

Effect of Sales Growth, Liquidity, Activity, Cash Flow and Company Size on Financial Distress

(Empirical Study of Mining Companies Listed on the Indonesian Stock Exchange for the 2019-2021 period)

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Abstract: The purpose of this discussion is to to examine the result of sales growth, liquidity, activity, cash flow and company size for financial distress. This exploration is a quantitative report utilizing various straight relapse investigation with the assistance of SPSS form 25. This study's participants are mining companies that will be listed on the Indonesia Stock Exchange (IDX) between 2019 and 2021. The testing procedure in this review is purposive examining strategy. The sample used was 51 mining company data from 57 data that meet the requirements for research. This study's analysis reveals that financial problems are influenced by liquidity, activities, and the size of the company, but not by sales growth or cash flow.

Keywords: Sales Growth, Liquidity, Activity, Cash Flow, Company Size, Financial Distress

1. Introduction

In this era of globalization, the increase in everything from various aspects requires that all parties be aware of the changing times that are increasingly sophisticated and developing rapidly. One of these parties is the company. Every corporation must have a problem that can hinder the rate of economic growth, the problem that often occurs in a company is financial problems. If later unable to deal with these problems, it is certain that the bussiness will experience financial slump.

Platt & Platt (2002) stated that financial hassle is a condition in which a company's performance decreases, this happened before bankruptcy. Financial Issues can be a company benchmark in anticipating bad things that have been avoided by the corporation. During the Covid-19 pandemic, numerous companies listed on the Indonesia Stock Exchange (IDX) experienced financial distress. This research discusses mining sector companies which were also affected by the pandemic and made the company's performance start to deteriorate. Mining companies are divided into several sub-sectors, namely the coal sector, the oil and gas sector, the metal and mineral sector and the land and mineral sector.

Reporting from CNBC Indonesia, one of the mining sectors experiencing difficulties in 2020 is the coal sector. In this sector, BOSS experienced the smallest decline in sales and revenue in Q3-2020 year on year by 18%, followed by MBAP by 19%. The coal sector experienced a decline of an average of 26% from 10 issuers. The decline occurred not only in sales but also in operating profit. The 4 issuers that experienced a decline in operating profit were INDY, BUMI, DOID and BOSS. INDY decreased by 575% from the previous year and BUMI fell by 258% and had the largest recorded loss of US\$ 136.98 million. This condition can continue in the years to come and cause financial distress if the right solution is not found to overcome it.

The way that can be done by the firm to monitor its financial condition is by analyzing the company's financial statements. Financial statements can be analyzed using financial ratios. Financial ratio analysis is an activity carried out to find out comparisons between accounts in financial statements in a certain period. The financial statements are in the form of a statement of financial position, balance sheet and profit and loss (Sujarweni, 2017). Some factors that can affect financial distress and are used in this study are sales development, liquidity, activity, cash flow, enterprise size, financial problem.

2. Literature Review and Hypothesis

2.1. Signalling Theory

According to Sutra & Mais (2019) Signal theory can be used by stakeholders such as business employees, investors and creditors so that information can be obtained properly and equally to obtain financial reports as expected. On the topic of financial hassle, this theory provides signals that can be useful for knowing the good and bad conditions of a company by looking at its financial reports. When the corporation's financial conditions and opportunities are good, a manager will give a signal by applying liberal accounting. However, if the enterprise is in unfavorable and unprofitable conditions, the manager gives a signal by applying conservative

accounting (Hendrianto, 2012). Therefore, the signal theory can be used by managers to provide action in the event of financial difficulties in the company.

2.2. Financial Distress

Financial Difficulties is a condition of a business that is in a stage of declining performance so that corporate performance becomes worse, if this situation lasts long enough it can cause financial slump and even bankruptcy. According to Almilia and Kristijadi (2003) companies with indications of financial distress are companies whose net profits have decreased in recent years and have not paid dividends for a period of more than one year. What can happen if a firm experiences financial hardship, specifically investors will be put off by the company's low value.. Investors will hesitate when they want to invest, even if there is a possibility that investors will withdraw from working with the business. Even investors may prefer to sell their shares rather than add shares.

2.3. Sales Growth

According to Kasmir (2015) a financial ratio known as sales growth can indicate how much a company can maintain its economic position when there is economic growth and sector success. The increase in sales can be seen from the company's graph from year to year, if it increases, it means that the venture has a good operational level and is in line with the venture's expectations. Sales will be good if the enterprise can generate high profits (Wulandari, 2019). Research conducted by WiwinPutriRahayu and Dani Sopian (2017) states that sales development has a significant effect on financial slump. So the formulation of the hypothesis in this study is:

H1: Sales Growth affect Financial Distress

2.4. Liquidity

Liquidity is a financial ratio that states the company is able to clear current debt with current assets. The conditions in the venture can be measured by seeing if the liquidity in the firm is getting higher, the finances in the corporation are also getting better and the indications of experiencing financial issues are getting smaller (Pratama, 2022). Research conducted by Bela Oktavianti, AchmadHizazi and Andi Mirdah (2020) states that financial difficulty is significantly influenced by liquidity. So the formulation of the hypothesis in this study is:

H2: Liquidity affect Financial Distress

2.5. Activity

Activity is the ratio used to measure how a concernment utilizes resources or assets to carry out company activities. The relationship between activity and financial trouble is that if the level of activity is higher, the business's receivables are getting smaller and it indicates that the establishment is in a stable condition and avoids the threat of financial difficulties (Aini, 2019). Previous research conducted by Rahmadona Amelia Fitri and Syamwil (2020) stated that activity significantly influences financial anguish. So the formulation of the hypothesis is:

H3: Activities affect Financial Distress

2.6. Cash Flow

The company's increase or decrease in assets is the basis for calculating cash flow. This cash flow is important because it is used by creditors and investors to assess a venture in running its business. Creditors will find it easy to provide funds if the cash flow statements at the enterprise are large, otherwise creditors will hesitate with the enterprise in returning funds if the cash flow statements are small (Indriani and Mildawati, 2019). In addition, investors will also be like creditors who are unsure and are still considering investing their funds in the company. Previous research conducted by EritaOktasari, RirinWidyastuti and ZeniarAstri (2022) stated that cash flow affects financial issues. So the formulation in the discussion is:

H3: Cash flow affects Financial Distress

2.7. Company Size

Company size is a variable that can explain the condition of a company. The amount of assets a company has acquired can be used to gauge its size. The relationship between firm size and signaling theory is that the business will provide a signal to investors, so that investors can assess the performance of the business. If the assets owned are getting bigger, the condition of the establishment is getting better and there are no signs of experiencing financial problem (Ayu et al, 2017). Research conducted by VonySavrinaWulandari (2019) states that enterprise size has a positive effect on financial difficulties. So the formulation of the hypothesis in this study is:

H5: Company size affect Financial Distress

3. Methodology and Procedures

3.1 Population and Sample

Mining companies that are listed on the Indonesia Stock Exchange (IDX) are the subjects of this study. The data collection method is carried out by collecting secondary data from annual financial reports published on the IDX, IDNFinancials and each company's website. The research sample for 3 years was 57 data and 6 data outliers, so the sample used in the study was 51.

Table 1 Research Sample Selection Process

No	Criteria	Total
1	Mining corporations listed on the IDX for the 2019-2021 period	56
2	Mining corporations that publish consecutive annual financial reports 2019 to 2021	(8)
3	Mining companies whose financial statements are presented in Rp	(28)
4	Mining companies that publish financial reports according to the variables to be studied	(1)
Samples that meet the criteria		19
Total samples processed 19 x 3 years		57
Outliers Data		(6)
Total research sample		51

Source: Data Process 2023

Table 2 Measurement of variable

Variable	Indicators	Source
Financial Difficulties	$Z'' = 6,56X_1 + 3,26X_2 + 6,72X_3 + 1,05X_4$	Tania et al (2021)
Sales Development	$\text{Sales Growth} = \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}}$	Aji & Anwar (2022)
Liquidity	$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$	Simanjuntak et al (2017)
Activity	$\text{TATO} = \frac{\text{Sales}}{\text{Total Assets}}$	Pratama (2022)
Cash Flow	$\text{Cash Flow} = \frac{\text{Operating Cash Flow}}{\text{Total Assets}}$	Indriani & Mildawati (2019)
Company Size	$\text{Firm Size} = \ln(\text{Total assets})$	Cahyono & Pribadi (2021)

3.2 Data analysis technique

This study used quantitative methods assisted by the SPSS version 25 program to process and test the data. Multiple linear regression is the method used in this study to analyze the data. An analysis called multiple linear regression is used to look at how one variable affects other variables in the independent variables. The following equation is used in this discussion for multiple linear regression:

$$FD = \alpha + \beta_1 SG + \beta_2 CR + \beta_3 TATO + \beta_4 AK + \beta_5 FS + e$$

Keterangan:

FD = Dependent variable (Financial Distress)

α = Constant

β = Coefficient

SG = Sales Growth

CR = Liquidity

TATO = Activity

AK = Cash Flow

FS = Firm Size

e = Residual/ error

4. Result & Discussion

4.1 Analyses of descriptive statistics

Table 3 Result of Descriptive Statistical Analysis

	N	Min	Max	Mean	Standar Deviation
Sales Development	51	-.822	1.427	.09265	.483524
Liquidity	51	.233	14.198	2.10614	2.313396
Activities	51	.048	2.249	.68663	.512072

Cash Flow	51	-.260	.372	.07816	.102380
Enterprise Size	51	24.891	31.218	28.31408	1.470599
Financial Hardship	51	-8.922	9.748	1.89763	3.729981
Valid N (listwise)	51				

The descriptive statistical analysis presented above demonstrates that:

1. The sales development has a minimum value of -0.822, the maximum value is 1.427, the average value is 0.09265 and the standard deviation is 0.483524.
2. The minimum value of the liquidity variable is 0.233, the maximum value is 14.198, the average value is 2.10614 and the standard deviation is 2.313396.
3. Activities have a minimum value of 0.048, a maximum value of 2.249, an average value of 0.68663 and a standard deviation of 0.512072.
4. The cash flow has an average value of 0.07816, a standard deviation of 0.0102380, a min value of -0.260, and a max value of 0.372.
5. The minimum value of the enterprise size variable is 24,891, the maximum value is 31,218, the average value is 28.31408 and the standard deviation is 1.470559.
6. The variable financial hardship has a minimum value of -8.922, a maximum value of 9.748, an average value of 1.89763 and a standard deviation of 3.729981.

4.2 Discussion

Test Classical Assumptions

Table 4 Normality Test

N		51
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.97876023
Most Extreme Differences	Absolute	.091
	Positive	.087
	Negative	-.091
Test Statistic		.091
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Table above normality test using one sample Kolmogorov-Smirnov test on asymp. sig. (2-tailed) of 0.200. It is expressed that the information is ordinarily circulated on the grounds that the importance esteem is above 0.05.

Table 5 Multicholnearity Test

Variable	Tolerance	VIF	Information
Sales Growth	.889	1.125	No multicholnearity occurs
Liquidity	.881	1.135	No multicholnearity occurs
Activities	.777	1.287	No multicholnearity occurs
Cash Flow	.803	1.245	No multicholnearity occurs
Firm Size	.749	1.335	No multicholnearity occurs

According to the calculation of the variables above, it shows that the tolerance value is > 0.10 and the VIF value is < 10. So that the test do not occur multicollinearity.

Table 6 Test of autocorrelation

	Value	Information
Significant	.202	No autocorrelation occurs

The autocorrelation test above shows the outcomes using the run test showing the asymp value. sig. (2-tailed) of 0.202 < 0.05, so there is no autocorrelation.

Table 7 Test of Heteroscedasticity

	Significant	Description
Sales Growth	.621	No heteroscedasticity occurs
Liquidity	.855	No heteroscedasticity occurs

Activity	.153	No heteroscedasticity occurs
Cash Flow	.763	No heteroscedasticity occurs
Firm Size	.784	No heteroscedasticity occurs

The Glejser test's results showed that the variables firm size, liquidity, activity, cash flow, and sales growth had significant values greater than 0.05. It tends to be reasoned that the factors in the review are free of heteroscedasticity.

Hypothesis Test

Table 8 Multiple Linear Regression Analysis Test

	Unstandardized Coefficients		Standardized Coefficients	t	sig
	B	std. error	beta		
(Constant)	-27.945	9.818		-2.846	.007
Sales Growth	1.784	.974	.231	1.831	.074
Liquidity	.517	.204	.321	2.529	.015
Activity	2.136	.984	.293	2.172	.035
Cash Flow	-4.015	4.839	-.110	-.830	.411
Company Size	.969	.349	.382	2.777	.008

In accordance with the multiple linear analysis, using the following regression equation:

$$FD = \alpha + \beta_1 SG + \beta_2 CR + \beta_3 TATO + \beta_4 AK + \beta_5 FS + e$$

1. The steady worth is - 27,945 which intends that if the free factors (sales development, liquidity, activity, cash flow and firm size) don't exist or have a worth of 0, then, at that point, monetary issues is worth - 27,945
2. The sales growth value is 1,784, which indicates that financial trouble will rise by 1,784 if the sales growth variable rises by 1%.
3. The variable liquidity shows a value of 0.517, which means it has a positive relationship. If liquidity increases by 1%, financial slump will also increase by 0.517
4. The activity value is 2,136, which indicates that financial slump will rise by 2,136 if the activity variable rises by 1%.
5. The cash flow value is -4,015 which indicates that every 1% increase in the cash flow variable will be followed by a decrease in financial problem of 4,105
6. The value of firm size is 0.969 which indicates that every 1% increase in the firm size variable will be followed by an increase in financial distress of 0.969

Table 9 F Test

	Sum of Squares	df	Mean Square	F	Sig
Regression	251.987	5	50.397	5.112	.001
Residual	443.651	45	9.859		
Total	695.638	50			

According to the table above, the f test using the ANOVA test shows that the F value is 5,112 with a significance of $0.001 < 0.05$, which means that the variables of sales growth, liquidity, activity, cash flow and company size simultaneously have an effect on financial distress.

Table 10 Test Results for the Coefficient of Determination

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.602	.362	.291	3.139889

Based on the test results of the coefficient of determination, the Adjusted R square value is 0.291. This shows that 29.1% of financial distress in mining organizations recorded on the Indonesia Stock Trade in 2019-2021 can be affected by sales growth, liquidity, activity, cash flow and company size. While 70.9% is influenced by other variables that are not tested in the study.

Table 11 T Test Findings

	T Total	Significant	Description
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Sales Growth	1.831	.074	H ₁ Rejected
Liquidity	2.529	.015	H ₂ Accepted
Activity	2.172	.035	H ₃ Accepted
Cash Flow	-.830	.411	H ₄ Rejected
Company Size	2.777	.008	H ₅ Accepted

Based on table 11 above it is concluded that:

1. Impact of Sales Development on Financial Distress
 With a significance level of 0.074 greater than 0.05, the sales development variable test has a t value of 1.831. This demonstrates that financial distress is unaffected by the company's sales growth (H₁ is rejected).
2. Effect of Liquidity on Financial Distress
 In testing the liquidity variable, the t value obtained is 2.529 with a significance level greater than 0.05 of 0.015 This indicates that liquidity partially mitigates financial distress (H₂ is accepted).
3. The Affect of Activity on Financial Distress
 The results of activity testing obtained a t-value of 2.172 with a significance value of 0.035 > 0.05. This indicates that activity have an impact on financial distress (H₃ is accepted).
4. Impact of Cash Flows on Financial Difficulties
 The outcomes of the cash flow test t value of -0.830 with a significance value of 0.411 > 0.05. So that cash flow does not affect financial distress (H₄ is rejected)
5. Effect of Company Size on Financial Distress
 The company size test produces a t count value of 2.777 and a significance greater than 0.05 of 0.008 This suggests that financial distress is influenced by the size of the company (H₅ diterima).

5. Conclusion

It is possible to draw the conclusion based on the outlined analysis and discussion that:

1. Financial distress in mining companies listed on the Indonesia Stock Exchange in 2019 and 2021 is unaffected by sales growth. This indicates that sales growth is not a significant predictor of financial distress.
2. Financial distress in mining corporation the IDX in 2019 and 2021 is influenced by liquidity. This demonstrates that liquidity is a significant predictor of financial distress. Activities that affect financial distress in mining companies listed on the Indonesia Commodity Exchange 2019 to 2021. Activity is a determining factor in the occurrence of financial hardship.
3. From 2019 to 2021, mining company cash flows are not recognized as affecting financial distress. This shows that cash flow does not have a significant role in the occurrence of financial distress.
4. Mining companies from 2019 to 2021 are influenced by company size. Therefore, the size of the business has an impact on financial difficulties.

Limitations

1. This research only uses mining companies, so this research cannot represent other companies on the Indonesian Stock Exchange.
2. The variables used are still few, namely the five independent variables that affect the dependent variable, it is possible that other variables outside the study have an influence on the dependent variable.
3. The sample used in the study is only 3 years from 2019-2021, so it has not provided maximum results.

Suggestion

1. It is anticipated that future research will be able to examine additional businesses with a broader range of businesses.
2. For further observations, it is expected to be able to use variables that have not been studied or use variables that have been studied but use other measurement methods.
3. It is wish that additional research can add years to the body of knowledge so that more samples are used and research results are maximized.

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