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PROFITABILITY MODERATES MANAGERIAL OWNERSHIP, LIQUIDITY, AND SALES GROWTH TOWARDS FINANCIAL DISTRESS

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ABSTRACT

This research is a quantitative study that aims to determine the effect of managerial ownership, liquidity, and sales growth towards financial distress, moderated by profitability, and with leverage and firm size as control variables. Financial distress as a variable in this study is measured using the modified Altman Z-Score for manufacturing companies. The samples used in this study are 107 manufacturing companies that are listed in the Indonesian Stock Exchange (IDX) during the period of 2018-2020. Multiple linear regression and panel data regression were used as the analysis techniques using STATA 16 with a significance level of 5%. The results of this study show that (1) managerial ownership does not have a significant effect towards financial distress. (2) liquidity does not have a significant effect towards financial distress (3) sales growth has a significant effect towards financial distress (4) profitability is not able to moderate the relationship between managerial ownership and financial distress. (5) profitability is not able to moderate the relationship between liquidity and financial distress. (6) profitability is not able to moderate the relationship between sales growth and financial distress.

Keywords: *Managerial Ownership, Liquidity, Sales Growth, Profitability, Financial Distress*

INTRODUCTION

The Indonesian economy has experienced decline, which impacts several business sectors in Indonesia. The decline in economic conditions has implications towards the financial performance of companies, which include difficulties in obtaining profit. If performance is disrupted and profits decline, the company will experience difficulties in carrying out its operational activities. Without prompt and proper handling, companies can even potentially become bankrupt. Financial distress is a condition where a company experiences financial difficulties, or it can be stated as a condition where the financial condition of an entity is not in good health. Platt & Platt (2002) define financial distress as the stage that takes place before bankruptcy or liquidation occurs, which is indicated by the degradation of financial conditions.

The phenomenon of the Covid-19 pandemic also has a role in the decline of Indonesia's economic conditions which has resulted in several company sectors experiencing difficulties due to the lockdown and activity restrictions. The manufacturing sector is one of the pillars of the national economy with the highest contribution to gross domestic product (GDP) yet experienced a decline in the 2018-2020 period (Central Bureau of Statistics, 2020). This sector experienced a serious contraction, where the Ministry of Industry stated that the average utilization of the Indonesian manufacturing sector, which previously could reach 76.29%, decreased drastically to 30-40% (CNBC, 2020).

PT Nipress Tbk (NIPS) is a manufacturing company that is in danger of being removed or delisted by the Indonesia Stock Exchange. Reporting from the CNBC news channel, as many as 26 parties have submitted a bill for Postponement of Debt Payment Obligations (PKPU) in March 2020. This shows that PT Nipress is experiencing financial difficulties due to not being able to fulfill its debt payment obligations. In December 2020, PT Nipress announced that it had received a decision on the ratification and termination of the suspension of debt payment obligations (CNBC, 2019). Nevertheless, PT Nipress is still in a state of financial distress because the Indonesia Stock Exchange has suspended the company's shares until July 1, 2021. This shows that in addition to difficulties in fulfilling obligations, there is also a going concern issue in PT Nipress which can result in the company's bankruptcy.

PT Kertas Basuki Rachmat (KBRI), a manufacturing company in the pulp and paper sub-sector, also experienced a similar condition to PT Nipress, namely the suspension of stock trading by the Indonesia Stock Exchange. Reporting from the CNBC news channel, this happened due to the cessation of factory operational activities. The cessation of factory production was carried out due to limited working capital caused by the withdrawal of credit by one of the syndicated member banks (CNBC, 2021). With the delay in the company's main operational activities, of course this indicates that PT Kertas Basuki Rachmat is experiencing financial distress.

Financial distress can occur due to external and internal factors. Internal factors have a close relationship with corporate governance. By implementing good corporate governance, companies can avoid financial distress conditions (Nursiva & Widyaningsih, 2020). One of the important components of good corporate governance is ownership structure, including managerial ownership. (Malahayati, 2021) explains that managerial ownership is the proportion of ordinary shares owned by the board of directors and board of commissioners. According to Widhiadnyana & Dwi Ratnadi (2019) a high percentage of managerial ownership can reduce the potential for financial distress.

In addition to good corporate governance, the internal factor within the company that also plays an important role in determining the occurrence of financial distress is the financial performance of the company itself. The financial performance of a company can be reflected by financial ratios. One of them is liquidity, which is a parameter that indicates the company's ability to pay short-term obligations (Kasmir, 2017). A low level of liquidity is one aspect of financial distress, according to Agostini (2018). If a company has low liquidity, it is considered that the company has difficulty paying off its short-term obligations as responsibilities to creditors.

Another internal aspect that has a fundamental role in determining the financial condition of a company is operational activities, which are activities carried out daily to generate income. Generally, the main operational activity of a company is sales which is one of the main indicators of the company's ability. Sales growth is defined as an increase in the level of sales from year to year, which is one indicator of the company's development, especially the potential for increasing profits. Based on research by Lifa (2020), high sales growth indicates that the company has succeeded in maintaining its position and the company's investment success can reduce the potential for financial distress.

In this study, profitability is used as a moderating variable to test the ability of these variables to strengthen the relationship between independent variables and financial distress variables. Companies that have high profits are said to have a good level of profitability, so they can avoid financial distress (Pundi et al., 2021). This is in line with the research of Kisman & Krisandi (2019). Waqas & Md-Rus (2018) also support this statement and argue based on the literature that profitability has a negative relationship with financial distress.

This study also uses a control variable, namely leverage. According to Kasmir (2017) leverage is a ratio that measures the number of company assets financed by debt. The relationship between leverage and financial distress is that an increase in the leverage ratio results in an increase in risk for the company as the amount of debt increases. This occurs because an increase in the amount of debt, which is accompanied by an increase in the amount of interest on debt and the potential for failure to meet these obligations, can cause financial distress. Firm size control variable is also used in this study. Firm size describes the overall assets owned by the company (Dirman, 2020). Large companies tend to have high profit growth, or revenue. This statement is based on research by Harahap (2017) which suggests that the potential for bankruptcy that can be experienced will be smaller if the company has large amounts of assets.

This research is expected to contribute to research on financial distress with different variables used in terms of combination, use of moderating variables, and use of control variables. In addition, this research is expected to provide insight to companies regarding financial distress, to avoid this condition. Based on the phenomena that have been described and the gaps in existing research results, researchers are motivated to conduct further research by referring to previous research with the title "Profitability Moderates Managerial Ownership, Liquidity, and Sales Growth Against Financial Distress" which has an objective to identify profitability in moderating the effect of managerial ownership, liquidity, and sales growth on financial distress in manufacturing sector companies listed on the Indonesia Stock Exchange.

The problems to be analyzed in this research are as follows:

1. Does managerial ownership have a significant effect on financial distress?
2. Does liquidity have a significant effect on financial distress?
3. Does sales growth have a significant effect on financial distress?
4. Can profitability moderate the relationship between managerial ownership and financial distress?
5. Can profitability moderate the relationship between liquidity and financial distress?
6. Can profitability moderate the relationship between sales growth and financial distress?

Literature Review

Agency Theory

Agency theory is a concept that describes the relationship between principal and agent. This theory was first proposed by Jensen & Meckling (2012) who suggested that there is a relationship between the principal who gives authority to the second party, namely the agent, to act in accordance with the wishes of the principal. The assumption of this theory is that there is a difference between the interests of the principal and the agent, which is caused by the conflict of interest of each party. According to Susilowati et al. (2019) a conflict of interest occurs because each party has a desire for individual wealth interests. It can be concluded that agency theory is a concept that describes the relationship between principal and agent based on the assumption of a conflict of interest.

Signal Theory

Signal theory is a concept that explains behavior when two parties have access to different information. In an economic context, this theory was developed by Ross (1997). This theory explains that managers have information that investors do not have, so managers have the ability to provide signals about company performance. According to Restianti & Agustina (2018), signaling theory describes the company's strategy in shaping the perspective of investors on the company's prospects through guidance. In the context of the company, the company as a provider of information sends signals to stakeholders through financial reports. According to Harmadji et al. (2018), signaling theory explains that companies that perform well will give signals to the market on purpose, so that the market can distinguish between companies that perform well and those that perform poorly.

Financial Distress

Conceptual understanding of financial distress is as the final stage of corporate decline that occurs before larger events such as bankruptcy or liquidation (Platt & Platt, 2002). Meanwhile, according to Farooq et al. (2018), financial distress is a major failure indicator that provides an early signal to anticipate bankruptcy. (Agostini, 2018) defines financial distress as a continuous negative situation where a company is in a bad financial condition such as a decline in credit scores, low levels of liquidity, obstacles in paying debts, increased costs of capital, restrictions on dividend distribution policies and reduction of external funding sources. It can be concluded that financial distress can occur continuously, and does not always lead to bankruptcy.

Hypothesis Development

Managerial ownership and financial distress

Furthermore, Malahayati (2021) details that managerial ownership includes share ownership by the board of directors and commissioners. Nursiva & Widyaningsih (2020) stated that managerial ownership can reduce agency problems in a company, which based on agency theory refers to conflicts of interest. According to Widhiadnyana & Dwi Ratnadi (2019) a

high percentage of managerial ownership can reduce the potential for financial distress. In this study, it was found that managerial ownership has a significant negative effect on financial distress. Khurshid et al. (2018) also found similar results and stated that managerial ownership increases management's ability to reduce the potential for financial distress. Referring to the research above regarding the impact of managerial ownership on financial distress, the following hypothesis is formulated:

H1: Managerial ownership has a significant effect on financial distress

Liquidity and financial distress

According to Susilowati et al. (2019), liquidity shows the company's ability to meet short-term obligations and finance operational activities. The level of liquidity is controlled by the company's management, namely the agent, where based on agency theory, an agent will tend to act based on personal interests and this can have a negative impact on the management of the company's liquidity level (Larasati & Wahyudin, 2020). Masdupi et al. (2018) which states that companies with higher current assets than current liabilities can avoid financial distress. The study found that the higher the level of liquidity, the less potential for financial distress to occur. Similar results were found by the research of Mesak (2019). Referring to the research above regarding the impact of liquidity on financial distress, the following hypothesis is formulated:

H2: Liquidity has a significant effect on financial distress

Sales growth and financial distress

Sales growth as sales growth experienced by the company from one year to another can be an indicator that the company's financial condition is good. Ramadhani & Nisa (2019), stated that a company with positive sales growth indicates a good financial condition, while negative sales growth indicates a financial distress condition. It can be concluded that sales growth is a measurement which, if it is positive, can indicate that the company has good financial performance and is able to operate well to maintain its position in its business sector. Previous research by Amanda (2019) suggests that increased sales growth reduces the potential for financial distress. Similar results were obtained in Lifia's study (2020). Referring to the research above regarding the impact of sales growth on financial distress, the following hypothesis is formulated:

H3: Sales growth has a significant effect on financial distress

Profitability moderates managerial ownership and financial distress

A high percentage of managerial ownership can reduce the potential for financial distress (Widhiadnyana & Dwi Ratnadi, 2019). This is based on the general concept of good corporate governance. By implementing good corporate governance, companies can avoid financial distress conditions (Nursiva & Widyaningsih, 2020). Where, high managerial ownership reflects good corporate governance. The level of managerial ownership can be influenced by the company's ability to earn profits, or the level of profitability. The better the profitability level, the manager is expected to be more motivated to own the company he manages because it can provide benefits as shareholders. This is based on agency theory where managerial ownership can reduce conflicts of interest due to agents who are directly

involved in operational activities as well as shareholders. Therefore, profitability is expected to moderate the relationship between managerial ownership and financial distress. The hypothesis is formulated as follows:

H4: Profitability moderates the relationship between managerial ownership and financial distress

Profitability moderates liquidity and financial distress

Companies that have a good level of liquidity can be said to have financial performance and do not experience financial distress. The increase in the company's profitability level contributes to a high level of liquidity because it has the power to meet short-term obligations from the profits earned. Based on agency theory, agents tend to act on personal interests rather than the interests of the principal. If the agent is not optimal in obtaining profit, namely increasing the company's profitability, then the risk arising from the low level of liquidity will increase. Zulfa (2018) states that increasing profitability contributes to the smooth payment of obligations. The following hypothesis is formulated:

H5: Profitability moderates the relationship between liquidity and financial distress

Profitability moderates sales growth and financial distress

According to Handayani et al. (2019), companies with high profitability tend to have high sales growth rates. The level of sales growth can describe the company's management ability to continue to increase revenue, namely from sales. Then, a high sales growth row can reflect an increase in company income which can reduce the risk of financial distress. Based on this, it can be said that profitability has the ability to moderate the relationship between sales growth and financial distress. The following hypothesis is formulated:

H6: Profitability moderates the relationship between sales growth and financial distress

Methodology

Three variables are used in this study, namely managerial ownership, liquidity, and sales growth as independent variables. The profitability variable is positioned as a moderating variable to determine whether profitability can strengthen or weaken the relationship between each independent variable and financial distress as the dependent variable. Meanwhile, leverage and firm size variables are used as control variables in this study.

In this study, data collection was carried out using the library study method and financial statement observation. This research is quantitative research with the type of data used being secondary data. The source of data where research data is obtained is the annual financial report of manufacturing sector companies listed on the Indonesia Stock Exchange during the period 2018 – 2020, which is accessed on the official website of the Indonesia Stock Exchange at the address www.idx.co.id. The population used in this study are manufacturing companies listed on the Indonesia Stock Exchange during the period 2018 – 2020. The sample selection used in this study is the purposive sampling method. The sample criteria are manufacturing companies that are consecutively listed on the Indonesia Stock Exchange in the period of 2018 – 202, publish financial data in the form of complete and

consecutive annual financial reports during the research period, and do not experience delisting during the observation period.

Table 1. Research Sample

No.	Keterangan	Jumlah
1.	Manufacturing companies listed in the Indonesia Stock Exchange as of 2020	198
2.	Manufacturing companies not listed in the Indonesia Stock Exchange consecutively for three years during the period of 2018 – 2020	(31)
3.	Companies that did not publish financial data in the form of complete financial reports consecutively during the observation period	(13)
4.	Companies that did not explicitly disclose managerial ownership in their annual financial report	(17)
5.	Companies that are delisted during the observation period	(3)
	Number of companies taken as research samples	134
	Number of years in the observation period (2018-2020)	3
	Number of samples before outlier elimination	134
	Number of samples eliminated due to outliers	(20)
	Number of companies used as research samples	114
	Number of observations	342

Source: Researcher's data (2021)

Based on the table, 114 companies are taken as research samples. Analysis is performed with multiple linear regression using STATA

Definition and Measurement of Variables

Financial Distress

Agostini (2018) defines financial distress as a continuous negative situation where a company is in a bad financial condition such as a decline in credit scores, low levels of liquidity, obstacles in paying debts, an increase in the cost of capital, restrictions on dividend distribution policies and a reduction in external funding sources. The Altman model version used in this study is a modified Altman model for the manufacturing sector with the following Altman Z-score components (Altman 2000):

$$Z'=0.717X1+0.847 X2+3.107X3+0,420X4+0,998X5$$

In which:

X1= working capital / total assets

X2= retained earnings / total assets

X3= earnings before interest and taxes / total assets

X4= market value of equity / total liabilities

X5=sales / total assets

There are Z-score interpretation parameters, namely:

1. If Z score < 1.20, it is indicated that there is financial distress and there is a great potential for bankruptcy
2. If 1.20 < Z < 2.90, the company is in the gray zone and has a moderate potential for bankruptcy.
3. If Z score > 2.90, it indicates good financial condition so that it is safe from financial distress.

Managerial Ownership

Managerial ownership is ownership by company management which includes directors and commissioners (Widhiadnyana & Dwi Ratnadi, 2019). The following formula is used as a proxy for managerial ownership:

$$\text{Managerial Ownership} = \frac{\text{Shares owned by management}}{\text{Total outstanding shares}}$$

Liquidity

Liquidity is a measurement that shows the company's ability to meet short-term obligations and finance operational activities (Susilowati et al., 2019). In this study, liquidity is proxied by the current ratio which is formulated as follows:

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Sales Growth

Sales growth is the sales growth experienced by the company from year to year. The sales growth variable is measured using the following formula:

$$\text{Sales Growth} = \frac{\text{Net sales year } X - \text{Net sales year } (X - 1)}{\text{Net sales year } X}$$

Profitability

Sujarweni (2017) argues that profitability measures the company's power in obtaining profits related to sales, sales, profits and its own capital. Profitability in this study was measured using return on equity with the following formula:

$$\text{Return on Equity} = \frac{\text{Net income}}{\text{Total equity}}$$

Leverage

Leverage is a measurement of company assets financed by debt (Kasmir, 2017). The debt-to-assets ratio as a leverage proxy is formulated as follows:

$$\text{Debt - to - Assets Ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

Firm size

The firm size variable refers to the size of the company, describing the total number of assets owned by the company (Dirman, 2020). The formula used to measure firm size is as follows:

$$\text{Firm size} = \text{Ln Total Asset}$$

RESULTS AND DISCUSSION

Table 2 shows the results of descriptive statistical analysis which includes the mean (mean), standard deviation, maximum value, and minimum value.

Table 2. Descriptive Statistics Data

	Obs	Minimum	Maximum	Mean	Std. Deviation
FD	342	-0.9120362	7.269157	1.946798	1.286184
KM	342	0.00000	0.7217944	0.0792148	0.1575993
LIQ	342	0.2667076	10.47979	2.343427	1.741867
SG	342	-0.5995067	0.858872	0.0253161	0.2119721
PROF	342	-0.4353238	0.3521475	0.0535092	0.1103076
LEV	342	0.0758259	0.8447821	0.4435032	0.1801105
SIZE	342	25.31018	33.47373	28.56594	1.582847

Source: Researcher's data (2021)

Based on Table 2, the mean or average value of the Altman Z-score (FD) which shows financial distress for the 114 sample companies used is 1.891761. Based on the Altman Z-Score value parameter, the average manufacturing sector company is in the gray zone with the assumption that it has a moderate potential for bankruptcy. The average value of managerial ownership (KM) is 0.0792148 or 7.92%, which is the percentage of company shares owned by members of the board of directors and members of the board of commissioners. The liquidity variable (LIQ) has an average value of 2.343427, which is measured by the current ratio. Meanwhile, the average value of sales growth (SG) is 0.0253161 or 2.53%. While profitability (PROF) has an average value of 0.0535092. Leverage (LEV) as the first control variable has an average value of 0.4435032. While the second control variable, namely firm size (SIZE) has an average value of 28,56594.

Table 3. Chow Test Results

<i>Probability</i>	0.0000
Sig.	0.05

Source: Researcher's data (2021)

Based on Table 3, the probability value is smaller than the sig value where $0.0000 < 0.05$. Thus, the model selected in the Chow test is the fixed effect model.

Table 4. Lagrange Multiplier Test Results

<i>Probability</i>	0.0000
Sig.	0.05

Source: Researcher's data (2021)

Based on Table 4, it is known that the probability value $<$ sig. Thus, the model selected in the Lagrange Multiplier test is a random effect model.

Table 5. Hausman Test Results

<i>Probability</i>	0.0000
Sig.	0.05

Source: Researcher's data (2021)

Based on Table 5, it is known that the probability value $<$ sig. so that the model selected in the Hausman test is a fixed effect model. Therefore, the model chosen in this study is the fixed effect model as the most suitable model.

Table 6. Skewness and Kurtosis

<i>Variable</i>	<i>Skewness</i>	<i>Kurtosis</i>
FD	1.129986	5.335567
KM	2.47943	8.555602
LIQ	1.888356	6.836004
SG	0.3145494	4.419749
PROF	-0.959424	5.883635
LEV	-0.913076	2.093225
SIZE	0.6754624	3.275082

Source: Researcher's data (2021)

Based on Table 6, the skewness value is less than 3 and the kurtosis value is less than 10. Thus, the data is normally distributed.

Table 7. Multicollinearity Test Results

<i>Variable</i>	<i>Colinearity Statistics</i>	
	<i>Tolerance</i>	VIF
KM	0.926888	1.08
LIQ	0.509535	1.96
SG	0.830931	1.20
PROF	0.734270	1.36
LEV	0.510815	1.96
SIZE	0.837405	1.19
Mean VIF	1.46	

Source: Researcher's data (2021)

The results of the multicollinearity test show that the tolerance value is more than 0.10 and the VIF is less than 10. It can be concluded that the tested regression model is free from the multicollinearity assumption.

Table 8. Wooldridge Test Results

<i>Probability</i>	0.000
<i>Sig.</i>	0.05

Source: Researcher's data (2021)

Table 9. Breusch Pagan Godfrey Test Results

<i>Chi² (1)</i>	4.82
<i>Prob > Chi²</i>	0.0281

Source: Researcher's data (2021)

Based on Table 8, it is known that the output of the Wooldridge test is 0.4055 and is greater than the value of sig. 0.05, so the data is not free from autocorrelation. Furthermore, based on Table 9, the probability value of the Breusch Pagan Godfrey test is 0.0281 which is greater than the sig value. 0.05. Thus, it is concluded that the data is subject to the assumption of heteroscedasticity. To overcome this problem, the General Least Square test was carried out. With the following results:

Table 10. Generalized Least Square Test Results

<i>Coefficients</i>	<i>Generalized least square</i>
<i>Panels</i>	<i>Homokedastic</i>

Source: Researcher's data (2021)

Table 11. Determination Coefficient Test Results (Model 1)

<i>Within</i>	0.1824
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Source: Researcher's data (2021)

Table 12. Hasil Coefficient Test Results (Model 2)

<i>Within</i>	0.3243
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Source: Researcher's data (2021)

Based on Table 11, it was found that the results of Adjusted R Square model 1 before the moderating variable were 0.1824 or equal to 18.24%. These results indicate that the financial distress variable is explained through managerial ownership, liquidity, and sales growth of 18.24%. While the remaining 81.76% is explained through variables outside of this study. Based on Table 12, it is found that the results of Adjusted R Square model 2 are 0.3243 or equal to 32.43%. These results indicate that the financial distress variable is explained by managerial ownership, liquidity, and sales growth and is moderated by profitability by 32.43%. While the remaining 67.57% is explained through variables outside of this study.

Table 13. Multiple Linear Regression Test Results (Model 1)

<i>Variable</i>	<i>Regression Model</i>		
	<i>Fixed Effect Model</i>		
	<i>Coefficient</i>	<i>t</i>	<i>Probability</i>
<i>(Constant)</i>	23.44832	3.02	0.003
KM	0.210978	0.24	0.809
LIQ	-0.0053328	-0.10	0.919
SG	0.8415955	5.50	0.000
LEV	-2.229292	-2.84	0.005
SIZE	-0.7193805	-2.60	0.010

Source: Researcher's data (2021)

Table 13. Multiple Linear Regression Test Results (Model 2)

Variable	Regression Model		
	Fixed Effect Model		
	Coefficient	t	Probability
(Constant)	29.79197	4.12	0.000
KM	0.1749426	0.21	0.834
LIQ	-0.033495	-0.69	0.491
SG	0.2437445	1.45	0.147
PROF	2.529384	3.55	0.000
LEV	-0.7947187	-1.04	0.298
SIZE	-0.9693014	-3.75	0.000
KM*PROF	-0.6363911	-0.22	0.823
LIQ*PROF	0.6167611	2.10	0.037
SG*PROF	0.9876976	0.92	0.361

Source: Researcher's data (2021)

1. Based on the results of multiple linear regression, it can be explained that managerial ownership has no effect on financial distress. The results of the hypothesis test that have been carried out show that the significance value is greater than the alpha value, which is 0.809 ($0.809 > 0.05$). Thus, the first hypothesis (H1) is rejected. Managerial ownership as a form of good corporate governance can reduce agency problems in a company, which based on agency theory refers to reducing conflicts of interest. This happens because of the duality of the manager's function, as both manager and owner. A high percentage of managerial ownership can reduce the potential for financial distress. This is in line with agency theory, because the duality of functions owned by management as both manager and owner can reduce agency problems, namely conflicts of interest. However, research shows that high managerial ownership is not able to guarantee that the company avoids financial distress. Another factor that causes managerial ownership to have no effect on financial distress is that in fact it is not an obligation for members of the board of directors or commissioners to own shares in the company where they work. Thus, in a number of companies, there is no managerial ownership. The results of this study are in line with the research of Nursiva & Widyaningsih (2020) which states that managerial ownership has no significant effect on financial distress because not all companies have managerial ownership or do not provide incentive policies in this regard. The results of this study are also in line with Dirman's research (2020) which states that managerial ownership cannot be used as a categorization to determine whether the company is experiencing financial distress or not.
2. Based on the results of multiple linear regression, it can be explained that liquidity has no effect on financial distress. The results of the hypothesis test that have been carried out show that the significance value is greater than the alpha value, which is 0.919 ($0.919 > 0.05$). Thus, the second hypothesis (H2) is rejected. Liquidity shows the ability of a company to meet its short-term liabilities. The

level of liquidity is controlled by the company's management, namely the agent, where based on agency theory, an agent will tend to act based on personal interests and this can have a negative impact on the management of the company's liquidity level (Larasati & Wahyudin, 2020). According to the notion of financial distress put forward by Agostini (2018), low liquidity is one of the factors in the occurrence of financial distress. However, high liquidity does not always guarantee a low level of financial distress. In this study, liquidity is measured based on the current ratio, which compares the number of current assets and current liabilities which does not reflect the total number of assets and liabilities. It is possible that a company has a good level of liquidity, but the total liabilities are very large when compared to the total assets. Also, it is possible that a company with a good proportion of total liabilities to total assets also has a good current ratio. The results of this study are in line with Amanda's (2019) research which states that there is no significant difference between companies experiencing financial distress and not experiencing financial distress. The results of this study are also in line with Susilowati's research (2019) which states that liquidity does not have a significant effect on financial distress because the level of liquidity does not guarantee that the company can meet its obligations if it cannot manage assets properly.

3. Based on the results of multiple linear regression, it can be explained that sales growth has a significant positive effect on financial distress. The results of the hypothesis test that have been carried out show that the significance value is smaller than the alpha value, which is 0.000 ($0.000 < 0.05$) with a positive coefficient, so that the sales growth variable has a significant positive effect on financial distress. Thus, the third hypothesis (H3) is accepted. It can be concluded that the results of this hypothesis test are in line with the theory used in this study, namely signaling theory. Based on this theory, companies experiencing sales growth indicate good financial conditions. Companies with positive sales growth indicate that the company's financial condition is good, while negative sales growth indicates financial distress (Ramadhani & Nisa, 2019). This is because a company that is able to increase its sales gives an indication that the company can manage its assets and capital to successfully carry out sales transactions. Increased sales can also increase profits. This is a fundamental thing, especially for manufacturing companies whose main source of income is from the sale of products that have been produced by the company. Based on the coefficient on the multiple linear regression test, the effect of the sales growth variable on financial distress is positive. In this study, financial distress is proxied using the Altman Z-Score value where the higher the Altman Z-Score value, the less likely the occurrence of financial distress in the company. The results of this study are in line with Lifa's research (2020) which states that the higher sales growth, the company will avoid financial distress due to the high profits generated. The results of this study are in line with research by Amanda (2019) which states that the higher the sales growth, the smaller the chance of experiencing financial

distress because it shows the company's success in maintaining its position in the context of the level of sales.

4. Based on the results of multiple linear regression, it can be explained that profitability cannot moderate the relationship between managerial ownership and financial distress. The results of the hypothesis test that have been carried out show a significance value greater than the alpha value of 0.823 ($0.823 > 0.05$). Thus, the fourth hypothesis (H4) is rejected. The level of managerial ownership can be influenced by the company's ability to earn profits, or the level of profitability. The better the level of profitability, the manager is expected to be more motivated to own the company he manages because he can also feel the benefits as shareholders. Based on agency theory where managerial ownership can reduce the occurrence of conflicts of interest due to agents who are directly involved in operational activities as well as shareholders. However, profitability itself does not necessarily indicate that the company is performing well. In addition, profitability is not the only factor that determines whether members of the board of directors or members of the board of commissioners will own shares in the company they manage. Therefore, profitability is considered unable to moderate the relationship between managerial ownership and financial distress. The results of this study are in line with the research of Khafid et al. (2019) which states that profitability cannot moderate the relationship between managerial ownership and financial distress because even though the level of managerial ownership is high, it does not guarantee that management can increase profitability and reduce the potential for financial distress.
5. Based on the results of multiple linear regression, it can be explained that profitability cannot moderate the relationship between liquidity and financial distress. The results of the hypothesis test that have been carried out show a significance value greater than the alpha value, which is 0.037 ($0.037 < 0.05$). Thus, the fifth hypothesis (H5) is accepted. Based on agency theory, agents tend to act on personal interests rather than the interests of the principal. If the agent is not optimal in obtaining profits, namely increasing the company's profitability, then the risk arising from the low level of liquidity will increase. These risks include the occurrence of financial distress. Companies that have a good level of liquidity can be said to have financial performance and do not experience financial distress. An increase in the company's profitability can contribute to a high level of liquidity because it has the power to meet short-term obligations from the profits earned. High net profit causes an increase in profitability, which in this study is measured using return on equity. A good level of profitability can increase investment opportunities and then the profit can be used to increase the number of current assets and can increase the level of liquidity. Based on the regression model, the coefficient of interaction between profitability and liquidity is positive. Therefore, profitability is said to be able to strengthen the relationship between liquidity and financial distress. The results of this study are in accordance with Zulfa's research (2018) which states that profitability is able to

moderate the relationship between liquidity and financial distress. This study is also in line with Khafid et al. (2019) which states that profitability is able to moderate the relationship between liquidity and financial distress.

6. Based on the results of multiple linear regression, it can be explained that profitability as a proxy for the modified Altman Z-Score cannot moderate the relationship between sales growth and financial distress. The results of the hypothesis test that have been carried out show that the significance value is greater than the alpha value, which is 0.361 ($0.361 > 0.05$). Thus, the sixth hypothesis (H6) is rejected. Profitability shows the company's ability to earn a profit. The higher the ability of a company to earn a profit, the higher the potential of the company to be able to increase its main activity in earning a profit, namely sales. Companies with negative sales growth can indicate financial distress. Based on signaling theory, this will give a bad signal to stakeholders and cause investors to turn away from the company. Companies that have a high level of profitability tend to also have a high level of sales growth (Handayani, 2019). However, the high level of profitability and the results obtained by the company are not necessarily used to increase sales. The company's success is not only reflected by sales that continue to increase. This is because the increase in sales growth is not necessarily directly proportional to the increase in net profit. Because, a company can experience an increase in sales but on the contrary also experience an increase in the costs incurred to make these sales. If the costs incurred are large, then sales growth does not reflect good operations because net income will be small.

CONCLUSION

Based on the elaboration, it is concluded that managerial ownership and liquidity as independent variables have no effect on financial distress, while sales growth has a significant positive effect on financial distress. Profitability cannot moderate the relationship between managerial ownership and financial distress. In addition, profitability also cannot moderate the relationship between sales growth and financial distress. Meanwhile profitability can strengthen the relationship between liquidity and financial distress. Profitability as a moderating variable and firm size as a control variable have a significant positive effect on financial distress. Meanwhile, the leverage control variable has no significant effect on financial distress.

REFERENCES

- Agostini, M. 2018. Corporate Financial Distress: Going Concern Evaluation in Both International and U.S. Contexts. In *Corporate Financial Distress: Going Concern Evaluation in Both International and U.S. Contexts*. <https://doi.org/10.1007/978-3-319-78500-4>

- Altman, E. I. 2000. Predicting Financial Distress of Companies: Revisiting the Z-Score and ZETA Models. *Journal of Banking & Finance*, 1(1). <https://doi.org/10.4324/9781315064277>
- Amanda, Y. 2019. Effect of Liquidity, Leverage, Sales Growth and Company Size on Financial Distress.
- CNBC. 2021. Gas Company Nipress in PKPU, This Is The Case Update! Retrieved September 13, 2021, from <https://www.cnbcindonesia.com/market/20210609141354-17-251770/emiten-aki-nipress-terjerat-pkpu-begini-update-kasusnya>
- CNBC. 2019. Factory Stops Operating, Kertas Basuki Stock Is Suspended! Retrieved September 13, 2021, from <https://www.cnbcindonesia.com/market/20190423110536-17-68212/pabrik-berhenti-operasi-saham-kertas-basuki-disuspensi>
- CNBC. 2020. Indonesian Manufacture Destroyed Due To Covid-19, This Is Proof/ <https://www.cnbcindonesia.com/news/20201020205812-4-195870/manufaktur-ri-hancur-lebur-gegara-covid-19-ini-buktinya>
- Dirman, A. 2020. Financial Distress: The Impacts of Profitability, Liquidity, Leverage, FirmSize, And Free Cash Flow. *International Journal of Business, Economics and Law*, 22(1), 17–25.
- Ekasari Harmadji, D., Subroto, B., Saraswati, E., & Prihatiningtias, Y. W. 2018. From Theory to Practice of Signaling Theory: Sustainability Reporting Strategy Impact on Stock PriceCrash Risk with Sustainability Reporting Quality as Mediating Variable. *KnE Social Sciences*, 3(10), 647–658. <https://doi.org/10.18502/kss.v3i10.3411>
- Farooq, U., Jibrán Qamar, M. A., & Haque, A. 2018. A Three-Stage Dynamic Model Of Financial Distress. *Managerial Finance*, 44(9), 1101–1116. <https://doi.org/10.1108/MF-07-2017-0244>
- Handayani, R. D., Widiasmara, A., & Amah, N. 2019. Effect of Operating Capacity and Sales Growth on Financial Distress with Profitability as Moderating Variable. *Management Innovation Seminar, Business and Accounting I*, 137–151.
- Harahap, L. W. 2017. The Effect of Corporate Governance Mechanisms and Firm Size on Financial Distress Conditions in Property and Real Estate Companies Listed on the IDX in 2010 - 2014. *Accounting & Business Research Journal*, 17(2), 1–12.
- Jensen, M., & Meckling, W. 2012. Theory Of The Firm: Managerial Behavior, Agency Costs, And Ownership Structure. *The Economic Nature of the Firm: A Reader, Third Edition*, 283–303. <https://doi.org/10.1017/CBO9780511817410.023>
- Kasmir. 2017. *Financial Report Analysis* (10th print edition). Rajawali Press

- Khurshid, M. K., Sabir, H. M., Tahir, S. H., & Abrar, M. 2019. Impact of Ownership Structure and Board Composition on Financial Distress of Pakistan Stock Exchange Listed Manufacturing Firms. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 11(2), 1–14. <https://doi.org/10.14456/ITJEMAST.2020.26>
- Kisman, Z., & Krisandi, D. 2019. How to Predict Financial Distress in the Wholesale Sector: Lesson from Indonesian Stock Exchange. *Journal of Economics and Business*, 2(3), 569–585. <https://doi.org/10.31014/aior.1992.02.03.109>
- Larasati, H., & Wahyudin, A. 2020. The Effect of Liquidity, Leverage, and Operating Capacity on Financial Distress with Managerial Ownership as a Moderating Variable. *Accounting Analysis Journal*, 8(3), 214-220. <https://doi.org/10.15294/aaj.v8i3.30176>
- Lifia, S. 2020. The Effect of Solvency, Sales Growth, and Managerial Agency Costs on Financial Distress: An Empirical Study on Property and Real Estate Sector Companies Listed on the Indonesia Stock Exchange for the 2016-2018 Period. 1(2), 16. <http://pub.unj.ac.id/journal/index.php/japa> DOI:
- Malahayati, R. 2021. Managerial Ownership Structure, Institutional Ownership Structure, and Company Size on Company Performance and Its Impact on Earnings Management in Coal Mining Sector Companies in 2017-2019. *Accounting and Finance Journal*, 9(1), 29. <https://doi.org/10.29103/jak.v9i1.3551>
- Mesak, D. 2019. Financial Ratio Analysis in Predicting Financial Conditions Distress in Indonesia Stock Exchange. *Russian Journal of Agricultural and Socio-Economic Sciences*, 86(2), 155–165. <https://doi.org/10.18551/rjoas.2019-02.18>
- National Bureau of Statistics. 2020. <https://www.bps.go.id/pressrelease.html>
- Nursiva, K., & Widyaningsih, A. 2020. Financial Distress In Indonesia: Viewed From Governance Structure. *Accounting and Finance Research Journal* 8(2), 205–220. <https://doi.org/10.17509/jrak.v8i2.27796>
- Platt, H. D., & Platt, M. B. 2002. Predicting Corporate Financial Distress: Reflections On Choice-Based Sample Bias. *Journal of Economics and Finance*, 26(2), 184–199. <https://doi.org/10.1007/bf02755985>
- Pundi, J., Sarumaha, R. S., Yeni, F., Sari, Y. P., & Mayliza, R. 2021. The Effect of Cash Flow Funding, Net Profit and Leverage on Financial Distress with Profitability as a Moderating Variable: Empirical Study of the Indonesia Stock Exchange. 05(02), 225–236. <https://doi.org/10.31575/jp.v5i2.363>
- Ramadhani, A. L., & Nisa, K. (2019). Effect of Operating Capacity, Sales Growth and

Operating Cash Flow on Financial Distress. *Accounting and Finance Research Journal*, 5(1), 75–82. <https://doi.org/10.25134/jrka.v5i1.1883>

Restianti, T., & Agustina, L. (2018). The Effect of Financial Ratios on Financial Distress Conditions in Sub Industrial Sector Company. *Accounting Analysis Journal*, 7(1), 25– 33. <https://doi.org/10.15294/aaaj.v5i3.18996>

Ross, S. A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. In *Source: The Bell Journal of Economics* (Vol. 8, Issue 1).

Susilowati, Y., Suwanti, T., Puspitasari, E., & Nurmaliani, F. A. (2019). The Effect of Liquidity, Leverage, Profitability, Operating Capacity, and Managerial Agency Cost on Financial Distress of Manufacturing Companies Listed in Indonesian Stock Exchange. 100(2013),651–656. <https://doi.org/10.2991/icoi-19.2019.114>

Waqas, H., & Md-Rus, R. 2018. Predicting financial distress: Importance of accounting and firm-specific market variables for Pakistan's listed firms. *Cogent Economics and Finance*, 6(1), 1–16. <https://doi.org/10.1080/23322039.2018.1545739>

Widhiadnyana, I. K., & Dwi Ratnadi, N. M. (2019). The Impact of Managerial Ownership, Institutional Ownership, Proportion Of Independent Commissioner, And Intellectual Capital On Financial Distress. *Journal of Economics, Business & Accountancy Ventura*, 21(3), 351. <https://doi.org/10.14414/jebav.v21i3.1233>

Zulfa, M. Z. (2018). The Ability of Profitability to Moderate the Effect of Liquidity, Leverage and Operating Capacity on Financial Distress (Empirical Study On Retail Companies Registered On IDX 2012- 2017). *Business and Economics Conference in Utilizing of Modern Technology*, 310-323.