

## Analysis of *Financial Distress* with Profitability as Moderation Variable

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**Abstract:** The purpose of this research is to know and analyze the performance of profitability to measure its ability to strengthen or weaken about impact liquidity, leverage, and also operating capacity for financial distress. Furthermore, there are 39 of Indonesia Stock Exchange infrastructure companies as long as 2016-2020 as samples in this study. The results of the data analysis show that liquidity variables do not signiifkan to financial distress, and leverage is significantly positive to financial distress and operating capacity is significantly negative to financial distress. Profitability strengthens liquidity relationships to financial distress. As for the relationship of leverage and also operating capacity to financial distress can not be moderated profitability.

**Keywords:** Liquidity, Leverage, Operating Capacity, Profitability, Financial Distress.

**Abstrak:** Penelitian bertujuan untuk mengetahui dan menganalisis kinerja *profitability* untuk mengukur kemampuannya dalam memperkuat atau memperlemah pengaruh *liquidity*, *leverage*, dan juga *operating capacity* pada kondisi *financial distress*. Teknik penarikan data sampel dengan cara *purposive sampling*. Selanjutnya terdapat 39 perusahaan di Bursa Efek Indonesia dengan jenis infrastruktur selama tahun 2016-2020 sebagai sampel yang digunakan dalam penelitian. Adapun hasil dari analisis data menunjukkan bahwa variabel *liquidity* tidak signiifkan terhadap *financial distress*, dan *leverage* signifikan positif terhadap *financial distress* serta *operating capacity* signifikan negatif terhadap *financial distress*. *Profitability* memperkuat hubungan *liquidity* dan *financial distress*. Namun hubungan *leverage* dan juga *operating capacity* dengan *financial distress* tidak mampu dimoderasi variabel *profitability*.

**Kata kunci:** *Liquidity*, *Leverage*, *Operating Capacity*, *Profitability*, *Financial Distress*.

## INTRODUCTION

The infrastructure sector is a sector that in recent years has become the main focus of the Indonesian government. Infrastructure development is one of the important and vital aspects to accelerate the national development process. Infrastructure also has a very important role, namely as one of the driving wheels of economic growth. In the administration of President Joko Widodo from 2014 to 2021, he is very focused on the

development of state infrastructure, such as the construction of new airports, toll roads, high-speed trains, ports, and others. This is also evidenced by the increase in the state budget for the infrastructure sector from 2016-2021. However, in 2020 the APBN which was originally budgeted at Rp. 423.3 trillion must be reduced to Rp. 281.1 trillion. This is because the budget will be reallocated to deal with the COVID-19 pandemic that entered Indonesia in early March 2020. The impact of the COVID-19 pandemic is not only reducing the budget for the infrastructure company sector, but this has a lot of impact on the company's financial performance situation in the infrastructure sector. It is also evidenced by the increase in the budget in the infrastructure sector from the year 2016 -2021. This can be seen in the image below:



Figure 1. Infrastructure Sector Budget 2016-2021

Based on Figure 1, it can be seen that from 2016 to 2021 the budget that the government provides for the infrastructure sector has increased every year, this is because the Indonesian government is determined to make Indonesia's infrastructure development its main focus and the government also hopes that with the development of this equitable distribution of infrastructure can increase competitiveness, growth, and equitable distribution of the national economy.

Meanwhile in 2020 where the financial performance of infrastructure companies experienced a decline in profit posts, some experienced a decline in profits and some even experienced losses at the end of 2020. This phenomenon shows that there is low profitability in the infrastructure sector and it is feared that it will refer to trouble condition (*financial distress*) which will be impact at the company's bankruptcy and if the company enter into a state of *financial distress* will affect lenders or investors to invest or not. *Financial distress* is one of the *early warning systems* for the company's management to avoid the company from going bankrupt (Ananto et al., 2017).

*Financial distress* is a condition where the finance company in an unhealthy state, the company will have the condition of *financial distress* tend to difficulties in meeting their obligations, it will be impact on delay repayment obligations. (Platt and Platt, 2002) which explain that *financial distress* is a condition where the company's finances will

have difficulty paying off obligations, this can cause the company to go bankrupt. This *financial distress* condition was experienced by PT. Waskita Beton Precast Tbk. What is being sued by PT. Hartono Naga Persada on March 31, 2021 at the Central Jakarta District Court. The lawsuit was filed by the vendor to WSBP due to debt problems. The WSBP has not yet. Pay its debts to PT. Hartono Naga Persada as one of the suppliers of raw materials for the WSBP.

In detecting the financial difficulties of a company can be done by analyzing the financial ratios. The financial ratio consists of the *liquidity ratio* and *leverage* as independent variables to predict the occurrence of *financial distress*. Financial ratios is a corporate financial analysis tool which in this study infrastructure sector as the focus of research. The liquidity ratio is the ratio used to determine the company's ability to meet its short-term obligations (Rahma, 2020). The ratio of *leverage* is the ratio of the frequent use of funds derived from debt. This measurement aims to find out to what extent the *company's* spending is financed by creditors (Suryani, 2020).

## THEORETICAL REVIEW

**Signaling Theory.** Signals are the company's efforts to stimulate investors regarding the company's performance situation and perspective in the future. Signal provided by company is something that important, because it can have an impact on decision-making related to investments made by investors (Brigham and Houston, 2001). A company that doing *bad news* can explain that this is a bad signal for investors to invest their money, but on the contrary if the company is experiencing *good news* can make good signal for investors so that investors have the confidence to add the capital in companies so that it can avoid *financial distress* conditions.

**Financial Distres.** *Financial Distres* is a company condition where finance is bad condition or experiencing difficulties, but have not yet reached the stage of bankruptcy according to (Platt and Platt, 2002). According to (Rahmi, 2015); (Handayani et al., 2019), it is explained that financial distress is the stage of decreasing the company's financial condition which if not immediately acted upon will cause organization going to bankrupt.

**Leverage.** *Leverage* is an increase in company performance and is synonymous with debt. According to (Ross et al., 2015) leverage shows the company's ability to meet short-term and long-term obligations. The high level of the leverage ratio automatically creates a picture in companies that have large debts with maturities of obligations that add to the company's burden. If the company cannot pay its obligations when they fall due, it will greatly disrupt the company's operational activities and will lead to a reduced level of income (Rohmadini et al., 2018).

**Operating Capacity.** Operating Capacity always used to measure which effectiveness of organization to manage all of assets or simple word, a ratio to measure how high the level of efficiency or effectiveness of carry out organization resources (Idawati, 2020). Operating capacity reflects the company's ability to use its assets to manage profits. company. In general, a company uses assets in order to generate income. Assets can be regarded as an investment for the company.

**Profitability.** Profitability means a tools to reflect company's profitability in generating profits based to (Hery, 2018). In addition, this ratio also aims to measure the effectiveness of operating company operations management. The higher level of organization profit means that organization situation is better than other company to managing company. (Affifah and Muslih, 2018).

### Hypothesis Development

**Effect liquidity to financial distress.** *Liquidity* is a ratio used to measure how liquid the company. The higher the liquidity ratio of the company, the company is classified in the category of a good or liquid company. It the higher level of liquidity of the company, the company's financial performance shrubs in good and can avoid the risk of *financial distress* (Rafatnia et al., 2020). In the next, The result of research support by (Abdillah et al., 2020), (Suryani, 2020), (Rahma, 2020), (Stephanie and Lindawati, 2020). In line with the results of research which states that liquidity has a negative effect on financial distress, it is consistent with observations made by (Sari and Putri, 2016) which explains that the more the company has current assets, the more the company will pay its obligations on time to avoid financial problems.

**H<sub>1</sub>:** *Liquidity to financial distress has negative impact.*

**Effect leverage to financial distress.** *Leverage* can capture organization's ability to meet short and long capabilities. In this case , the entity sees how much the company will rely on debt to fund the company's operational activities. If the company relies too much on debt for the company's operational activities, it will cause problems in paying debt and interest in the future, causing the company to be in *financial distress* (Fitri and Syamwil, 2020). Furthermore, the results of this research are supported by (Fitri and Syamwil, 2020), (Saputra and Salim, 2020), (Affifah and Muslih, 2018), (Rohmadini et al., 2020). Key point states leverage and financial distress has positive impact, consistent with others researcher, (Sari and Putri, 2016) which explains that the more the company is financed by debt for its operational activities, the more risk the company has if it cannot pay its debts when they fall due. cause the company to experience financial distress.

**H<sub>2</sub>:** *Leverage to financial distress has a positive impact.*

**Effect operating capacity to financial distress.** *Operating capacity* in a lot of literature to measure how level of effectiveness in the management of their assets to increase income. Companies that can utilize their assets so as to increase revenue will avoid *financial distress* conditions (Barbara et al., 2020). Furthermore, the results of this study were supported by (Bernardin and Indriani, 2020), (Wilujeng and Yulianto, 2020), (Handayani et al., 2019), (Sari and Putri, 2016), (Zulfa, 2019). (Rafatnia et al., 2020), (Chen et al., 2020), (Baimwera and Muriuki, 2014), (Thim et al., 2011). The results of the study which state that operating capacity has a negative effect on financial distress are consistent with observations made by (Handayani, 2019) which explains that if the company can develop its assets to operation, its mean organization will have the best financial performance and can avoid financial distress.

**H<sub>3</sub>:** *Operating capacity* has a negative effect on *financial distress*.

**Influence liquidity against financial distress with profitability as a moderating variable.** *Liquidity* always used to compete how liquid organization is. The higher the level of company liquidity, the better the company's financial performance and can avoid the risk of *financial distress* and also coupled with the profits obtained by the company at the end of the year used to pay off debt, the company will be more and more avoided from *financial distress* (Sari and Putri, 2016). ). Furthermore, the results of this research are supported by (Paul and Rakshit, 2020). (Rafatnia et al., 2020). These results are in accordance with a study by (Sari and Putri, 2016) which results in profitability being able to weaken the influence of liquidity on financial distress because the profits gets by organization will later be used again for paying obligations, operational activities, and pay dividends and the company can avoid financial distress conditions.

**H<sub>4</sub>:** *Profitability* weakens *liquidity* and *financial distress* impact.

**Effect leverage to financial distress moderated by profitability.** *Leverage* is organization's capability to net of short and long capabilities. In this case, the entity sees how many their organization relies on debt to fund a strategic activities. The higher the *leverage* level of the company, the risk of *financial distress* is affected by the profits obtained by the company which are not high enough and are used for operational activities, paying obligations, distributing dividends. Therefore companies will increasingly encounter situations of *financial distress* due to obligations not all of them will be paid right on the entire profit (Wilujeng and Yulianto, 2020). Furthermore, This research was supported by (Thim et al., 2011, Indriaty et al., 2019), (Islamic and Rio, 2019), (Islamic and Rio, 2019), (Ayu and Widari, 2021).

**H<sub>5</sub>:** *Profitability* strengthens *leverage* to *financial distress* impact.

**Effect operating capacity to financial distress with moderated by profitability.** *Operating capacity* is measuring from effectiveness organization to utilize its assets to increase value of the firm. Businesses can use their own resources thereby increasing the revenue it will avoid the condition of *financial Distress* . Influenced by profits every year but not all profits will be used to buy new assets to increase income (Zulfa, 2019). Companies with high income will generate high profits as well. According to (Zulfa, 2019), profitability can strengthen operating capacity to financial distress impact, because organization profits earned by company are not fully used for sales with company assets.

**H<sub>6</sub>:** *Profitability* strengthens *operating capacity* to *financial distress* impact.

Based on the literature review that has been done above, the following is the framework used to describe the relationship between the dependent variable, the independent variable, and the moderating variable. The framework of thought in this study can be described as follows:

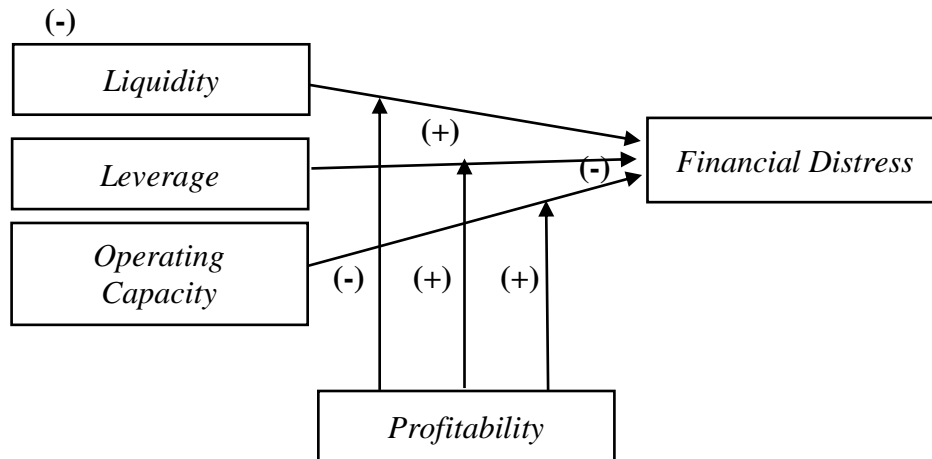


Figure 2. Research Model

## METHODS

The population used in this study are infrastructure companies listed on the Indonesian Stock Exchange in 2016-2020. The *sampling technique* used in this research is *purposive sampling*. The criteria used in the selection of the sample are as follows: (1) Infrastructure company in Indonesia Stock Exchange since 2016 to 2020. (2) An infrastructure company that publishes audited financial reports for 2016-2020.

**Dependent Variable.** The dependent variable is a variable that can be influenced or be the result of an independent variable. In this study the *financial distress* is the dependent variable. measurement of *financial distress* using the *springate* method if the S value > 0.862 the company classified as *non-financial distress* is given a score of 0 and if the S value < 0.862 the company is classified as *financial distress* is given a score of 1. The measurement can be seen as follows:

$$S = 1.03A + 3.07B + 0.66C + 0.4D \dots \dots \dots (1)$$

Note:

- A = (CA-CL) / Total Asset
- B = EBIT / Total Assets
- C = NRE / Current Liabilities
- D = Sales / Total Assets

**Independent Variable.** It is a variable used that causes changes from dependent variable. Three independent used are *liquidity*, *leverage*, and *operating capacity*.

**Liquidity.** The company's liquidity shows organization ability to finance strategic operations and net of organization's short-term debt. This formula of *liquidity* is *current ratio* perspective.

$$CR : Current Assets / Current Liabilities \dots \dots \dots (2)$$

**Leverage.** *Leverage* is usually defined as an increase in the company's performance and is synonymous with debt. In this study *leverage* is measured by *debt to equity ratio* (DER).

$$\text{DER} : \text{Total Liabilities} / \text{Total Equity} \dots\dots\dots(3)$$

**Operating Capacity.** *Operating capacity* is the company's ability to use its assets to manage company profits. Usually, companies use their assets to increase revenue. *Operating capacity* formula is *total asset turnover*.

$$\text{TATO} : \text{Net Sales} / \text{Total Assets} \dots\dots\dots(4)$$

**Moderating Variables.** Moderating variables are those that can cause strengthening or weakening between the independent variable and the dependent variable. In this study, the moderating variable used is *profitability*, which is a ratio to describe the company's ability to generate profits. *Profitability* is measured by using *return on assets* .

$$\text{ROA} : \text{Net Income} / \text{Total Assets} \dots\dots\dots(5)$$

**Research Model.** Analysis Instrument which use in this research is logistic regression model:

$$\text{FD} = + \text{LQD} + \text{LEV} + \text{OC} + \text{LQD} * \text{PRF} + \text{LEV} * \text{PRF} + \text{OC} * \text{PRF} + e \dots\dots\dots(6)$$

Note:

- FD = *Financial Distress* (1 = *financial distress* ; 0 = *healthy*)
- α = *Constant*
- β<sub>1</sub> - β<sub>3</sub> = *Regression coefficient of independent variable*
- β<sub>4</sub> - β<sub>6</sub> = *Regression coefficient of moderating variable*
- LQD = *Liquidity*
- LEV = *Leverage*
- OC = *Operating Capacity*
- PR F = *Profitability*
- e = *error*

## RESULTS

Research model get a lot of data from purposive sampling technique. Research is getting 39 sample infrastructure companies or 191 data collected. Our criteria of selection data is appeared below:

**Table 1.** Sample Criteria

Keterangan	Jumlah
1. Infrastructure in Indonesia Stock Exchange (IDX) period 2016 to 2020	57
2. Infrastructure companies whose annual financial statements are not fully available for the period 2016-2020	(18)
<b>Population numbers during the study period</b>	<b>39</b>
<b>Year of Research</b>	<b>5</b>
<b>Number of Data Observations</b>	<b>195</b>
<b>Outlier data</b>	<b>(4)</b>
<b>Number of Data Observations</b>	<b>191</b>

**Descriptive statistics.** Descriptive statistics show the number of observational data in category N, the value of each variable being studied for the minimum, maximum, mean, and standard deviation values. The results of descriptive statistical tests are as follows:

**Table 2.** Descriptive Statistics Test Results

<i>Variable</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
FD	191	0	1	.75	.435
CR	191	.000	410.920	8.41602	44.246769
DER	191	-2.857	370.620	3.61682	26.868901
TATO	191	.000	3.381	.47835	.426709
ROA	191	-33.110	.196	-.21954	2.416086

Source: (Data Prossed, 2021)

Table 2 above shows an overview of the descriptive statistical results of each of these research variables. Table 2 can be described as follows:

Liquidity projected with current ratio shows a maximum value of 410.920 and a minimum value of 0.000 with average and standard deviation values of 8.41602 and 44.246769. It can be inferred from the average value that infrastructure sector has liquid of current assets to net off with short-term debt from the company.

Leverage projected with a debt to equity ratio shows maximum and minimum values of 370,620 and -2.857 as well as an average value of 3.61682 and a standard deviation of 26.868901. From the maximum value of 370,620 shows that in the infrastructure sector there are companies that rely heavily on debt for their business capital activities and risk causing future defaults.

Operating capacity projected with total asset turn over shows a maximum value yield of 3.381 and a minimum value of 0.000 and an average value and standard deviation of 0.47835 and 0.426709. From the average value and maximum value of infrastructure companies are considered to have the ability to manage their assets to increase production results so as to generate profits that have an impact on the company's financial performance to be good.

Profitability projected with return on asset yields a maximum value of 0.196 and a minimum value of -33,110 and has an average value and standard deviation of -0.21954 and



2.416086. From these results it can be concluded that at this time infrastructure companies are considered less in generating corporate profits can be seen from the average value and the value of minimum that have a negative value this is predicted because of pandemic factors that occurred in the last two years that have an impact on company profits.

**Frekuensi distribution of Financial Distress Variable**

**Tabel 3.** *Descriptive Frequencies Financial Distress*

	<i>Category</i>	<i>Frequency</i>	<i>Percentage</i>
VALID	<i>Financial Distress</i>	143	74,9
	<i>Non-Financial Distress</i>	48	25,1
	<i>Total</i>	191	100,0

Source : (Data Prossed 2021)

According to table 3 it can be described that dependent in this study is financial distress using dummy variables measured using the springate method. If the result of  $S < 0.862$  then the company is indicated to be at risk of bankruptcy or financial distress and given a score of 1, but if the result of  $S > 0.82$  then the company is categorized as healthy or non-financial distress and given a score of 0. In this study, companies that are at risk of experiencing financial distress as much as 143 or 74.9% and those who are not at risk of financial distress as much as 48 or 25.1%. The condition of *financial distress* have become an *early warning system* to management companies to immediately take action for the future so that the company does not lead to bankruptcy.

**Testing the Overall Model Fit (*Overall Model Fit Test*).** *Overall model fit test* is used to determine whether the research model is fit before or after the independent variables are included. Testing the fit model is done by comparing the value of the initial -2 Log Likelihood with the final -2 Log Likelihood. The research model declared fit if the value of the initial -2LL against -2LL end decreased.

**Tabel 4.** *Result -2 Log Likelihood Beginning*

<i>Iteration</i>		<i>-2 Log Likelihood</i>	<i>Coefficients Constant</i>
Step 0	1	215.702	.995
	2	215.360	1.089
	3	215.360	1.092
	4	215.360	1.092

Source : (Data Prossed 2021)

**Tabel 5.** Result -2 Log Likelihood Ending

<i>Iteration</i>		<i>-2 Log Likelihood</i>	<i>Coefficients Constant</i>
Step 1	14	37.656	6.472

Source: (Data Prossed 2021)

According to table 4 shows the result of -2LL step 0 or beginning of 215,360 and table 5 shows the result of -2LL step 1 or ending of 37,656. From both tables it can be concluded that there was an initial decrease in the value of -2LL to the final -2LL by a margin of 177,704. The initial -2LL decrease to the final -2LL suggests that this hypothesized research model is fit with data which means the addition of free variables such as liquidity, leverage, and operating capacity to the study will improve the research fit model.

**Assessing the Feasibility of the Regression Model (*Hosmer and Le Meshow's Goodness of Fit Test*).** This test to capture about difference between regression model and analysis data. Research regression model should be accepted according to observation data if the result of significance is more than 0.05. If the result of significance is less than 0.05, it can be said that its situation has difference regression model analysis and observation data.

**Table 6.** Hosmer and Lemeshow's Test Results

<b>Step</b>	<i>Chi-Square</i>	<b>df</b>	<b>Sig.</b>
1	.940	8	.999

Source: (Data Prossed, 2021)

**Table 6** explains that the significance value is 0.999 ( $0.999 > 0.05$ ), Its means there is no differ both of them, this research model is able to predict the value of observation or it can be said that this model is accepted because it matches the observation data.

**Coefficient of Determination (*Nagelkerke R Square Test*).** This test is used to see how much the independent variable in this study is able to explain the dependent variable.

**Tabel 7.** Nagelkerke R Square Test

<b>Step</b>	<i>-2 Log Likelihood</i>	<i>Cox &amp; Snell R Square</i>	<i>Nagelkerke R Square</i>
1	37.656 <sup>a</sup>	.606	.896

Source: (Data Prossed, 2021)

From **Table 7** shows a Nagelkerke R Square value of 0.896 or 89.6% which means that dependent variables can be explained by independent variables of 89.6% while the remaining 10.4% are explained by other variables outside the research model.

**Test Result F.**

**Tabel 8. Omnibus Test**

		Chi-square	Df	Sig.
Step 1	Step	177.704	4	.000
	Block	177.704	4	.000
	Model	177.704	4	.000

From **Table 8.** shows the results of simultaneous logistic regression testing with a significance rate of 5%. The test results showed that the significance value is less than 0.05 ( $0.000 < 0.05$ ) which means liquidity, leverage, and also operating capacity together have a significant effect on financial distress.

**Test Result t.** The partial hypothesis test is conducted by a logistic regression test of the wald test against each of variables. As for the test of moderating variables, namely profitability using the MRA (Moderating Regression Analysis) test. This test is done by comparing the value of significance ( $\alpha$ ) must be below 0.05 for the hypothesis to be accepted. Here are the results of the logistic regression output:

**Tabel 9. Regression Results**

		B	S.E	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	LQD	-.012	.013	.853	1	.356	.988
	LEV	4.438	1.184	14.044	1	.000	84.605
	OC	-4.412	1.342	10.812	1	.001	.012
	PRF	-157.708	39.142	16.234	1	.000	.000
	LQR*PRF	-32.662	8.354	15.287	1	.000	.000
	LEV*PRF	-.006	.014	.153	1	.695	.994
	OC*PRF	-4.178	20.278	.042	1	.837	.015
	CONSTANT	6.472	1.887	11.768	1	.001	647.085

Source: (Data Prossed, 2021)

From **Table 9** shows the results of logistic regression testing with a significance rate of 5%. From the results of these tests, the logistic regression equation can be obtained as follows:

$$Y = 6,472 - 0,012LQD + 4,438LEV - 4,412OC - 32,662LQD*PRF - 0,006LEV*PRF - 4,178OC*PRF \dots \dots \dots (7)$$

**DISCUSSION**

**Effect Liquidity to Financial Distress.** First research hypothesis, it tests the negative influence of liquidity on financial distress. Table 9 indicates that the coefficient value (B) of -0.012 and significance level 0.356 is greater from 0.05 ( $0.356 > 0.05$ ) it can be noted that  $H_1$  is rejected, meaning that liquidity has no effect on financial distress. Liquidity has no effect on financial distress, this is because the level of company liquidity is high so it can

be said that company still able to net off its short-term payable for using current assets owned by organization

This is because the company can still pay off short-term debt with its current assets. In addition, in current assets there are receivables and inventories which will later be used to pay off short-term debt, it will take time to convert trade receivables and inventories into cash which will be used to pay a lot of payable from organization's short-term debt.

Results in our study is similar with research conducted by (Anggraeni et al., 2020), (Rahma, 2020), and (Baimwera and Mariuki, 2014). The results of this study resulted that current ratio formulate has no effect to financial distress, because current ratio is only a short-term measurement so that the company's management is considered still able to setting pay off its short-term debt with their own current assets that are considered still able to pay off their company's short obligations so that it does not affect financial distress conditions. Beside that, Results differ with researcher, (sari and putri, 2016) which states that liquidity negatively affects financial distress.

**Effect Leverage to Financial Distress.** Second research hypothesis, it tests the positive impact leverage to financial distress situation. Based on table 9 showing that the coefficient value (B) of 4,438 and the value of significance of 0.000 is smaller 0.05 ( $0.000 < 0.05$ ), it can be concluded  $H_2$  is accepted, meaning leverage positively affects financial distress. Leverage positive to financial distress impact, because if organization's debt is big, it will be difficult for the company to obtain additional funds and also the greater the debt and interest the company has the potential to experience financial distress and bankruptcy.

The results of the study based on table 9 show that  $H_2$  which states that *leverage* has a positive effect on *financial distress* is **accepted**. This is because if the company funds its operational activities with debt, it will be at risk of default in the future. If the company cannot pay off the debt and interest in accordance with the term, the company will fail to pay and will cause the company to experience *financial distress*.

Similar research with (Naufal, 2020), (Syawil et al., 2020), (Artini et al., 2021) who explain *leverage to financial distress* has positive, it is assessed that organization has not been able to manage the company's debt. properly so that when the debt and interest payments are due, the company has not been able to pay it so that it has an impact on the condition of the company which causes *financial distress* and can even lead to bankruptcy. However research is differ with Stephanie, (Lindawati, 2020), who states leverage to financial distress has no impact.

**Effect Operating Capacity to Financial Distress.** In testing this third hypothesis, it tests negative impact operating capacity to financial distress. Table 9 showing that the coefficient value (B) of -4.412 and the value of significance of 0.001 is smaller standard 0.05 ( $0.001 < 0.05$ ). so, we can be concluded  $H_3$  is accepted, which means operating capacity has negatively affects to financial distress. Operating capacity has negative impact to financial distress, this is because organization is considered effective and efficient in managing its assets to generate high income so the company avoids financial distress

Based on table 9 show that  $H_3$  which states that *operating capacity* has negative impact to *financial distress* is **accepted**. Because management is considered capable of utilizing the assets owned by the company efficiently so that the company's production

increases and income increases so that the company's financial performance becomes good and avoids *financial distress* conditions.

Similar result of study is (Riska, 2019), (Barbara et al., 2020), and (Azzahra et al., 2021) this is because the company's management has a strategy in using its assets so that production has increased which led to increase in the company's income so organization can avoid *financial distress*. However results of this analysis are different (Ayu and Widari, 2021) stated that operating capacity has a positive effect on Financial Distress

**Effect Profitability in Moderating Effect of Liquidity to Financial Distress.** This fourth test tests profitability weakens the influence about liquidity to company financial distress. According to our table 9 showing the coefficient value (B) of -32,662 and the value of significance of 0.000 is smaller standard than 0.05 ( $0.000 < 0.05$ ). So, researcher can be concluded that  $H_4$  is accepted, its mean profitability can weaken the influence of liquidity to urgent condition about financial distress. Profitability can weaken how could impact liquidity to financial distress variable, this is because company's liquidity level is high and company still can to pay off its short payables. In addition, our company's high profit is also used by corporate to pay off its short payable so that company is increasingly protected from financial distress.

The results based on table 9 show that  $H_4$  which states *profitability* condition can to weaken impact of *liquidity* to *financial distress* is **accepted**. Cause companies are classified as illiquid considered able to repay short-term debt with liquid asset owned enterprises. Then the profit earned by the company is allocated to payment payable company's short-term debt so that company is increasingly protected from *financial distress*.

Inline research are (Sari and Putri, 2016) and (Zulfa, 2019) which explain about *profitability* in the context has impact to weaken influence *liquidity* to *financial distress* because the profits obtained will be reused by management to payment a lot of payable to others with short-term debt.

**Effect of Profitability in Moderating the Effect of Leverage on Financial Distress.** In fifth testing, profitability strengthens impact leverage to financial distress. Based on table 9 showing coefficient value (B) of -0.006 and significance value of 0.695 greater than 0.05 ( $0.695 > 0.05$ ) it means we concluded that  $H_5$  is rejected, meaning that profitability can not be moderated leverage to financial distress. Profitability cannot be moderated leverage situation to financial distress, this is because how about size of profit earned by management is not necessarily able to assist the company in paying off its obligations, because the profits earned by the company are not only used to pay off obligations but to finance other operational activitie.

The results of the study based on table 9 show that  $H_5$  which states that *profitability* situation could strengthen how does *leverage impact* to *financial distress* is **accepted**. Because companies that fund operational activities with debt are at risk of experiencing *financial distress* if the company is unable to pay off debt and interest when it matures. Then the profits earned by the company will not all be allocated to pay off debt because it will be used such as to divide dividends, pay salaries, operational activities, and others so that the company experiences a higher risk of *financial distress*.

The results of this study are in line with (Sari and Putri, 2016) and (Wilujeng and Yulianto, 2020) which state that *profitability* has no impact on

the *leverage* relationship to *financial distress* because infrastructure companies are classified as high *leverage* levels coupled with small profits so that they do not cover all debt, the company will be stronger at risk of experiencing *financial distress*.

**Effect of Profitability in Moderate Oversight Operating Capacity of the Financial Distress.** In testing this sixth hypothesis, testing profitability strengthens the influence of operating capacity on financial distress. From table 9 shows the coefficient value (B) of -4.178 and significance value of 0.837 is greater standard than 0.05 ( $0.837 > 0.05$ ) We could concluded  $H_6$  rejected, which means that profitability does not moderate operating capacity towards financial distress. Profitability cannot to be a moderate variable for impact operating capacity to financial distress, this is due to the large or small profits obtained by the company not only to buy company assets which will increase production results to generate income, but profits will be used for other operational purpose.

The results of the study based on table 9 show that  $H_6$  which states that *profitability* condition can be variable to strengthen how does variable influence from *operating capacity* to *financial distress* is **rejected**. Because the company is able to take advantage of its assets to increase production so that income increases. However, the profit generated by the company tends to be small so that the profit cannot be used by management to buy other assets to increase the company's production.

The results of this study are not in line with (Zulfa, 2019) which states that *profitability* is able to strengthen the influence of *operating capacity* on *financial distress*. This is because the large or small profits obtained by the company will not be used to buy assets for the company's production purposes only, but for other purposes such as paying debts, funding the company's operational activities, and others.

## CONCLUSION

Based on the results of the analysis and hypothesis testing that has been carried out by researchers regarding the effect of *liquidity*, *leverage*, and *operating capacity* on *financial distress* with *profitability* as a moderating variable in infrastructure companies. Conclusions that can be drawn are:

Liquidity has no impact to financial distress. Furthermore, Leverage has positive impact to financial distress. Thus, operating capacity negative impact to financial distress. Profitability situation can weaken the influence of liquidity to financial distress. While Profitability does not moderate the effect of leverage on financial distress. Likewise, Profitability does not to be moderate variable to getting impact operating capacity to financial distress.

This study has several limitations that can be used as consideration for further research in order to get better results, namely: (1) The object of this research is an infrastructure company, the results of this study may have differences if it is carried out on companies in other sectors. (2) This research is limited to financial ratios such as liquidity, activity, solvency, and profitability. For the measurement of a limited variable with a measurement determined by the researcher, there are still many ratio measurements that can be used.

Based on the limitations of this study, (1) The suggestions that the author can give are: It is hoped that future researchers will calculate financial distress using other methods such as Altman z-score, Grover, Zmijewski, or others (2) for further research it is expected

to add other independent variables besides financial ratios such as GCG (Good Corporate Governance).

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