables are considered constant, every 1% increase in leverage will increase financial distress by -0.291054% and vice versa.
3. Sales Growth
   The regression coefficient of the sales growth variable is 0.438417 which means that if other variables are considered constant, every 1% increase in sales growth will experience an increase in financial distress of 0.438417% and vice versa.

**Coefficient of Determination Test Results (R2)**

The results of the Coefficient of Determination (R2) test on the research data using Eviews-9 are shown in table 4.12 as follows:

**Table 12.** Coefficient of Determination Test Results (R2)
Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.922913 | Mean dependent var | 1.461208 |
| Adjusted R-squared | 0.905783 | S.D. dependent var | 1.528298 |
| S.E. of regression | 0.469109 | Akaike info criterion | 1.495077 |
| Sum squared reside | 13.86397 | Schwarz criterion | 1.948290 |
| Log likelihood | -43.30800 | Hannan-Quinn criter. | 1.676506 |
| F-statistic | 53.87564 | Durbin-Watson stat | 1.771773 |
| Prob(F-statistic) | 0.000000 | | |

Table 12 obtained the Adjusted R-squared value of 0.905783, this shows that the percentage of independent variables has an influence on the dependent variable by 90% while the remaining 10% is influenced by other factors outside this regression model

**Simultaneous Test Results (F Test)**

The results of the simultaneous regression test using the Eviews 9 test are as follows:

**Table 13.** Simultaneous Test Results (F Test)
Cross-section fixed (dummy variables)

| | | | |
|---|---|---|---|
| R-squared | 0.922913 | Mean dependent var | 1.461208 |
| Adjusted R-squared | 0.905783 | S.D. dependent var | 1.528298 |
| S.E. of regression | 0.469109 | Akaike info criterion | 1.495077 |
| Sum squared resid | 13.86397 | Schwarz criterion | 1.948290 |
| Log likelihood | -43.30800 | Hannan-Quinn criter. | 1.676506 |
| F-statistic | 53.87564 | Durbin-Watson stat | 1.771773 |
| Prob(F-statistic) | 0.000000 | | |

As for determining the magnitude of , it is sought with the provisions of the significant level ($\alpha$) = 5% and df1 (k-1) = (3-1) = 2 and df2 (n-k) = (78-3) = 75, Ftable of 3.12. Based on table 4.12, the results obtained are Fcount > Ftable (53,87564 > 3.12) and it is also shown that the probability value is smaller than the significant level of 0.05 (0.000000 < 0.05), so H0 is rejected and H1 is accepted and it can be concluded that operating cash flow, debt level and sales growth has a simultaneous effect on financial distress.

**Partial Test Results (t Test)**

The results of the partial regression test using the Eviews 9 test are as follows:

**Table 14.** Partial Test Results (t Test)
Cross-sections included: 13
Total panel (balanced) observations: 78

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| C | 1.614058 | 0.302438 | 5.336822 | 0.0000 |
| X1 | -0.291054 | 0.560734 | -0.519059 | 0.6055 |
| X2 | 0.438417 | 0.180804 | 2.424817 | 0.0182 |

Based on the table in the linear equation regression model, it can be seen that:

1. **Effect of Leverage on Financial Distress**
   As for determining the size of the t table, it is searched using the formula df = (nk) = 78-4 = 74, then ttable (0.05:74) = 1.29294. so that tcount < ttable (-0.519059 < 1.29294), this is reinforced by a probability value greater than the significance level or (0.6055 > 0.05), so H1 is rejected and H0 is accepted so that it can be concluded that the level of debt has no effect on financial distress, which means that it is large. the small level of debt does not affect the size of the occurrence of financial distress in the company.
2. **Effect of Sales Growth on Financial Distress**
   As for determining the magnitude of the t table, it is sought using the formula df = (n-k) = 78-3 = 75, then ttable (0.05:75) = 1.29294. Based on table 4.12, the results obtained are tcount sales growth of 2.342541, ttable = 1.29294 so tcount > ttable (2.424817 > 1.29294), this is reinforced by a probability value greater than the significance level or (0.0182 > 0.05), so H1 is accepted and H0 is rejected so that It can be concluded that sales growth has an effect on financial distress, which means that sales growth affects the size of the occurrence of financial distress in the company.

## CONCLUSIONS

The table above shows that the results of Fcount > Ftable (53,87564 > 3.12) and also shows the probability value which is smaller than the significant level of 0.05 (0.000000 < 0.05), so H0 is rejected and H1 is accepted and it can be concluded that financial distress is affected simultaneously by leverage and sales. growth. It can be concluded that with leverage and sales growth means the company can give a positive signal to investors to invest in the company, as evidenced by the stronger position of the company's operating cash flow against the prospect of future funding needs, will prevent financial distress. The low amount of leverage can prevent the occurrence of financial distress experienced by the company and high sales growth in the company can prevent the occurrence of financial distress. The results of this study are in line with research by Fatmawati (2017), Purba (2016) and Mappadang, et al. (2019) regarding the effect of operating cash flow, leverage and sales growth simultaneously having an effect on financial distress.

The results of the research that have been carried out, from the simple regression equation in the analysis model for the second hypothesis, state that the results of the t test (partial test) provide information that partial leverage has no effect on financial distress. Where the probability value is greater than the significance level or (0.6055 > 0.05), these results indicate that H0 is accepted and H1 is rejected. This means that if the company has leverage, it is not necessarily that the metal industry sub-sector company and the like are running poorly on leverage. Based on the above understanding, it can be concluded that leverage measures the company's ability to meet its long-term obligations, such as interest payments on debt, final principal payments on debt and other fixed obligations. Long-term debt is usually defined as an obligation to pay maturities of more than one year. The results of the research above are in line with Srikalimah (2017) which states that leverage has a very low and insignificant effect in predicting financial distress.

The results of the research that have been carried out, from the simple regression equation in the analysis model for the third hypothesis, state that the results of the t test (partial test) provide information that sales growth partially affects financial distress. Where

the probability value is smaller than the significance level or (0.0182 < 0.05), these results indicate that H0 is rejected and H1 is accepted. This means that sales growth has an influence on sub-sector companies in the metal industry and the like in carrying out sales growth. It can be concluded that Sales growth describes an increase in sales from year to year. The high level of sales growth indicates the better a company is in carrying out its operations. The results of the research above are in line with research conducted by Mappadang, et al (2019) which states that sales growth has a significant effect on financial distress.

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