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EFFECT OF LIQUIDITY AND LEVERAGE ON FINANCIAL DISTRESS WITH PROFITABILITY AS AN INTERVENING VARIABLE

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Abstract

Financial Distress can be caused by a problematic economy in a company and cause economic instability in a company that can even lead to bankruptcy. This study aims to (1) determine the effect of liquidity, leverage, and profitability on financial distress (2) determine how profitability mediates the relationship between liquidity and leverage on financial distress. Research on all mining sector companies listed on the IDX for the 2017-2023 period. A population of 63 companies with a sample of 30 companies. The method used is purposive sampling. And the data analysis used is path analysis with SmartPLS 4.0 software. Based on the final results of this study, liquidity has a positive effect on financial distress, leverage does not affect financial distress, profitability has a positive effect on financial distress, liquidity does not affect profitability, leverage has a negative effect on profitability, then profitability is unable to mediate the effect of liquidity on financial distress, and profitability is able to mediate the effect of leverage on financial distress. The importance of financial distress analysis is to help management in making decisions to improve the company's financial situation faster before it gets worse, and so that external parties can invest in the company.

Keywords: liquidity, leverage, financial situation, profitability.

INTRODUCTION

The increasingly tight competition nowadays causes significant changes in the economic sector, and changes are required to have competitive capabilities in order to increase profits. If a company fails to compete, a decline in sales can occur, which ultimately has an impact on financial reports. One of the main causes of financial problems is unhealthy company finances. Financial distress predictions are also needed by external parties before making investments or providing loans (Ayu et al., 2017).

Researchers use the Altman Z-Score method to predict bankruptcy. With the aim of finding out how big the potential for bankruptcy is and to find out which companies are most indicated to have financial difficulties. The Altman Z-Score model is considered to be the right and accurate technique for analyzing a company's financial difficulties compared to other methods. This study will discuss the prediction of financial distress in mining sector companies listed on the Indonesia Stock Exchange (IDX) because of certain phenomena that occur in the sector.





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Table 1. Altman Z-Score Data on Mining Companies for the Period 2017-2023

No.	Nama Perusahaan	Altman Z'Score						
		2017	2018	2019	2020	2021	2022	2022
1.	PT Pelayaran Nasional Bina Buana Raya Tbk. (BBRM)	-8,2	-2,8	-2,9	-9,3	-8,7	-6,3	-5,3
2.	PT Bumi Resources Tbk. (BUMI)	-2,9	-3	-3,3	-3,5	-5,2	-0,2	-0,9
3.	PT Atlas Resource Tbk. (ARII)	-2,4	-5	-4,7	-4,8	-2,8	-1,6	-1,1
4.	PT Energi Mega Persada Tbk. (ENRG)	-3,9	-6	-4,9	-3	-1,3	-1,5	-0,9
5.	PT Krakatau Steel (KRAS)	-1,4	-0,8	-6,7	-1,4	0,7	-4,5	-5,5
6.	PT Capitol Nusantara Indonesia Tbk. (CANI)	-7	-7,5	-10,6	-8,7	-9	-20,4	-28,5
7.	PT Astrindo Nusantara Infrastruktur Tbk (BIPI)	-2,6	-1,1	-0,4	-0,9	-1,2	-1,3	0,2
8.	PT Indo Straits Tbk. (PTIS)	0,4	-1,1	0,8	1,7	2	2	2,7
9.	PT Bumi Resources Minerals (BRMS)	-0,4	-1,8	-1	-2,3	7,7	6,3	10,1
10	PT J Resources Asia Pasifik Tbk. (PSAB)	1,2	1,1	0,3	0,5	1,1	0,5	0,7
11.	PT Tembaga Mulia Seamanan Tbk. (TBMS)	0,9	0,7	1,4	2	2,8	3,3	3,5
12.	PT. Garda Tujuh Buana Tbk. (GTBO)	4,8	5,9	3	-2,6	-8	5,4	32

Based on the final results of the financial distress prediction analysis using the Altman Z-Score technique, companies in the mining sector for the 2017-2023 period, 43% of companies experienced financial difficulties with a Score <1.1, namely: PT BBRM, PT BUMI, PT ARII, PT ENRG, PT KRAS, PT CANI and PT BIPI for 7 consecutive years, then PT PTIS for three consecutive years in the 2017-2019 period, PT BRMS for four consecutive years 2017-2020, PT PSAB in 2019-2020 and 2022-2023, PT TBMS for two consecutive years in the 2017-2018 period, PT GTBO in the 2020-2021 period, and PT MEDC and PT TOBA in 2023. Financial Distress can be caused by a problematic economy in a company and cause economic instability in a company which can even lead to bankruptcy. When viewed from the internal financial situation of the company, one of the causes of financial distress is the company's losses which can be triggered by income that is smaller than its operational costs, the large debt and interest burden and cash flow difficulties (Damodaran, 1997). While external factors that cause financial difficulties such as currency fluctuations such as the decline in the value of the rupiah against the US dollar, inflation that reduces people's purchasing power, high interest rates and the amount of money in circulation (Tyas et al., 2021). So that it becomes a negative signal to external parties to provide capital for the company. Therefore, companies need to protect themselves by balancing debt and profit so that companies can prevent financial distress situations before they get worse. Some of the internal factors analyzed in this study are liquidity and leverage. Liquidity refers to a company's ability to finance the company's operations and pay off its short-term liabilities. Liquidity can be calculated using the current ratio (Ayu et al., 2017). Low liquidity can indicate that the company is less able to pay off its short-term obligations through the current ratio, investors or potential creditors can find out the company's liquidity level, and can assess the company's financial health (Silanno, 2021). Then leverage arises from the use of funds originating from liabilities. When leverage is high, the company is at risk of entering a financial distress situation, especially if it is not balanced with the availability of sufficient



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funds or assets to pay off its debts. Leverage can be calculated using the debt ratio and debt equity ratio (Ayu et al., 2017).

METHOD

This research is basic research that adopts a quantitative approach. With the population in this study covering all Mining Sector companies on the Indonesia Stock Exchange as many as 63 companies. To determine the sample in this study, it was carried out using the purposive sampling method. Purposive sampling is a technique in taking samples that must be based on certain provisions so that they can be in line with the interests and intentions of the research. The benchmarks determined by the researcher in determining the sample are:

- 1. Mining Sector companies listed on the Indonesia Stock Exchange (IDX) that publish financial reports starting from the 2017-2023 period sequentially.
- 2. Mining Sector companies that publish financial reports in dollars as their currency during the 2017-2023 period.

Based on the purposive sampling technique, and the benchmarks that have been determined, a sample of 30 companies was obtained from a population of 63 companies. The collection technique in this study utilizes secondary data through financial reports from companies engaged in the mining sector and listed on the Indonesia Stock Exchange for the period 2017-2023, which are obtained by downloading from the official website of the Indonesia Stock Exchange, namely (www.idx.co.id) and from (https://britama.com), (https://emiten.kontan.co.id), and the official website of the related company. Data analysis used in this study is the non-parametric method and SmartPLS 4.0 software.

RESULT AND DISCUSSION

Inner Model Measurement

Inner model measurement is carried out to understand the level of influence of the overall relationship of independent latent variables to the dependent variable whether it has a substantive relationship. Evaluation of the inner model is related to testing the relationship between previously hypothesized variables. This includes whether the coefficient of the relationship between the variables is statistically significant or not.

R-Square Analysis

R-Square functions to assess the predictive strength of the structural model. R-Square describes the impact of certain exogenous latent variables on endogenous latent variables, and whether the impact is significant. An R-Square value of 0.75 indicates that the model is strong, while a value of 0.25 indicates that the model is at a moderate or weak level (Ghozali & Latan, 2015:78).





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Table 2. R-Square Test Results

	R-square
ALTMAN Z'SCORE	0,278
ROA	0,101

Based on the Smart-PLS output results in table 4.3, the R-Square value is 0.278 or 28%. This condition shows that the liquidity (X1) and leverage (X2) variables are able to explain financial distress (Y) by 28% and the remaining 72% is explained by other variables not included in this study. Meanwhile, liquidity (X1), leverage (X2) and financial distress (Y) are able to explain profitability (Z) by 0.101 or 10% and the remaining 90% is explained by other variables outside this study.

F-Square Analysis

F-Square is carried out to understand the suitability of the model. With a range of values of 0.02, 0.15 and 0.35, it can be said whether the latent variable predictor has a weak, medium or large influence at the structural level (Ghozali & Latan, 2015). The F-Square value in this study can be seen in the following table:

Table 3. F-Square Test Results

,	Y	Z
X1	0,239	0,000
X2	0,000	0,089
Z	0,047	

In the table above, it can be observed that the value of the influence of liquidity on financial distress has a medium influence because it is 0.239, between the range of 0.15-0.35. Then for the influence of liquidity on profitability, it has a weak or medium influence because it is 0.000, <0.02, for leverage on financial distress it also has a weak influence because it is 0.000, <0.02 and leverage on profitability has a medium influence because it is 0.089> 0.02. While profitability has a medium influence on financial distress because it is 0.047,> 0.020.

Model feasibility test or Goodness of Fit test

The model feasibility test or Goodness of Fit test in this study aims to measure the accuracy of the sample regression function in predicting the actual value. (Hanseler et al., 2014) said that Standardized Root Mean Square Residual (SRMSR) is a measure-to-measure goodness of fit in PLS-SEM which can be used to prevent model specification errors. The results of the Standardized Root Mean Square Residual can be seen in the following table:



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 Table 4. Results of the Standardized Root Mean Square Residual (SRMSR)

	Model jenuh	
	(saturated)	Perkiraan model
SRMR	0,000	0,000

Standardized Root Mean Square Residual in this study is 0.000 <0.05 or <0.08, so the goodness of fit in this study is acceptable.

Direct Effect Hypothesis Testing

Hypothesis testing is used based on the results of the Inner Model test which includes the r-square and f-square outputs. To determine whether a hypothesis can be accepted or rejected, it is necessary to pay attention to the significance value between variables and p-values. This hypothesis testing is carried out using Smart-PLS 4.0 software. These values can be obtained from the bootstrapping results. The following are the results of the model in this study:

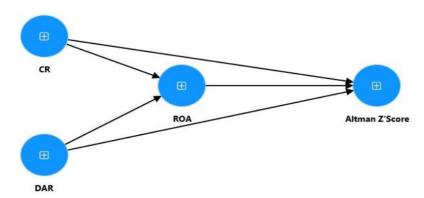


Figure 1. Research Model Results

Table 5. Path Coefficients Results

	Sampel asli	Rata-rata	Standar deviasi	T statistik	Nilai P (P-
	(O)	sampel (M)	(STDEV)	(O/STDEV)	values)
X1 -> Y	0,454	0,431	0,113	4,031	0,000
X1 -> Z	0,021	0,021	0,070	0,295	0,768
X2 -> Y	-0,015	-0,052	0,231	0,065	0,948
X2 ->Z	-0,310	-0,310	0,056	5,516	0,000
Z -> Y	0,195	0,195	0,051	3,829	0,000

Based on the results of the first hypothesis test, it shows that the liquidity path coefficient on financial distress is 0.454 with a T-Statistic of 4.031 and a p-value of 0.000. So, the results are significant, because the T-Statistic> 1.96 and p-value <0.05. This shows that liquidity has a significant effect on financial distress in mining sector companies.



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Based on the results of the second hypothesis test, it shows that the liquidity path coefficient value on profitability is 0.021 with a t-statistic of 0.295 and a p-value of 0.768. Based on these results, it can be seen that the t-statistic is not significant, because <1.96 and p-value> 0.05. Therefore, these results indicate that liquidity has an insignificant effect on profitability in mining companies.

Based on the results of the third hypothesis test, it shows that the leverage path coefficient value on financial distress is -0.015 with a t-statistic of 0.065 and a p-value of 0.948. Based on these results, it is stated that the t-statistic is not significant because it is <1.96 and the p-value is >0.05. So these results indicate that leverage does not have a significant effect on financial distress in mining companies.

Based on the results of the fourth hypothesis test, the leverage path coefficient on profitability is -0.310 with a t-statistic of 5.516 and a p-value of 0.000. Based on these results, the t-statistic is significant because it is >1.96 with a p-value <0.05. So these results indicate that leverage has a significant effect on profitability in mining companies.

Based on the results of the fifth hypothesis test, the profitability path coefficient on financial distress is 0.195 with a t-statistic of 3.829 and p-values of 0.000. Based on these results, the t-statistic is significant because it is >1.96 with a p-value <0.05. So these results indicate that profitability has a significant effect on financial distress in mining companies.

Indirect Effect Hypothesis Testing

Indirect effect analysis or indirect influence functions to test the hypothesis of the indirect influence of exogenous variables on endogenous variables mediated by an intervening variable. With the value used in the indirect effect, namely the p-value <0.05, which means significant and the variable is able to mediate the influence of an exogenous variable on the endogenous variable. It can be said that the influence is indirect. If the p-value>0.05, then it is not significant, meaning that the mediator variable is unable to mediate the influence of an exogenous variable on the endogenous variable. So that the mediator variable that is unable to mediate only becomes an independent variable or predictor variable. It can also be said that the influence is direct. The results of the indirect hypothesis test can be seen in the following table:

Standar Nilai P (P Sampel Rata-rata T statistik deviasi (|O/STDEV|) asli (O) values) sampel (M) (STDEV) X1 -> Z -> Y0.004 0.004 0,014 0.295 0,768 X2 -> Z -> Y-0.060-0,060 0,019 3,146 0,002

Table 6. Indirect Effect Results

The results of the sixth test show that the coefficient of liquidity on financial distress through profitability is 0.004 with a t-statistic of 0.295 and a p-value of 0.768, indicating that the t-statistic is <1.96 and the p-value is> 0.05, so it is not significant. Thus, profitability



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does not function as a mediator in the effect of liquidity on financial distress in mining companies.

Meanwhile, the results of the seventh test show that the leverage coefficient on financial distress through profitability is -0.060 and the t-statistic value is 3.146 with a p-value of 0.002, which means that the t-statistic is> 1.96 and the p-value is <0.05 indicates significance, therefore, profitability can mediate the effect of leverage on financial distress in mining companies.

This study was conducted to investigate the impact of independent variables, namely liquidity and leverage, on financial distress with an intervening variable in the form of profitability. This study focuses on companies in the mining sector listed on the Indonesia Stock Exchange during the 2017-2023 period. Using purposive sampling technique, the number of companies sampled in this study was 30 companies from a total of 63 companies.

The Effect of Liquidity on Financial Distress

Based on data analysis and hypothesis testing carried out in this study, it shows that the first hypothesis, namely liquidity's effect on financial distress, is accepted. From the results of hypothesis testing, it can be seen that liquidity has a path coefficient on financial distress of 0.454 with a t-statistic of 4.031 which is greater than 1.96 and a significance level of 0.000 which is below 0.05. These results state that liquidity has an effect on financial distress.

In the H1 test results, liquidity has a positive coefficient value, which means that when the liquidity of a mining company is higher, the company will be protected from the risk of financial distress. The liquidity used in this study is the current ratio. The current ratio is a scale that calculates the company's capability to cover short-term liabilities or debts of less than a year with available current assets. And financial distress uses the Altman Z'Score which means an indicator to calculate the potential for bankruptcy of a company. Several studies have been conducted to understand the usefulness of financial ratio analysis to predict the failure or bankruptcy of a company.

This result is not in line with agency theory where the principal (owner) and agent (management) have their respective interests and try their best. In difficult conditions, the principal will tighten supervision and find poor management performance, so the principal will make a management change to protect its investment. However, as the manager, management certainly has more information and obtains information faster than the principal. This can be used by management to keep the principal from knowing the financial condition of the company and prevent management changes (Togatorop, 2022).

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Figure 2. Graph of Liquidity and Financial Distress in Mining Companies 2017-2023

From Figure 2, it can be seen that the liquidity conditions in mining companies listed on the IDX have experienced sharp fluctuations in the last three years. In 2021 to 2022, Liquidity experienced a sharp increase, which can be interpreted as meaning that the capability of mining companies to meet short-term liabilities with assets increased significantly. And during the Covid-19 pandemic, it had a negative impact on mining companies, this was indicated by the movement of liquidity followed by financial distress. And there was a significant difference between before and after the Covid-19 pandemic. Liquidity is one of the important things in a company because if it is not considered, it will result in severe financial difficulties and difficulties in meeting its short-term obligations (Wild et, 2010). Figure 4.2 shows that the capability of mining companies to cover their short-term liabilities has a positive effect because it avoids potential financial difficulties. Meanwhile, the movement of financial distress in mining companies did not increase significantly and tended to stagnate. Stagnant financial distress shows that the company does not have the potential risk of financial distress. This condition shows that the company's ability to cover its short-term liabilities is quite adequate, and sufficient to overcome the financial challenges that will be faced. Therefore, the company can be prevented from the negative impact of financial distress movements, and is able to maintain long-term financial stability. The results of this study agree with research conducted by researchers (Badriyah Islamiyatun et al., 2021) which states that liquidity has a positive effect on financial distress.

The Effect of Leverage on Financial Distress

Based on data analysis and hypothesis testing carried out in this study, it shows that the second hypothesis, namely the effect of leverage on financial distress, is not accepted. Because from the results of the hypothesis test, it can be seen that leverage has a path coefficient on financial distress of -0.015 with a t-statistic of 0.065 which is smaller than 1.96 and a significance level of 0.948 which is greater than 0.05. These results state that leverage does not have a significant effect on financial distress.



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The results of the H2 test were rejected, which means that the leverage ratio has no effect on financial distress. The cause of the insignificant influence between leverage and financial distress is because the total liabilities owned by mining companies can be met by their own capital. So that mining companies can cover all their debts with the capital they have. Thus, every obligation that will be borrowed has been guaranteed by the capital.

This study is in line with the Thrade-Off Theory, which states that the use of debt must consider the tax benefits and sacrifices that arise due to the use of debt. If the benefits obtained are still greater than the sacrifices made, then additional debt is still allowed. This provides benefits for debt because it can protect income from taxes (Frank et al., 2007: 6).

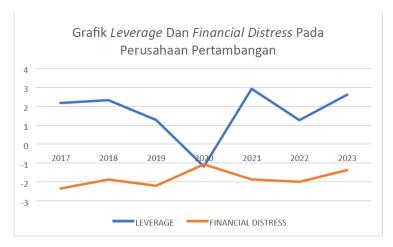


Figure 3. Graph of Leverage and Financial Distress in Mining Companies in 2017-2023

Based on the data collected, leverage, which reflects the use of liabilities by the company to finance operations and investments, experienced significant fluctuations. However, financial distress, which means financial difficulties faced by the company, showed fluctuations and appeared lower than liquidity. In the mining business, careful financial management is very important in maintaining stability in the company.

As in Figure 4.3, although the debt burden on mining companies is high, the company still seems to be able to maintain cash flow stability and meet its obligations. And overall, the company is able to utilize large debts in operations and investments. So that mining companies have shown their ability to meet installment payment obligations on term loans.

This study is in line with the Thrade-Off theory, where companies try to achieve a balance between the benefits and sacrifices of using debt. The benefits of using leverage are tax savings due to tax-deductible debt interest. The data collected shows that mining companies are able to balance the benefits of liabilities and the sacrifices made. And this study is in line with research conducted by (Purwaningsih, 2022) which shows that leverage has no effect on financial distress, because issuers who are competent in managing funding through liabilities can create profits from the issuer's operational activities, which can then cover their obligations.



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The Effect of Profitability on Financial Distress

Based on data analysis and hypothesis testing that have been carried out in this study, it shows that the third hypothesis, namely the effect of profitability on financial distress, is accepted. From the results of the hypothesis test, it can be seen that profitability has a path coefficient on financial distress of 0.195 with a t-statistic of 3.829 which is greater than 1.96 and a significance level of 0.000 less than 0.050. These results prove that profitability has a significant effect on financial distress.

In the results of the H3 test, profitability has a positive coefficient value, which means that if the profitability of a mining company increases, the company will avoid the risk of financial distress. The results of this study agree with the research conducted by researchers (Dahruji & Muslich, 2022) which states that the profitability variable does not have a negative effect on financial distress.



Figure 4. Graph of Profitability and Financial Distress in Mining Companies 2017-2023

From the picture above, it can be seen that the profitability conditions in mining companies listed on the IDX experienced a sharp increase in 2017 to 2018 and tended to stagnate in the following year. This means that the company is able to create profit and maintain it. In general, high profitability can reduce the potential for signs of financial distress in a company. If profitability is high, the company should be able to avoid the risk of financial difficulties. However, this study shows that high profitability does not necessarily mean that a company can avoid the risk of financial distress. What happens is that companies with high profit values can also potentially experience financial distress, this can be caused by management not being able to manage the company's profits to carry out its business or the company's profits obtained from debt. Based on Agency Theory, a high risk of financial distress shows that management is unable to control the company's financial risk effectively and cannot fulfill the owner's wishes. So that it will reduce the company's ability to avoid financial distress which shows that the company does not utilize its capital optimally so that it does not generate shareholder value (Madhaviltha, 2016). The results of this study are also in line with research conducted by (Rahma, 2020) that profitability has a



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negative effect on financial distress. When a company is unable to generate profit by maximizing its assets, it is closer to the potential for financial distress.

The Effect of Liquidity on Profitability

Based on data analysis and hypothesis testing carried out in this study, it shows that the fourth hypothesis, namely the effect of liquidity on profitability, is not accepted. From the results of hypothesis testing, it can be seen that liquidity has a path coefficient on profitability of 0.021 with a t-statistic of 0.295 which is smaller than 1.96 and a significance level of 0.768 which is greater than 0.05. These results state that liquidity does not have a significant effect on profitability.

In the H4 test results, liquidity has a positive coefficient value, which means that the company has more liquid assets or cash to cover its short-term liabilities. However, increased liquidity does not automatically mean increased profitability. High liquidity shows that the company has sufficient funds to maintain operational stability and avoid financial distress. However, profitability depends on the company's ability to generate profit from its operations. The results of this study are in line with research conducted by researchers (Pitoyo et al., 2018) that liquidity using the current ratio proxy does not have a significant effect on profitability. In some situations, companies will increase their liquidity at the expense of profitable investments, which can have a negative impact on profitability.



Figure 5. Liquidity and Profitability Graph in Mining Companies 2017-2023

Based on the data that has been collected, the movement of liquidity and profitability shows a difference in fluctuation. The increase in liquidity of mining companies shows the company's ability to maintain cash flow stability and meet its short-term obligations. However, increasing liquidity will not automatically increase the company's profits as seen in Figure 4.3.

This shows that liquidity has no effect on profitability in financial distress in mining companies. One of the reasons is because the company has used most of its funds to pay its short-term liabilities or liquidity compared to being used for investments that can be used to generate profits for the company. On the other hand, high liquidity does not always provide benefits because it has the potential to generate idle costs that can actually be used for



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projects that can increase the company's profitability. It can be said that liquidity does not have a significant effect on financial distress.

And the results of this study are not in line with the Resource-Based View (RBV) theory, where liquidity is a valuable resource that helps companies manage internal assets optimally, so that it will increase profitability and maintain competitive advantage. However, in mining companies, increasing liquidity does not guarantee that profitability in mining companies will increase. This shows that increasing liquidity alone is not enough to increase company profits. The results of this study are in line with research conducted by (Nandi, 2012) that liquidity does not have a significant relationship with profitability. This proves that the high and low values of the current ratio do not affect the company's profits.

The Effect of Leverage on Profitability

Based on data analysis and hypothesis testing carried out in this study, it shows that the fifth hypothesis, namely the effect of leverage on profitability, is accepted. The results of hypothesis testing show that leverage has a path coefficient on profitability of -0.310 with a t-statistic of 3.829 which is greater than 1.96 and a significance level of 0.000 greater than 0.05. These results state that leverage has a significant effect on profitability.

In the H5 test results, leverage has a negative coefficient value, which means that the higher the leverage, the profitability obtained by the company will decrease and vice versa. According to the Thrade-Off Theory view, the use of debt will increase profits but only to a certain limit. After that limit, the use of debt will actually have the potential to experience financial difficulties because the increase in profits from the use of debt is not comparable to the increase in the burden of using the debt.



Figure 6. Graph of Leverage and Profitability in Mining Companies 2017-2023

Based on the results obtained, it can be seen that the leverage of mining companies fluctuates relatively high, then in the last six years it tends to move stagnantly, which means that the company is able to balance between debt and profit. This stagnant leverage means that the leverage level has not changed significantly in a certain period.

However, when viewed from the other side, this stagnant movement shows that the company has not changed significantly in the use of debt and the company's ability to generate profits. In this condition, the company seems to be in a phase of financial stability



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where the level of debt usage is relatively constant, as well as the operational efficiency that generates profit.

The results of this study are in line with research that has been carried out by researchers (Firmansyah et al., 2022) that the increasing leverage ratio when the ratio has passed the optimal threshold, threatens the company's operational efficiency so that it has an impact on reducing the company's ability to generate profits and funds from debt are used to finance current assets but in its elements are dominated by illiquid assets that have an impact on reducing the company's ability to generate profits.

The Effect of Liquidity on Financial Distress with Profitability as an Intervening Variable

Based on data analysis and hypothesis testing that have been carried out in this study, it shows that the sixth hypothesis, namely profitability, is unable to mediate the effect of liquidity on financial distress. The results of this hypothesis test can be seen through the t-statistic of 0.004 which is smaller than 1.96 and the p-value of 0.768 which is greater than 0.05. These results prove that the level of financial distress is not influenced by liquidity through the company's profitability. So that the profitability projected with Return on Assets is unable to mediate the effect of liquidity projected with the Current Ratio on financial distress projected with the Altman Z-Score.

Profitability measured using ROA shows the company's efficiency in creating profit from the assets used. Like the study conducted by (Selvitriana et al., 2023) which states that profitability cannot mediate the effect of liquidity on financial distress. One reason for the inability of mediate profitability is that high liquidity does not always have a direct impact on increasing profitability. This means that the addition of profitability variables or the company's capability to create profit does not affect liquidity in reducing financial distress in mining companies.

In addition, profitability in mining companies is inadequate to reduce the risk of financial distress because companies have high debt burdens and face market conditions that often change such as falling commodity prices, market conditions, and increasing operational costs that can increase the risk of financial distress. So in this study, profitability is unable to mediate the influence between liquidity and financial distress in mining companies. And good liquidity can help reduce the risk of financial distress, but does not always have an impact on increasing profitability.

Based on signal theory, when the final result of the financial analysis does not have the potential for bankruptcy, it will give a positive signal to external parties. Conversely, when the final result indicates the potential for bankruptcy, it will be a negative signal for external parties in investing their capital or providing loans to a company. Because investors will see the good and bad management of funds for the company's operational activities through the company's ability to generate profit.



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The Effect of Liquidity on Financial Distress with Profitability as an Intervening Variable

Based on data analysis and testing of the seventh hypothesis, profitability can mediate the effect of leverage on financial distress is accepted. This result is shown from the t-statistic of 3.146 which is greater than 1.96 with a p-value of 0.002 which is smaller than 0.050. This means that the level of financial distress of a company can be influenced by the company's leverage through profitability. So that the profitability projected with return on assets is able to mediate the effect of leverage on financial distress projected by the Altman z'score. This happens because leverage in the mining sector has a direct negative effect on financial distress and profitability.

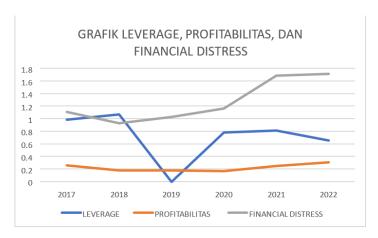


Figure 7. Graph of Leverage, Profitability and Financial Distress of Mining Companies 2017-2022

Based on Figure 7, it can be seen that the leverage of mining companies fluctuates. Meanwhile, the profitability projected with ROA tends to be stable, with a low value. Then, the financial distress projected with Altman Z-Score shows a significant increase. These data indicate that although leverage fluctuates, the profitability that tends to be stable but low successfully mediates the effect of leverage on financial distress so that this hypothesis is accepted.

Sharply fluctuating leverage reflects that companies often use large amounts of debt to finance their operations and investments. This leverage fluctuation can be caused by various factors, such as changes in market conditions, investment needs, and the company's financial policies. High leverage can provide tax savings benefits and increased return on assets. However, excessive use of debt also increases the potential for financial distress because the company must cover its liabilities, especially when the company's income fluctuates.

This stable but low profitability indicates that the company is able to maintain its operational efficiency, but not enough to increase profits significantly. This profitability stability reflects that the company has good financial management, but the level of profit generated is still low. This low profitability means that the company has a thin profit margin,



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making it more vulnerable to fluctuations in income and operating costs. Stable but low profitability can mediate the effect of leverage on financial distress. Although stable profitability shows operational efficiency, low levels of profit are sufficient to overcome large debt burdens. Therefore, companies with high leverage and low profitability are more vulnerable to financial distress. And the increase in financial distress in recent years indicates that companies are facing significant financial difficulties, which can be caused by high debt burdens and low profitability.

In signal theory, when the final results of the financial analysis have the potential to go bankrupt, it can give a negative signal to investors in investing their capital in a company. Because investors will see how much the company is financed by external parties for the company's operational activities through the company's ability to generate profits. This study is not in line with previous research by (Selvitriana et al., 2023) that profitability cannot mediate the effect of leverage on financial distress.

CONCLUSION

The conclusion of this study is that liquidity has a positive effect on financial distress, leverage does not affect financial distress, profitability has a positive effect on financial distress, liquidity does not affect profitability, leverage has a negative effect on profitability, then profitability is unable to mediate the effect of liquidity on financial distress, and profitability is able to mediate the effect of leverage on financial distress. The importance of financial distress analysis is to help management make decisions to improve the company's financial situation faster before it gets worse, and so that external parties can invest in mining sector companies listed on the IDX for the 2017-2023 period.

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