

The Effect of Profitability, Liquidity, and Leverage on Financial Distress with Firm Size as a Moderating Variable in Infrastructure, Utility, and Transportation Companies Listed on the Indonesia Stock Exchange from 2019 to 2023

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KEYWORDS

*Financial Distress,
Profitability,
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ABSTRACT

This study investigates the influence of profitability, liquidity, and leverage on financial distress with firm size as a moderating variable in the infrastructure, utilities, and transportation sectors listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. Using a quantitative approach with secondary data from audited financial statements, the study analyzes 30 companies selected through purposive sampling, yielding 150 observations. The results indicate that profitability and liquidity significantly and positively affect financial distress, whereas leverage has a significant negative effect. Firm Size moderates the relationship between liquidity and financial distress, suggesting that larger companies with better cash flow management can reduce financial distress risks. However, Firm Size does not moderate the effect of profitability or leverage. The findings provide insights into the financial dynamics of capital-intensive sectors, emphasizing the importance of effective financial management to mitigate financial distress. This study contributes to the understanding of financial performance determinants and offers practical recommendations for improving corporate financial strategies.

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INTRODUCTION

The Ministry of Finance released a number of State-Owned Enterprises (SOEs) that are included in the list of vulnerable to bankruptcy. From the data, it is known that the various industrial and agricultural sectors have the worst performance. Director General of State Assets of the Ministry of Finance Isa Rachmatarwata said that one of the reasons why many SOEs in various industries and agriculture are in the red zone is due to the lack of current assets in these companies, in addition, profit before interest and taxes (*EBIT*) The SOEs of various industries and agriculture are not enough to face economic pressure. Previously, Finance Minister Sri Mulyani Indrawati said that indications of poor financial performance could be seen from the Altman Z-Score index. The average score of SOEs in various industries is at level 0, while agricultural SOEs are negative 0.4. PT Dirgantara Indonesia (Persero) has a negative score of

0.84. PT Pindad (Persero) is at the level of 1.02. PT Industri Kereta Api (Persero) 0.92. PT Barata Indonesia (Persero) 0.83. PT Krakatau Steel (Persero) 0.47. PT Dok and Kodja Bahari (Persero) negative 1.72. PT Dok dan Perkapalan Surabaya (Persero) negative 1.23. PT Industri Kapal Indonesia (Persero) 0.89. PT PAL Indonesia (Persero) negative 0.1 (Kontan.co.id, 2019).

A company is a business entity that cannot be separated from accounting and managerial activities and has the main goal of obtaining the greatest profit for the survival of the company. The weak level of the economy in Indonesia can cause a fairly bad systematics for companies where competition between companies is inevitable, both in terms of marketing, product quality, management, optimal use of resources and even the level of financial performance that can underlie this.

A company's financial performance can usually be seen through financial statements. Financial statements are a record of company information in an accounting period and usually contain several important elements such as financial position statements, income statements, statements of changes in equity, cash flow statements and other financial statement statements which are usually useful as a provider of information related to financial positions,

In Indonesia, many companies have gone bankrupt in the existing competition, even these companies can be categorized as giant companies in their respective fields, such as PT Sariwangi, PT Nyonya Meneer, and PT Metro Batavia (*Batavia Air*) which is caused by the company's inability to pay its obligations, which is in the form of a considerable debt (Tribunnews, 2018)

According to Nugroho (2021), *Financial distress* occurs when a company is unable to meet its financial obligations on time, thus risking bankruptcy. Nugroho stated that *financial distress* It is often caused by poor management in managing the company's finances. Furthermore, the losses that occur will result in a capital deficiency due to a decrease in the value of the profit balance used to pay dividends, so that the total equity as a whole will also experience a deficiency. This condition indicates that a company is experiencing financial difficulties (*financial distress*) In the end, if the company is unable to get out of the conditions mentioned above, then the company will experience bankruptcy.

According to Silanno dkk (2021) A company that is categorized as experiencing *financial distress* is if the company experiences negative operating profit for two consecutive years. Companies that have experienced negative operating profit for more than a year indicate that there has been a stage of decline in the financial condition of a company. If there are no corrective actions taken by the company's management, the company can go bankrupt. It can be concluded that *financial distress* In general, it can occur due to the disintegration of the financial system implemented by a company so that the utilization of financial performance is not optimal and causes chaos in the financial system which affects the level of efficiency of the profits obtained so that it causes negative operating profits and occurs for two consecutive years and causes bankruptcy, because they want to know in depth about several cases *financial distress* that occurs in infrastructure, utility, and transportation companies listed on the Indonesia Stock Exchange (IDX).

Influencing factors *financial distress* namely Profitability. According to Nuranti dkk (2022), profitability is a ratio that measures how effective a company's management or executives are as evidenced by their ability to create profits. Profitability is a ratio that measures a company's ability to generate net profit at a certain level of sales, assets and share capital. With the effectiveness of the company's management and executives based on certain levels of sales, assets and share capital, the company can optimize the company's profits. Company profits can be a strong foundation to be able to reduce the level of *financial distress*, so that bankruptcy can be avoided. Results Stepani & Nugroho (2023), Darussalam et al (2023) shows that profitability has a significant effect on *financial distress*, However, research Marfungatun (2017) states that profitability has no effect on *financial distress*.

The second factor that affects *financial distress* is liquidity. According to Wijaya and Suhendah (2023), the inability of a company to meet its current liabilities is an extreme liquidity problem, this problem can lead to forced sale of investments and other assets, and even lead to difficulties in insolvency and bankruptcy. *current ratio* is one of the financial ratios that is used quite often. Level *current ratio* It is usually determined by comparing between *total current assets* with *total current liabilities*. In measurement *current ratio* There cannot be an absolute measurement or value that can be maintained by a business unit and it all depends on the scale of the business and the type of company that exists. *Current ratio* It can be said to be good if it meets the standard of a score of 2.00 or more in the existing general guidelines. Results Stephanie (2020) shows that liquidity has a significant effect on *financial distress*, However, research Aryadi (2018), Darussalam et al (2023) shows that liquidity has no effect on *financial distress*.

Factors that also greatly influence *financial distress* be *Leverage*. According to Silanno dkk (2021) *Leverage* emphasizing the important role of debt financing for companies by showing the percentage of company assets supported by debt funding. The larger the amount of debt, the greater the potential for the company to experience financial difficulties and bankruptcy and indications of bankruptcy can usually be preceded by the occurrence of a default event, this causes a larger amount of debt, so that the probability of occurrence *financial distress* will be higher. *Leverage* which is very high will cause the ratio *Leverage* which is also very high so that it can make the company burdened when the debt has experienced a maturity period, therefore the company is obliged to know and set the standard level *Leverage* which is good so that it can pay off its debts optimally for the survival of the company. But on the other hand, if the company cannot standardize against the *Leverage* that will make the company very burdened in carrying out the company's operational activities, it can even be fatal and experience bankruptcy. Results Andari et al (2023) indicates that *leverage* have a significant negative effect on *financial distress*, research Dini & Murtini (2023) indicates that *leverage* have a significant positive effect on *financial distress*, However, research Stephanie (2020) and Aryadi (2018) indicates that *leverage* has no effect on *financial distress*.

In this study, a variable for moderating the size of the company was used. The size of the company reflected in the company's performance is one of the measures to assess a

company. The size of a company is usually measured based on total sales, average sales level and total assets. The larger a company, the higher the profit growth is also expected. High profit growth will also affect *the company's financial distress* and sustainability in attracting potential investors who will be suspected of profit modification practices. In general, investors will have more faith in large companies because they are considered able to continue to improve the quality of their profits through a series of efforts to improve the company's performance.

Recent research by Fighting Glue Joung (2020), in the journal "*Firm size and profitability: A Bayesian approach*" It can be seen that large companies have a larger economy and tend to be more profitable. In addition, large companies often have more resources for large-scale innovation and investment, which also increases profitability. The size of a company needs to be moderated because different firm sizes have different access to resources and investment opportunities, which can affect its ability to generate profitability.

According to research by Goddess and Fachrurrozie (2021), large companies tend to have more stable liquidity than small companies. Large companies have easier access to the capital markets and can better manage liquidity through diversification of assets and liabilities. The size of a company can moderate the relationship between liquidity and financial performance, as large companies can better manage liquidity and reduce liquidity risk.

The study also found that the effect of *leverage* on company performance varies based on the size of the company. Large companies tend to have a greater capacity to handle debt burdens and leverage leverage for growth. Moderation by Firm Size is necessary because large companies may be better able to utilize *leverage* effectively without increasing excessive financial risk compared to small companies.

Research by Dirman (2020), indicating that large companies are likely to be at risk *financial distress* which is lower due to better diversification and access to a wider range of funding sources. Large companies also tend to have better risk management. The size of the company can moderate the relationship between *financial distress* and company performance because large companies usually have more tools and strategies to manage risk *financial distress* compared to small companies. However, according to research Purwaningsih & Safitri (2022), Aryadi (2018) states that the size of the Company has no effect on the *financial distress*.

Based on the study, moderation by Firm Size variables is essential to understand how profitability, liquidity, *leverage*, and *financial distress* interact with company performance. Large companies have different capacities and resources that can affect how they manage those variables, so it is important to consider the effects of Firm Size moderation in financial performance analysis.

The infrastructure, utilities, and transportation sectors are sectors that are developing quite rapidly in Indonesia. According to data provided by the Investment Coordinating Board (BKPM) in the first semester of 2019, the largest investment was in the transportation, warehouse and telecommunications business sectors, amounting to Rp 71.8 trillion. Investment acquisition *Inline* with the performance of its sector in the capital market. Infrastructure, utilities, and transportation sector indices during *year to date* up 12.47%. This sector has a very

high level of performance compared to other sectors. Sukarno Alatas explained, the brilliant performance of this sector greatly exceeded the percentage of the performance of the Composite Stock Price Index (JCI) which strengthened by 2.35% in the same period. "The strengthening contribution to the infrastructure index was supported by the telecommunications sub-sector which had a contribution of 62.3% with a gain of 28.49% since the beginning of the year, second came from the transportation sub-sector of 12.1% with a gain of 4.26%. The performance of other sectors that can boost this sector in the long term is from telecommunications and transportation, according to Infovesta Utama Head of Research Wawan Hendrayana. "With the incessant expansion of the transportation sector such as car manufacturers entering Indonesia, it certainly increases the performance of this sector significantly (Kontan.co.id, 2019).

Behind the extraordinary achievements in the sector, there are still several facts that can be concluded and encountered and observed, that in the sector there are still several cases that can make investors refuse to invest their capital in the sector, because in 2017 and 2018 there were several companies in the infrastructure, utilities and transportation sectors in the transportation sub-sector such as PT Citra Maharlika Nusantara Corpora Tbk and PT Inovisi Infracom Tbk in the telecommunications sub-sector and PT Truba Alam Manunggal Engineering in the non-building construction sub-sector have been declared delisted and even bankrupt by the Indonesia Stock Exchange and on average due to poor financial performance and inability to be repaired quickly by the company (Cekdollarmu, 2021).

Based on the data studied, there are several companies in the infrastructure, utilities and transportation sectors that tend to experience an increase in asset value during the period 2017 – 2019 such as what happened to companies PT Mega Power Makmur Tbk, PT Adi Sarana Armada Tbk, PT Blue Bird Tbk, PT Bali Towerindo Sentra Tbk, PT Bukaka Teknik Utama Tbk, PT Inti Bangun Sejahtera Tbk, and PT PP Presisi Tbk. This indicates that most of the companies in the sector have experienced an increase in assets Annually.

Therefore, a generalized research will be carried out on the infrastructure, utilities and transportation sectors listed on the Indonesia Stock Exchange in order to find out how much progress the sector has made in overcoming problems regarding the standardization of profitability levels, liquidity to existing *leverage*, so that it is biased to get valid data on what will be discussed, namely the level of *financial distress* in the sector.

The infrastructure, utilities, and transportation sectors are sectors that require long-term and capital-intensive funding, so many investors are still hesitant to invest due to high risks when investing in this sector. Investors will basically consider the level of profit and risk obtained when they want to make an investment. To get investor interest, the management of the company must be done very well and systematically. The form of good company organization can be seen from the level of company performance, which can also be assessed through profit or profit growth. If the company's performance level is good, profit growth will increase and vice versa, if the company's performance is not good, profit growth will decrease, and even business bankruptcy can occur.

Based on the existing phenomenon, the company's performance has an important role in suppressing financial distress in the infrastructure, utilities, and transportation sectors listed on the Indonesia Stock Exchange (IDX), so this research was conducted to prove the truth of this phenomenon. Against this background, this thesis is entitled "The Effect of Profitability, Liquidity, and Leverage on Financial Distress with Firm Size as a Moderating Variable in Infrastructure, Utilities, and Transportation Sector Companies Listed on the Indonesia Stock Exchange in 2019-2023." This study aims to analyze the influence of profitability, liquidity, and leverage on financial distress, as well as the role of Firm Size as a moderation variable, with the formulation of the problem including how each variable affects financial distress and whether Firm Size can moderate the relationship. The results of this study are expected to be theoretically useful for the development of accounting science, especially in the field of financial accounting, and can practically help companies understand the importance of managing profitability, liquidity, and leverage to prevent financial distress, as well as be a reference for further research in understanding financial dynamics in companies in the infrastructure, utilities, and transportation sectors.

RESEARCH METHODS

This study uses a quantitative approach with secondary data in the form of financial statements of companies in the infrastructure, utilities, and transportation sectors listed on the Indonesia Stock Exchange (IDX) in 2019-2023. The data was obtained through the official IDX website (<http://www.idx.co.id>) to ensure accuracy. The research aims to analyze the influence of profitability, liquidity, and leverage on financial distress, with Firm Size as a moderation variable. The study population included 83 companies, and through the purposive sampling method, a sample of 30 companies that met the criteria was obtained over five years, resulting in a total of 150 observations.

The research variables consist of independent variables (profitability measured by return on assets, liquidity with current ratio, and leverage with debt to asset ratio), dependent variables (financial distress measured using Altman Z-score), and moderation variables (Firm Size measured by natural logarithms of total assets). Data was collected through literature studies and financial report collection, and analyzed using SmartPLS software version 4. The analysis includes descriptive statistical tests, measurement models (validity and reliability), and structural models to test the relationships between variables. The bootstrapping method is used to measure the significance of the influence, ensure objective results in answering the formulation of the problem and achieve the research objectives.

RESEARCH RESULTS AND DISCUSSION

A. Research Results

1. Overview of Research Objects

This study took the population, namely companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. There are 83 companies included in the infrastructure, utilities and transportation sectors listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023.

This study aims to analyze the influence of profitability, liquidity, and leverage levels on the company's *financial distress*. This research was also conducted using secondary data. Secondary data is data obtained or collected by people who conduct research from existing sources. The data used is in the form of audited financial statements of companies in the infrastructure, utilities and transportation sectors listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023 and has been officially published through its official website on [the http://www.idx.co.id](http://www.idx.co.id) so that there is accuracy and completeness of research data.

Based on the existing research sampling criteria, the infrastructure, utilities and transportation sector companies listed on the Indonesia Stock Exchange during 2019 to 2023 are 83 companies and the sample in this study is 30 companies in the 5-year period 2019 – 2023 with a total sample of 150.

2. Descriptive Statistics

Descriptive statistics are statistics that are used to analyze data by describing or describing the data that has been collected as it is without intending to make generalized conclusions or generalizations. Data presentation can be in the form of tables, graphs, pie charts, mode calculations, medians, mean, pictograms, decile calculations, percentile calculations, data distribution calculations through mean and standard deviation calculations, percentage calculations. The description of the research data consists of the variables of profitability (*ROA*), liquidity (*CR*), leverage (*DAR*), *financial distress* (*Altman Z-Score*), and Firm Size (*Firm Size*) in 2019 – 2023. The following is Table 4.1 of the results of the descriptive statistical test obtained from each variable.

$X1 = ROA$

$X2 = CR$

$X3 = DAR$

$Y = Altman Z-Score$

$Z = Firm Size$

Table 4. 1 Descriptive Statistics

Variable	Mean	Min	Max	Standard Deviation
Profitability	0.018	-0.580	0.555	0.123

Liquidity	1.366	0.025	9.900	1.734
Leverage	0.613	0.096	2.292	0.358
Firm Size	16.637	11.317	23.795	2.880
Financial Distress	1.521	-18.712	16.237	5.124

Source: Smart PLS Output (Processed, 2024)

Based on Table 4.1, the results of the descriptive statistical test of Profitability (X1) are presented with the number of research objects observed as many as 150. The lowest profitability is -0.580 which belongs to PT Garuda Indonesia (Persero) Tbk in 2021, and the highest profitability value is 0.555 which belongs to PT Garuda Indonesia (Persero) Tbk in 2022. The average value of profitability proxied by *ROA* in the sample company in 2019-2023 is 0.018 and the deviation is 0.123.

The Liquidity Variable (X2) proxied by *CR* with the number of research objects observed was 150. The lowest liquidity is 0.025 which belongs to PT Air Asia Indonesia Tbk in 2021, and the highest liquidity value is 9,900 which belongs to PT Cikarang Listrindo Tbk in 2022. The average value of Liquidity proxied with *CR* in the sample company in 2019-2023 is 1.366 and the standard deviation is 1.734.

The *Leverage* Variable (X3) that is proxied by *DAR* with the number of research objects observed is 150. The lowest leverage is 0.096 which belongs to PT. Armada Berjaya Trans Tbk in 2021, and the highest leverage value is 2,292 which belongs to PT Air Asia Indonesia Tbk in 2023. The average value of *Leverage* proxied by *DAR* in the sample company in 2019-2023 is 0.613 and the standard deviation is 0.358. This shows that *Leverage* data is homogeneous and well distributed.

The *Financial Distress* (Y) variable with the number of research objects observed was 150. The lowest *Financial Distress* is -18,712 which belongs to PT Air Asia Indonesia Tbk in 2022, and the highest *Financial Distress* value is 16,237 which belongs to PT. Armada Berjaya Trans Tbk in 2021. The average value of *Financial Distress* in the sample companies in 2019-2023 is 1,521 and the standard deviation is 5,124.

Firm Size Variable (Z) with the number of research objects observed as many as 150. The lowest Firm Size is 11,317 which belongs to PT. Armada Berjaya Trans Tbk in 2020, and the highest Firm Size value is 23,795 which is owned by PT Citra Marga Nusaphala Persada Tbk in 2023. The average value of Firm Size in the sample companies in 2019-2023 is 16,637 and the standard deviation is 2,880. This shows that Firm Size data is homogeneous and well distributed.

3. Outer Model Evaluation

a. Validity Test

The *Outer Model* is usually evaluated by examining the *convergent validity value*, which is the size of the *loading factor* for each existing construct. The Convergent Validity of the Indicator reflective measurement model can be assessed based on the correlation between *item scores* or *component scores* obtained through PLS. Individual reflective

measures are considered high when the correlation is more than 0.70 with the measured construct.

Table 4. 2 Outer Loadings (Measurement Model)

	Profitability	Liquidity	Leverage	Financial Distress	Firm Size
X1	1.000				
X2		1.000			
X3			1.000		
Source: And				1.000	
Smart With					1.000

PLS Output (Processed, 2024)

From the results of the above test output, it can be obtained that *the loading factor* of each relationship between the indicator and its structure has a variable value and it can be said that the indicator value is above 0.70 so that all indicators are valid and no value shows below 0.70.

Table 4. 3 Average Variance Extracted

Variable	AVE
Profitability	1.000
Liquidity	1.000
<i>Leverage</i>	1.000
Firm Size	1.000
<i>Financial Distress</i>	1.000

Source: Smart PLS Output (Processed, 2024)

The *Average Variance Extracted (AVE)* value shows that the construct has a very good validity value because the AVE value is more than 0.50 which can be seen in table 4.3 where for each construct exceeds 0.50.

b. Reliability Test

In PLS, the Reliability Test can be carried out in two ways, namely *Cronbach's alpha* and *Composite reliability*. *Cronbach's alpha* measures the lower bound of a construct's reliability, while *Composite reliability* measures the true value of that reliability. *Composite reliability* is considered better in assessing the internal consistency of a construct.

Table 4. 4 Cronbach's Alpha

Variable	Cronbach's alpha
Profitability	1.000
Liquidity	1.000
<i>Leverage</i>	1.000
<i>Firm Size</i>	1.000
<i>Financial Distress</i>	1.000

Source: Smart PLS Output (Processed, 2024)

It can be seen that in Table 4.4 *Cronbach's Alpha* values for all exogenous and endogenous constructs, all of them are very reliable because their values are above 0.70. So it can be concluded that Profitability, Liquidity, *Leverage*, *Financial Distress* and *Firm Size* have good reliability.

Table 4. 5 Composite Reliability

Variable	Composite Reliability
Profitability	1.000
Liquidity	1.000
<i>Leverage</i>	1.000
<i>Firm Size</i>	1.000
<i>Financial Distress</i>	1.000

Source: Smart PLS Output (Processed, 2024)

It can be seen that in Table 4.5 the *Composite Reliability* values for all exogenous and endogenous constructs are all very reliable because the values are above 0.70. So it can be concluded that Profitability, Liquidity, *Leverage*, *Financial Distress* and *Firm Size* have good validity and reliability.

4. Inner Model Evaluation

The determination coefficient (R^2) aims to measure how far the model is able to explain the variation of dependent variables. The value of the determination coefficient is between zero and one. A small value (R^2) means that the ability of independent variables to explain the variation of dependent variables is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable.

Table 4. 6 Value R-Square (R^2)

Variable	R-square	R-square adjusted
<i>Financial Distress</i>	0.925	0.921

Source: Smart PLS Output (Processed, 2024)

Table 4.6 shows that the *Financial Distress Variable* has an R-Square value of 0.925 which is quite strong. This value indicates that 92.5% of the changes in *Financial Distress* can be influenced and explained by Profitability, Liquidity, *Leverage* and *Firm Size*, while the rest is influenced by other variables outside of this study.

5. Hypothesis Test Results

Table 4. 7 Bootstrapping (path Coefficients)

<i>Relationship</i>	<i>Original sample (O)</i>	<i>P values</i>
Profitability -> <i>Financial Distress</i>	0.375	0.000
Likuiditas -> <i>Financial Distress</i>	0.290	0.000
<i>Leverage</i> -> <i>Financial Distress</i>	-0.519	0.000
<i>Firm Size</i> x Profitabilitas -> <i>Financial Distress</i>	-0.067	0.177
<i>Firm Size</i> x Likuiditas -> <i>Financial Distress</i>	-0.140	0.001
<i>Firm Size</i> x <i>Leverage</i> -> <i>Financial Distress</i>	0.043	0.335

Source: Smart PLS Output (Processed, 2024)

Based on the test results in Table 4.7 above, the relationship between constructs shows that the Profitability construct has a positive and significant effect on *Financial Distress* because the *P values* are less than 0.05, namely $0.000 < 0.05$ with the *original sample* value of 0.375. Liquidity has a positive and significant effect on *Financial Distress* because the *P values* are less than 0.05, namely $0.000 < 0.05$ with an *original sample* value of 0.290. *Leverage* has a negative and significant effect on *Financial Distress* because the *P value* is less than 0.05, namely $0.000 < 0.05$ with an *original sample* value of -0.519. Profitability moderated by firm size has no effect on *Financial Distress* because *P values* are more than 0.05, namely $0.177 > 0.05$. Liquidity moderated by firm size has a negative and significant effect on *Financial Distress* because the *P value* is less than 0.05, namely $0.001 < 0.05$ with an *original sample* value of -0.140. *Leverage* moderated by firm size has no effect on *Financial Distress* because *P values* are more than 0.05, i.e. $0.335 > 0.05$.

B. Discussion

1. The Effect of Profitability on *Financial Distress*

The results of this study state that Profitability has an effect on *Financial Distress*. Based on the results of the hypothesis test, it shows that the *P Values* value is $0.000 < 0.05$. Based on *stakeholder theory*, the relationship between profitability and *financial distress* can be explained through how a company manages its relationships with its *stakeholders*, including employees, suppliers, customers, creditors, and shareholders. Companies that have high profitability tend to be able to fulfill their obligations to *stakeholders*, such as paying

employee salaries, paying off debts to creditors, and meeting customer needs. On the other hand, if profitability is low, the company may have difficulty fulfilling these obligations, so that stakeholder confidence can decrease, which ultimately increases the risk of *financial distress*.

Within the framework of *stakeholder* theory, profitability is an indicator of a company's ability to manage relationships with various parties involved. Good profitability creates trust, support, and stability that reduces the risk of *financial distress*. Conversely, low profitability can disrupt relationships with *stakeholders* and increase the likelihood of *financial distress*.

Based on agency theory, profitability affects *financial distress* because it reflects the company's ability to manage agency conflicts, meet financial obligations, and provide positive signals to creditors and investors. Low profitability increases risk *financial distress* through various mechanisms, including limited liquidity, increased agency costs, and decreased stakeholder confidence. These findings are in line with research Stepani & Nugroho (2023), Darussalam et al (2023) which shows that profitability has a significant effect on *financial distress*.

2. The Effect of Liquidity on *Financial Distress*

The results of this study state that Liquidity has an effect on *Financial Distress*. Based on the results of the hypothesis test, it shows that the *P Values* value is $0.000 < 0.05$. Based on agency theory, liquidity can affect *financial distress* because good liquidity management can improve conflicts of interest between managers (agents) and owners (principals) and reduce the risk of failure in meeting the company's financial obligations. High liquidity provides managers with financial flexibility to manage operations and meet short-term obligations. However, in the context of agency theory, managers can use excess liquidity inefficiently (for example, for projects that do not provide maximum value to their owners or personal interests), which increases the risk of *financial distress* if the investment fails to generate a profit. In contrast, low liquidity limits the manager's ability to run the company's operations, which can lead to failure in meeting financial obligations, such as debt interest payments. Low liquidity reduces a company's ability to pay short-term obligations such as trade debts, employee salaries, or debt interest. In agency theory, this inability can trigger conflicts between owners and creditors, where creditors may increase oversight or restrict access to additional sources of funding, accelerating the risk of *financial distress*.

Based on stakeholder theory, liquidity affects *financial distress* Because the company's inability to fulfill its obligations to stakeholders can damage relationships, reduce trust, and create conflict. These tensions worsen business stability and accelerate the risk of financial distress, as companies lose support from those who are supposed to help their operations. These findings are in line with the results of the study Stephanie (2020) which shows that liquidity has a significant effect on *financial distress*.

3. Effect of *Leverage* on *Financial Distress*

The results of this study state that *Leverage* has a cynical effect on *Financial Distress*. Based on the results of the hypothesis test, it shows that *the P Values* value is $0.000 < 0.05$. According to agency theory, *leverage* can affect financial distress due to a conflict of interest between shareholders and creditors, known as agency problems. In a company that uses debt, shareholders and creditors have different interests. Shareholders tend to seek higher profits, which can be achieved with high risks, such as increasing *leverage*. Meanwhile, creditors prioritize safe and stable debt repayment. When *leverage* is too high, the risk of default on debt payments increases, which can lead to losses for creditors and potential *financial distress* for the company.

So *leverage* can have an effect on *financial distress* because increased debt increases the risk of bankruptcy or financial difficulties, caused by tensions between the interests of shareholders and creditors as well as risky decisions that may be taken by managers.

Overall, according to the stakeholder theory, *leverage* which can cause *financial distress* because of its wide impact on various stakeholders. When a company has difficulty meeting its debt obligations, all parties involved in the company's operations, both internal (such as employees) and external (such as creditors and the public), can feel the negative impact of these conditions. These findings are in line with the results of the study Andari et al (2023) which shows that *leverage* have a significant negative effect on *financial distress*.

4. The Effect of Profitability on *Financial Distress* with Firm Size as a Moderator

Profitability moderated by Firm Size (*firm size*) has no effect on *Financial Distress* because of the value of *P values* more than 0.05 i.e. $0.177 > 0.05$. In theory *Stakeholder*; The large size of a company is often related to the capacity to diversify risks. Large companies have more resources and access to a wider market, which can reduce the impact *financial distress* even though the profitability is low. In this case, the size of the company can act as a buffer that reduces the impact of financial problems, despite low or declining profitability. Large companies have better access to external financing, both in the form of debt and equity. Thus, they can overcome financial problems even if their profitability is not optimal, which may reduce the likelihood of occurrence *financial distress*. Overall, in stakeholder theory, profitability is not always a major factor in *Determining Financial Distress* companies, especially if large companies have the capacity to manage stakeholder interests more effectively and have the resources to reduce the impact of financial risks. These findings are in line with the Purwaningsih & Safitri (2022) which states that the size of the Company has no effect on *financial distress* when viewed only in terms of Profitability.

5. The Effect of Liquidity on *Financial Distress* with Firm Size as a Moderation

Liquidity moderated by Firm Size (*firm size*) negatively and significantly affect *Financial Distress* because of the value of *P values* less than 0.05 i.e. $0.001 < 0.05$. The size of the company serves as a moderator that strengthens the relationship between liquidity *dan financial distress*. Large companies, with greater resource capacity, often have better access to external financing, whether through debt or equity. With good liquidity and a large Firm

Size, it is easier for companies to obtain funds or adjust their cash position to meet their operational needs. This reduces the likelihood of *financial distress*, because large companies are able to better manage cash flow and financial liabilities. Large companies often have more efficient and sophisticated financial management systems for managing liquidity. They can better plan cash, manage cash inflows and outflows, and optimize the use of their resources. This helps them to avoid liquidity issues that can lead to *financial distress*. Thus, the large size of the company reduces the negative impact of liquidity issues. high liquidity reduces risk *financial distress* Because companies can meet their financial obligations more easily, maintain good relationships with stakeholders, and manage financial risks more effectively. The size of the company acts as a moderator because large companies have a greater capacity to manage and utilize liquidity in a more efficient way and have more resources to address issues that may arise, ultimately reducing the likelihood of *financial distress*. These findings are in line with research by Goddess and Fachrurrozie (2021), large companies tend to have more stable liquidity than small companies. Large companies have easier access to the capital markets and can better manage liquidity through diversification of assets and liabilities. The size of a company can moderate the relationship between liquidity and financial performance, as large companies can better manage liquidity and reduce liquidity risk.

6. The Effect of *Leverage* on *Financial Distress* with Firm Size as a Moderator

Leverage moderated by the size of the company (*firm size*) has no effect on *Financial Distress* because of the value of *P values* more than 0.05 i.e. $0.335 > 0.05$. Overall *leverage* may not have a significant effect on *financial distress* which is moderated by Firm Size because large companies are better able to manage debt-related risks through better access to financing, risk diversification, tighter supervision, and financial flexibility. In the context of theory *stakeholder*, Large companies tend to be more cautious in making financial decisions, considering the interests of various parties, and using *leverage* wisely to avoid negative impacts on *financial distress*. These findings are in line with Research Aryadi (2018) which states that the size of the Company has no effect on *financial distress* in moderating the value *Leverage*.

CONCLUSION

The conclusions and suggestions of this study can be summarized as follows. Based on the results of testing five variables, namely profitability, liquidity, leverage, financial distress, and firm size, it is concluded that profitability and liquidity have a positive and significant influence on financial distress, in accordance with the theory of stakeholders and agencies that explain that good relationship management and liquidity can reduce the risk of financial distress. In contrast, leverage has a negative effect on financial distress because increased debt increases the risk of financial distress. Firm Size cannot moderate the effect of profitability or leverage on financial distress, although large companies tend to be more cautious in making

financial decisions. However, Firm Size can moderate the effect of liquidity on financial distress because large companies are better able to manage cash flow and financial liabilities. Based on this analysis, the suggestions given include the incorporation of other variables to measure profitability, liquidity, leverage, financial distress, and Firm Size, the addition of different independent variables for future research to produce more accurate assessments, and paying attention to other variables that can change the mindset of companies, especially those listed on the Indonesia Stock Exchange, in adjusting investment strategies and raising funds from investors to achieve better alignment.

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