

The Impact of Liquidity and Leverage on Financial Distress: Profitability as an Intervening



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ABSTRACT: Financial distress is a condition where a company experiences financial difficulties that can go bankruptcy. Financial distress is an early warning system used to identify and improve the condition of a company before it reaches a crisis or bankruptcy. By predicting and understanding financial distress conditions from the beginning, it is expected to help management take preventive actions that can keep the company away from bankruptcy. This study aims to examine how liquidity and leverage affect financial distress mediated by profitability. This research specifically focuses on property and real estate companies listed on the Indonesia Stock Exchange for the period 2019 to 2021. This research applies a quantitative approach with a total population of 47 companies. The sampling technique used is saturated sampling. The data is analyzed using path analysis. The result shows that liquidity has an influence on profitability, but leverage does not affect profitability. Leverage and profitability influence on financial distress, but liquidity has no effect on financial distress. Furthermore, profitability is able to mediate the relationship of liquidity to financial distress, but profitability is unable to mediate the relationship of leverage to financial distress.

KEYWORDS: Liquidity, leverage, profitability, financial distress

I. INTRODUCTION

The Covid-19 pandemic has caused crises around the world. Beside people die from the disease, this outbreak also disrupted economic activities in various sectors. The enforcement of lockdown and other government policies to inhibit the spread of Covid-19 virus has hampered the economic cycles of all countries. In addition, the impact of several policies implemented certainly caused the economy disruption in Indonesia, during 2020, the Indonesian economy can be said to have experienced an economic recession because it contracted for 3 consecutive quarters from the second quarter to the end of 2020 (BPS, 2021). The real estate sector is one of the sectors that can still survive when Indonesia is on a recession. However, there are many property and real estate companies that have suffered losses due to the Covid-19 pandemic. This makes the company's management have to take more serious steps in managing its company, because a decrease in profits for 2 consecutive years or more is one of the characteristics of financial distress that can lead to bankruptcy.

Financial distress is a condition where companies experience financial difficulties in fulfilling overdue obligations to creditors (Drescher, 2014: 25). It is identified when a company's economy deteriorates and even commits violations against creditors. It is also an early warning system used to identify early and improve the condition of a company before it reaches a crisis or bankruptcy. By predicting and knowing financial distress conditions from the beginning, it is expected to help managers anticipated bankruptcy.

Financial distress can occur due to two factors, namely external factors that include economic conditions, political conditions, and natural disasters. The second factor is internal factors, such as company performance, company policy and corporate culture. Therefore, to reduce the concerns of investors and creditors, one of the ways used in predicting the occurrence of financial distress is to measure financial indicators contained in financial statements. Financial indicators are generally obtained from financial ratios contained in financial statements. Financial statement is crucial for company because it describes the results of company activity that is a communicator between company financial data and interested parties. In this study, there are three financial ratios utilized to predict financial distress, namely liquidity, leverage and profitability.

Liquidity is one of the important financial ratios in the sustainability of the company. The reason is the company must have enough cash to pay its short-term debts. The company's ability to pay off its short-term debt can be seen using cash ratio analysis because cash is a ready-to-use payment instrument and is free to be used by the company. Cash and cash equivalents are the company's most liquid assets that can be immediately used to fund and pay off short-term obligations that are maturing soon and can be used to finance the company's general activities. The potential for companies to experience

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financial distress will be smaller if the company can fund and pay off its short-term obligations properly (Zainul Kisman and Dian Krisandi, 2019).

In addition, in making investment and funding decisions, investors and creditors also concern on the company's ability to pay its long-term debt. This ability can be seen from the value of company leverage which is used to measure the company's long-term ability to pay its debts (Ross, et.al, 2015: 66). The greater the leverage value, the more debt the company uses, the greater the risk and return. Leverage can be calculated using the long-term debt to equity ratio which is used to measure the proportion of debt to company capital and is useful for determining the company's capital ability to pay its long-term debt. If the greater the leverage value, it will make the possibility of the company experiencing financial distress also increase (Ramly et.al, 2019).

Beside liquidity and leverage, the profitability ratio is one of the important ratios in the company. A company is considered as healthy if it has a high level of profitability and can survive in any economic situation. Profitability indicates efficiency and effectiveness in the use of company assets. The profitability ratio is a tool to measure the company's ability to generate profits and is useful for measuring the level of management effectiveness in carrying out its operations (Hery, 2017: 3192). The higher the profitability means the higher the company's ability to produce profit. One ratio to measure profitability is return on assets which focuses the company's ability to earn profits in operating activities by utilizing its assets. Therefore, in this study return on assets is used as a measurement of company profitability. The greater the company's profitability, the smaller the possibility of the company runs into financial distress (Miftahul Fauzy et.al, 2019).

In this study will be explained about the importance of factors that can cause financial distress in a company. Therefore, management can decide the best decisions to avoid bankruptcy. This study aims to test and empirically prove the effect of liquidity, leverage, activity and sales growth on financial distress mediated by profitability.

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II. LITERATURE REVIEW AND DEVELOPMENT HYPOTHESIS THE EFFECT OF LIQUIDITY ON PROFITABILITY

Liquidity is a ratio used to measure a company's ability to meet its short-term obligations. Brigham and Houston (2019: 108) stated that liquid assets are assets traded in the active market so that they can be converted quickly into cash, while the liquidity position of a company is related to the ability of a company to pay off its short term liabilities. Horne et al (2012: 167) revealed that liquidity is inversely proportional to profitability. The higher the company's liquidity is, the lower the company's ability to generate profit. This statement is supported by the results of research conducted by Jhon Nasyaroeka (2021) which explains that liquidity has a significant effect on profitability.

H1: Liquidity has a significant effect on profitability.

THE EFFECT OF LEVERAGE ON PROFITABILITY

Leverage is a ratio that describes the relationship between a company's debt to capital and assets that can be an indicator to see how far the company is financed by debt or outside parties. Companies with high leverage can lead to substantial financial risk, but also have a great opportunity to generate high profits. Based on signaling theory, a company that is increasingly able to generate profits tends to increase the amount of its debt, because additional interest payments will be offset by profit before tax (Sudana, 2011: 157). This is in line with the results of research conducted by Diana Supriati, et.al. (2018) explains that leverage has a significant effect on profitability.

H2: Leverage has a significant effect on profitability.

THE EFFECT OF PROFITABILITY ON FINANCIAL DISTRESS

The profitability ratio is a ratio applied to measure the company's ability to generate profits from its business activities, from the profitability ratio it can be seen how the management's ability to earn profits (Brigham and Daves, 2019: 25). The company is considered in a good condition if the profit obtained by the company is growing and positive. The high profitability of a company shows that the better the company's ability to generate profits and will make the possibility of the company experiencing financial distress conditions smaller. This is supported by the results of research conducted by Miftahul Fauzy, et.al. (2019), I Gusti Ayu Prayuningsih, et.al. (2021) which explains that profitability affects financial distress.

H3: Profitability has a significant effect on financial distress.

THE EFFECT OF LIQUIDITY ON FINANCIAL DISTRESS

Liquidity ratios provide a picture of a company's ability to meet its short-term obligations. The company can be said to be liquidity if the company can settle its short-term obligations at maturity. However, if the company cannot settle its short-term obligations

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at maturity, the company is regarded illiquid. Consequently, it makes the company suffer into financial distress. This is supported by the results of research conducted by Reschiwati, et.al. (2021), Zainul Kisman and Dian Krisandi (2019) whostated that liquidity affects financial distress in the company.

H4: Liquidity has a significant effect on financial distress.

THE EFFECT OF LEVERAGE ON FINANCIAL DISTRESS

Leverage shows how much of a company's capital is fund by debt. In addition, leverage is also used to measure a company's ability to meet its long-term obligations (Brigham and Houston, 2019; 463). When the leverage value is high, it can be interpreted that the use of debt is getting bigger, it will encourage into financial distress which leads to bankruptcy. Research on the relationship between leverage and financial distress has been conducted by Ramly, et.al. (2019), Zainul Kisman and Dian Krisandi (2019), Debby Christine, et.al. (2019) which mentioned in the conclusion that leverage affects financial distress. H5: Leverage has a significant effect on financial distress.

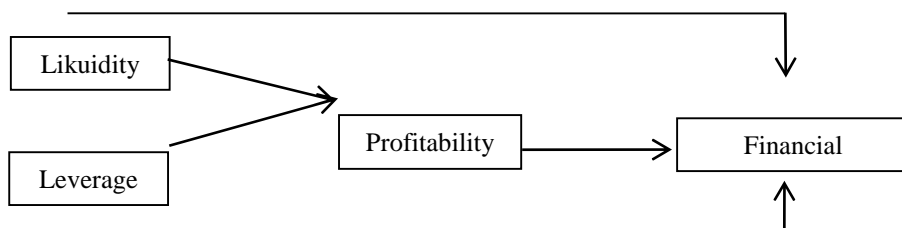


Figure 1: Research model; Source: Authors

III. RESEARCH METHODMETHODOLOGY

This research is included in the category of explanatory research using a quantitative approach. According to Uma Sekaran and Roger Bougie (2019: 110), explanatory research is a study that aims to obtain an explanation of the relationship or cause and effect among existing variables through hypothesis testing. The purpose of this study is to examine and explain the relationship between liquidity, activity ratio, leverage, sales growth, profitability and financial distress in property and real estate sector companies listed on the Indonesia Stock Exchange.

POPULATION AND SAMPLE

The population in this study is all companies from the property and real estate sectors listed on the Indonesia Stock Exchange. Then, there will be 47 property and real estate companies listed on the Indonesia Stock Exchange for the 2019 to 2021 period. The technique used for sampling in this study is saturated sampling. According to Sugiono (2018: 82), saturated sampling is a sampling technique when all members of the population are used as samples. In this study, the sample used consisted of 47 property and real estate sector companies listed on the Indonesia Stock Exchange with a research period of 3 years, namely from 2019 to 2021.

OPERATIONAL VARIABLES

Table 1. Operational Variables

Variabel	Indikator	Scale
Liquidity	Cash Ratio = Cash Equivalents and Cash / Current Liabilities	Ratio
Leverage	Long Term to Debt Ratio = Long Term Debt / Total Equity	Ratio
Profitability	Return on Assets = Net Profit / Total Assets	Ratio
Financial Distress	Altman Z-Score = 1,2 X1 + 1,4 X2 +3,3 X3 +0,6 X4 +1,0 X5 X1 = Working Capital/Total assets X2 = Retained Earnings/Total assets X3 = Earning Before Interest and Taxes/Total assetsX4 = Market Value of Equity/Total liabilities X5 = Sales/Total assets	Ratio

IV. RESULT AND DISCUSSIONS

A. PATH ANALYSIS

Path analysis is a form of application of multiple linear regression that uses path diagrams as signals to hypothesis testing and to

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prove whether the variables of liquidity, leverage, activity ratio, and sales growth affect financial distress with profitability as a mediating variable. Path analysis is calculated using two structural model equations 1 and 2. For the first test, Multiple Linear Regression Analysis was used to analyze the relationship between independent variables to mediation variable. The independent variables in this study are liquidity and leverage. For the mediation variable is profitability. The second test was used to analyze the relationship between independent variables to dependent variable. The independent variables in this study are liquidity, leverage and profitability. For the dependent variable is financial distress. The magnitude of the influence between variables is based on the value of standardized beta.

STRUCTURAL MODEL 1

Table 2 : Multiple Linear Regression Calculation Results

	Unstandardized Coefficients		Std Coeffiencts		Sig
	B	Std Error	Beta	t	
Liquidity	0,014	0,003	0,320	4,731	0,000
Leverage	-0,008	0,004	-0,149	-2,158	0,063

The results of the analysis of the model 1 equation path obtained a standard beta value of the liquidity variable of 0.320 with a significance value of 0.000 < 0.05, meaning that liquidity has a significant positive effect on profitability. The standard beta value of the leverage variable is -0.149, with a significance value of 0.063 > 0.05, which means that leverage does not have a significant effect on profitability.

2. STRUCTURAL MODEL 2

Table 3: Multiple Linear Regression Calculation Results

	Unstandardized Coefficients		Std Coeffiencts		Sig
	B	Std Error	Beta	t	
Liquidity	-0,207	0,236	-0,070	-0,875	0,383
Leverage	-0,546	0,270	-0,164	-2,019	0,046
Profitability	11.640	3,263	0,302	3,568	0,000

The results of the analysis of the model 2 equation path obtained a standard beta value of the liquidity variable of -0.070 with a significance value of 0.383 > 0.05, meaning that liquidity does not has a significant effect on financial distress. The standard beta value of variable leverage is -0.164, with significance values of 0.046 < 0.05, which means that leverage has a significant effect on financial distress. The standard beta value of the profitability variable is 0.302, with a significance value of 0.000 < 0.05, which means that profitability has a significant effect on financial distress.

Table 4 : Summary of Model Parameter Estimation Results

Variable	Direct	Indirect	Total	Sig	Information
H1 Liquidity → Profitability	0,320			0,000	Significant
H2 Leverage → Profitability	-0,149			0,063	Not Significant
H3 Profitability → Financial Distress					Significant
H4 Liquidity → Financial Distress	-0,070			0,383	Not Significant
H5 Leverage → Financial Distress	-0,164			0,046	Significant
H6 Liquidity → Profitability → Financial Distress		0,096	0,026		Significant

B. DISCUSSION

THE EFFECT OF LIQUIDITY ON PROFITABILITY

Liquidity is a ratio used to measure a company's ability to meet its short-term obligations. In this study, liquidity has a significant effect on profitability. This shows that the more liquid the financial condition of a company, the smoother its operational activities. The more liquid a company is, the better it will be able to meet its short-term obligations. Short-term obligations in question are obligations to vendors, employees, taxes, and other obligations of banks and financial institutions for short-term ones. If the

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company can fulfill its short-term obligations well, it will maintain the trust of external and internal parties. Higher level of liquidity can increase the credibility of the company which causes a positive reaction from investors to provide capital that the company can use for investment in an effort to increase its profitability. The results of the study are in line with research conducted by Jhon Nasyaroeka (2021), Nurlaila Yaumin Nadhifa and Budiyanto (2017) which states that liquidity has a significant effect on profitability.

THE EFFECT OF LEVERAGE ON PROFITABILITY

Leverage is a ratio used to measure a company's ability to meet its long-term obligations. In this study, leverage had no significant effect on profitability, H2 in this study was rejected. This shows that the increase or decrease in the value of leverage will not affect the value of the company's profitability. A company can be said to be very dependent on debt if it has a leverage level above 60% (Soleman, 2008). Meanwhile, property and real estate companies in the period 2019 to 2020 had an average leverage value of 39.2%, meaning that property and real estate companies during this observation period did not rely on funding derived from long-term debt to meet their sources of funds. Hence, it can be concluded that the amount of debt owned by the company does not affect the size of the profitability obtained by the company. The results of the study are in line with research conducted by Diana Supriati, *et.al.* (2018) which states that leverage has an insignificant effect on profitability.

THE EFFECT OF PROFITABILITY ON FINANCIAL DISTRESS

The profitability ratio is a ratio used to measure the company's ability to generate profits from its business activities. From the results of testing the hypothesis shows that profitability has a significant effect on financial distress. This shows that the higher the profitability ratio of a company, the possibility of the company experiencing financial distress will be smaller. The company is in a good condition if the company's profit is growing and positive. When the profit obtained by the company increases, it will make the company's profitability also increases. The high profitability of a company shows that the better the company's ability to generate profits and will make the possibility of the company encountering financial distress conditions smaller. Hence, it can be concluded that profitability affects the company's financial distress. This is in line with research conducted by Miftahul Fauzy *et.al* (2019), I Gusti Ayu Prayuningsih *et.al* (2021), Imam Hidayat *et.al* (2021), Debby Christine *et.al* (2019) which explains that profitability has a significant effects on financial distress.

THE EFFECT OF LIQUIDITY ON FINANCIAL DISTRESS

The result shows that liquidity does not has a significant effect on the company's financial distress condition because financial distress can be seen by companies that have low liquidity or companies that have high liquidity. This can happen because low liquidity is usually considered to indicate a problem in liquidation. On the contrary, too high liquidity is also not adequate because it shows a large number of idle funds which in turn can reduce the company's ability to manage its assets. The result of the study is in line with research conducted by Ardhiani Fadila, *et.al.* (2021), Andi Runis Makkulau (2020). It explained that liquidity has a significant effect on financial distress.

THE EFFECT OF LEVERAGE ON FINANCIAL DISTRESS

Leverage is a ratio that shows how much of the company's assets are financed by debt or how much the company's debt affects asset management. The higher the company's leverage is, the higher the possibility of financial distress. It is because the leverage ratio that indicates the company's ability to meet its long-term obligations. The results of the hypothesis test show that leverage can affect financial distress in the company. The use of debt that is too high will harm the company. The greater the debt used by the company, the higher the possibility of the company not being able to pay off its debts when it is on due. Therefore, it can increase the possibility that the company will experience financial distress. The results of this research are supported by research that has been conducted by Ramly *et.al* (2019), Ida Mustahgfiroh and G. Anggana Lisiantara (2021), I Gusti Ayu Prayuningsih, *et.al* (2021), Imam Hidayat *et.al* (2021) who explained that leverage has a significant effect on financial distress

THE EFFECT OF LIQUIDITY ON FINANCIAL DISTRESS MEDIATED BY PROFITABILITY

The results of testing using path analysis and sobel tests show that profitability is able to mediate the effect of liquidity on the company's financial distress. This explains that when the company has a high liquidity value, it allows the company to manage cash flow better. Companies can pay debts and financial obligations on time, avoid late payment fees, and build good relationships with suppliers and creditors. Companies can use available cash to expand operations, develop new products, improve efficiency, or make acquisitions that can increase company revenue and profits. This will make the company's profitability increase which causes the company to be far from a state of financial distress. The results of this study are in line with research conducted by Miftahul Fauzy *et.al* (2019), I Gusti Ayu Prayuningsih *et.al* (2021), Imam Hidayat *et.al* (2021), Debby Christine *et.al* (2019), Pratama

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Agustin Indah Sari (2018) and Ramly et.al (2019) which explained that profitability affects financial distress.

THE EFFECT OF LEVERAGE ON FINANCIAL DISTRESS MEDIATED BY PROFITABILITY

The results of testing using track analysis and sobel tests show that profitability is unable to mediate the effect of leverage on the company's financial distress. The reason is when the higher the leverage value, it explains that the company has a greater level of debt, which means the company has to pay greater interest costs. If the interest costs to be paid are very high, it can suppress the profitability of the company, regardless of how high the level of profitability is. Thus, too high an interest expense can cause financial difficulties without depending on the level of profitability of the company. Companies with higher levels of debt will tend to experience financial distress faster than companies with low levels of debt. It is caused by the greater the company's funding comes from debt, the greater the company's obligation to pay off the debt which makes the possibility of the company being exposed to financial distress higher because it has a high burden as well. When the company has a high leverage value but it is not followed by a high increase in profitability as well, it will increase the possibility of financial distress in the company. The results of this study are in line with research conducted by Miftahul Fauzy et.al (2019), I Gusti Ayu Prayuningsih et.al (2021), Imam Hidayat et.al (2021), Debby Christine et.al (2019), Pratama Agustin Indah Sari (2018) and Ramly et.al (2019) which explained that profitability affects financial distress.

CONCLUSIONS

The results showed that liquidity had a significant effect on profitability. However, leverage has no effect on profitability. In addition, the results showed that leverage had a significant effect on financial distress. However, liquidity has no effect on financial distress. In this study, the sobel test shows that profitability is able to mediate the relationship between liquidity against financial distress. However, profitability is unable to mediate the relationship between leverage and financial distress.

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