



## Effect of debt, profit, company size and cash flow on financial distress in financial institution companies

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### ABSTRACT

The purpose of this is to test and analyze how debt, profit, company size, and cash flow affect financial distress in financing companies on the IDX for the 2016-2020 period, either partially or simultaneously. This research includes quantitative descriptive research. The population of this study was 16 financial institution companies on the Indonesia Stock Exchange and the sample used a purposive sampling technique to obtain data from 9 companies with a total of 45 observations. The statistical method is multiple linear regression analysis. The results of the research show that the classical assumptions have met the requirements. Partially (t-test), Debt, Profit, Company Size, and Cash Flow have a significant effect on Financial Distress. Simultaneously (test F) Debt, Profit, Firm Size, and Cash Flow have a significant effect on Financial Distress. The magnitude of the coefficient of determination is 97.8% while the remaining 2.2% of Financial Distress is explained by other variables not examined in this study.

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## INTRODUCTION

Financing institutions are business entities that carry out financing activities in the form of providing funds or capital goods. Therefore, financing institutions must provide large capital to fund their customer's credit financing, where these funds can be obtained from internal and external funds. The problem faced by financial institutions today is the declining ability to pay their customers which will eventually disrupt financial performance and result in more severe financial difficulties.

Companies in carrying out their business activities do not always get the benefits as expected. Many companies experience progress and setbacks, because of competition. This business competition requires companies to develop innovation, improve performance, and pay attention to the company's financial condition so that they are not less competitive than other companies and avoid financial difficulties. Companies that are unable to compete well and pay little attention to their company's performance will tend to experience financial distress (financial distress).

For financial institution companies, an increase in the debt ratio will have an impact on financial distress if the company experiences problems with increasing default by its customers. This will also have an impact on reducing the profit ratio if the company is unable to get customers. If

this happens to small companies, these companies will not be able to survive and will quickly experience financial distress. The initial symptoms of financial distress by a company are usually preceded by negative cash flows. In more detail, we can observe the following phenomena in the three financial institution companies:

**Table 1.** Phenomena on Three Financing Institution Companies

Kode	Year	Debt	Equity	Total Asset	Cash Flow	Net Profit
MFIN	2016	1.748.809	1.813.426	3.562.235	58.592	255.284
	2017	1.281.211	1.933.974	3.215.185	64.472	332.932
	2018	1.560.997	2.060.667	3.621.664	60.132	333.346
	2019	2.448.259	2.277.895	4.726.154	52.278	377.084
	2020	1.875.421	2.334.972	4.210.393	476.595	174.397
TIFA	2016	1.095.967.700	307.269.654	1.403.237.354	30.656.131	17.597.039
	2017	1.308.204.929	323.771.910	1.631.976.839	13.580.028	23.010.364
	2018	1.169.481.293	345.487.555	1.514.968.848	42.841.681	27.836.632
	2019	841.356.595	370.709.565	1.212.066.160	12.166.479	33.033.880
	2020	738.620.372	365.195.595	1.103.815.967	137.549.931	14.855.370
BBLD	2016	.528.134	1.100.904	3.629.038	98.232	53.421
	2017	3.238.393	1.129.541	4.367.934	120.381	66.433
	2018	3.841.990	1.177.056	5.019.046	189.751	57.571
	2019	3.843.919	1.207.483	5.051.402	164.800	59.629
	2020	2.907.239	1.208.656	4.115.895	147.919	20.053

Source: 2016-2020 financial reports

From these data, it can be seen that there is a phenomenon at PT. Mandala Multi Finance, Tbk debt in 2018 increased when compared to 2017 but net profit also increased which should have decreased profit, as well as cash flow in 2018, decreased compared to 2017 but net profit actually increased. PT. KDB Tifa Finance, Tbk its total assets and cash flow in 2019 decreased when compared to 2018 but its net profit actually increased. PT. Buana Finance, Tbk its equity in 2020 has increased compared to 2019 but its net profit has actually decreased. Based on the phenomenon, a study was carried out with the title Effects of Debt, Profit, Company Size, and Cash Flow on Financial Distress in Financing Institution Companies.

According to Rodoni and Ali (2014: 189), financial distress can be an "early warning" enterprise systems as a sign of a problem. Companies that have a lot of debt will experience financial distress earlier than companies that have little debt. However, companies that experience financial distress earlier can have plenty of time to restructure on their own initiative and reorganize.

According to Hery (2017: 24), profitability shows the efficiency and effectiveness of using company assets, where this ratio measures the company's ability to generate profits based on the use of existing assets. With the effectiveness of the use of assets, it will reduce costs that must be incurred by the company, so that the company will get savings and have sufficient funds to run its business. With the adequacy of these funds, the possibility of the company experiencing financial distress in the future will be smaller.

Chrissentia and Syarief (2018: 50), If a company is able to generate high profits, then the company can use these profits to pay operational costs and obligations on time, so that financial distress will not occur. Syuhada's opinion (2020: 324), namely the increasing profits achieved by the company, it will show that the company's financial performance is getting better so in this way the company will be further away from financial distress.

According to Sinaga (2014: 560) failure occurs when the actual cash flow of the company falls below the expected cash flow, and the projection cannot be fulfilled. Even though profits are high, if you don't have enough cash flow, the company will certainly suffer from difficulties (Wahyudiono, 2014:66).

Khasanah (2021: 360), explains that if the cash flow generated by the company increases, the greater the chance for the company to avoid financial distress, and vice versa if the company's cash flow experiences a continuous decline without being able to overcome it, the company may

experience financial distress. Calestia and Indarto (2018: 45), if the company's cash flow is smooth in all parts, the company will be financially healthy, it will reduce financial distress in the company.

## RESEARCH METHOD

This approach uses a deductive method based on Sujarweni's theory (2015: 12) which states that the deductive way of presentation begins with an existing theory and then provides evidence to support the theory. This research uses quantitative data so this type of research is quantitative descriptive research. This research was conducted on companies in the financial institution sector, while the time this research was conducted was from July 2021 to December 2021. This sub-sector has a population of 16 companies and the determination of this sample using a purposive sampling technique. As for our consideration in taking samples of this study are: Financial institution sector companies that are listed on the IDX, published complete financial reports in a row for 2016-2020, and earned a net profit in a row for 2016-2020. And obtained a sample of 9 companies with an observation period of 5 years, so that there are 45 data. The data collected is quantitative data. Secondary data sources were taken from the financial reports of financial institution companies listed on the IDX in the 2016-2020 period which researchers downloaded from the IDX website so this data collection technique uses documentation study and literature study. This study uses multiple linear regression analysis techniques. The equation used is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \quad (1)$$

## RESULTS AND DISCUSSIONS

### Descriptive statistics

Descriptive statistics aim to provide an overview of the research variables which can be seen from the minimum and maximum values, average values, and standard deviations. The following results are descriptive statistics.

**Tabel 2.** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Debt Ratio	45	.0523	.8778	.600462	.2244625
Profit Ratio	45	.0098	.2610	.108151	.0705156
Firm Size	45	26.3153	31.1897	29.055718	1.3607492
Cash FLOW	45	23.2220	29.0726	25.741220	1.6587570
Financial Distress	45	1.0063	9.0350	3.726758	2.2094684
Valid N (listwise)	45				

Source: SPSS Processed Data, 2022

Based on Table 2 above it can be described as follows

1. N or the number of samples in the financial institution sector companies listed on the Indonesia Stock Exchange totaling 45 company financial data from 9 companies for 5 years, namely from the 2016-2020 period.
2. The debt ratio variable has a minimum value of 0.0523, a maximum value of 0.8778, an average value of 0.600462 and a standard deviation of 0.2244625.
3. The profit ratio variable has a minimum value of 0.0098, a maximum value of 0.2610, an average value of 0.108151 and a standard deviation of 0.0705156.
4. The firm size variable has a minimum value of 26.3153, a maximum value of 31.1897, an average value of 29.055718 and a standard deviation of 1.3607492.
5. The cash flow variable has a minimum value of 23.2220, a maximum value of 29.0726, an average value of 25.741220 and a standard deviation of 1.6587570.
6. The financial distress variable has a minimum value of 1.0063, a maximum value of 9.0350, an average value of 3.726758 and a standard deviation of 2.2094684.

### Normality test

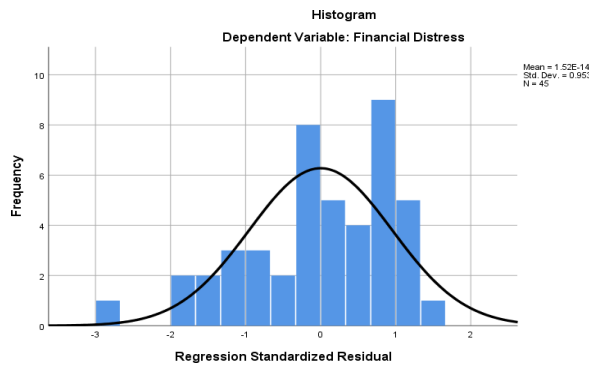
This normality test can be done in 2 ways, namely statistical tests using the Kolmogorov-Smirnov approach and graphical analysis with histograms and normal P-P plots.

**Table 3.** Normality Test  
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		45
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.31258370
Most Extreme Differences	Absolute	.108
	Positive	.084
	Negative	-.108
Test Statistic		.108
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>
Monte Carlo Sig. (2-tailed)	Sig.	.635 <sup>e</sup>
	99% Confidence Interval	<u>Lower Bound</u>
		.623
		<u>Upper Bound</u>
		.648

Source: SPSS Processed Data, 2022

Based on Table 3 above, it is known that the Asymp. Sig. (2-tailed) of 0.635 is greater than 0.05 so it is concluded that the residual data is normally distributed and to be sure it can be seen in the graphical analysis. The following data from the results of the graphic analysis are as follows.



**Figure 1.** Normality test

Based on Figure 1 above it is known that the distribution pattern has followed a bell-shaped curve even though there is a slope of the data so it is concluded that the data has been normally distributed.

**Multicollinearity Test**

The multicollinearity test can be measured by looking at the Tolerance and VIF values. The following results of the multicollinearity test are as follows:

**Table 4.** Multikolinieritas test

		Collinearity Statistics	
		Tolerance	VIF
1	Rasio Hutang	.514	1.946
	Rasio Profit	.627	1.596
	Ukuran Perusahaan	.248	4.037
	Cash Flow	.404	2.475
	Rasio Hutang	.514	1.946

a. Dependent Variable: Financial Distress

Source: SPSS Processed Data, 2022

## Glejser test

**Table 5. Coefficients**

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	1.314	.864	1.521	.136
	Debt Ratio	-.050	.170	-.295	.770
	Profit Ratio	-.107	.489	-.219	.828
	Firm Size	-.027	.040	-.663	.511
	Cash Flow	-.010	.026	-.370	.714

a. Dependent Variable: Absres

Based on Table III.5 above, it is known that the debt ratio variable has a significant value of 0.770, and the profit ratio variable has a significant value of 0.828, the variable. Company size with a significant value of 0.511 and Cash Flow variable with a significant value of 0.714 so this significant value has a value greater than 0.05 so it can be said that this Glejser test also does not have a heteroscedasticity problem.

## Regression Analysis

**Table 6. Regression Analyst**

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	2.611	1.566	1.668	.103
	Debt Ratio	-11.036	.307	-35.930	.000
	Profit Ratio	4.366	.885	4.931	.000
	Firm Size	.154	.073	2.117	.041
	Cash Flow	.108	.047	2.305	.026

a. Dependent Variable: Financial Distress

Source: SPSS Processed Data, 2022

Based on Table 6 above, it can be concluded that the multiple linear regression analysis models in this study can be formulated as follows: Financial Distress = 2.611 - 11.036 Debt + 4.366 Profit + 0.154 Company Size + 0.108 Cash Flow:

The description of the multiple linear regression analysis formula above is as follows:

1. The constant value (a) is 2.611, meaning that if debt, profit, company size, and cash flow are zero or constant, then financial distress will increase by 2.611 units.
2. The debt regression coefficient is -11.036 or positive, meaning that for every increase in debt by 1 unit, Financial Distress will decrease by 11.036 units assuming the other independent variables are considered constant or equal to zero.
3. The Profit regression coefficient is 4.366 or is positive, meaning that for every increase in Profit by 1 unit, Financial Distress will increase by 4.366 units assuming the other independent variables are considered fixed or equal to zero.
4. The regression coefficient for Company Size is 0.154 or positive, meaning that for every increase in Company Size by 1 unit, Financial Distress will increase by 0.154 units assuming the other independent variables are considered constant or equal to zero.
5. The Cash Flow regression coefficient is 0.108 or positive, meaning that for every increase in Cash Flow by 1 unit, Financial Distress will increase by 0.108 units assuming the other independent variables are considered fixed or equal to zero

## F-Test

**Table 7. ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	210.498	4	52.624	489.624	.000 <sup>b</sup>
	Residual	4.299	40	.107		
	Total	214.797	44			

a. Dependent Variable: Financial Distress

b. Predictors: (Constant), Cash Flow, Profit Ratio, Debt Ratio, Firm Size

Based on table 7 above, it is known that the  $F_{table}$  value of 2.61 is obtained from  $df_1$  of 4,  $df_2$  of 40, and an alpha value of 5% (0.05). So that the  $F_{count}$  value is greater than  $F_{table}$  ( $489.624 > 2.61$ ) meaning that there is influence and the significance value is smaller than the significance level ( $\alpha$ ) 0.05 ( $0.000 < 0.05$ ) meaning that it is significant. This result means that simultaneously debt, profit, company size, and cash flow have a joint effect on financial distress in financial institution companies.

### T-test

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	2.611	1.566	1.668	.103
	Debt Ratio	-11.036	.307	-35.930	.000
	Profit Ratio	4.366	.885	4.931	.000
	Firm Size	.154	.073	2.117	.041
	Cash Flow	.108	.047	2.305	.026

a. Dependent Variable: Financial Distress

Source: SPSS Processed Data, 2022

Based on table III.9, the explanation of the partial test (t test) is described as follows:

1. Partial testing can show that the debt variable has a  $t_{count}$  of -35.930 less than  $-t_{table}$  of -2.02108 which is obtained from a  $df$  of 40 with 0.05 and a significance value of 0.000 less than an alpha value of 0.05. This result means that debt has a negative and significant effect on financial distress in financial institution companies.
2. Partial testing can show that the Profit variable has a  $t_{count}$  value of 4.931 which is greater than the  $t_{table}$  of 2.02108 and a significance value of 0.000 which is smaller than the alpha value of 0.05. This result means that profit has a positive and significant effect on financial distress in financial institution companies.
3. Partial testing can show that the variable Company Size has a  $t_{count}$  value of 2.117 which is greater than the  $t_{table}$  of 2.02108 and a significance value of 0.041 which is smaller than the alpha value of 0.05. This result means that company size has a positive and significant effect on financial distress in financial institution companies.
4. Partial testing can show that the Cash Flow variable has a  $t_{count}$  value of 2.350 which is greater than the  $t_{table}$  of 2.02108 and a significance value of 0.026 which is smaller than the alpha value of 0.05. This result means that cash flow has a positive and significant effect on financial distress in financial institutions.

### Effect of Debt on Financial Distress

The results of the regression test show that the debt variable has a  $t_{count}$  of -35.930 which is smaller than  $-t_{table}$  of -2.02108 which is obtained from a  $df$  of 40 with 0.05 and a significance value of 0.000 less than an alpha value of 0.05. This result means that debt has a negative and significant effect on financial distress in financial institution companies. Thus the first hypothesis is accepted. The results of this study are in line with the results of previous research by Putri Syuhada (2020) which stated that debt has a negative and significant effect on financial distress.

### Effect of Profit on Financial Distress

The results of the regression test show that the Profit variable has a  $t_{count}$  value of 4.931 which is greater than the  $t_{table}$  of 2.02108 and a significance value of 0.000 which is smaller than the alpha value of 0.05. This result means that profit has a positive and significant effect on financial distress in financial institution companies. Thus the second hypothesis is accepted.

The results of this study are in line with the results of previous research by Dipta Adytia Nugraha and Nursito (2021) which states that profit has a positive and significant effect on financial distress.

#### **Effect of Company Size on Financial Distress**

The results of the regression test show that the variable company size has a tcount value of 2.117 which is greater than the ttable of 2.02108 and a significance value of 0.041 which is smaller than the alpha value of 0.05. This result means that company size has a positive and significant effect on financial distress in financial institution companies. Thus the third hypothesis is accepted. The results of this study are in line with the results of previous research by Sanny Nafilla Salim and Vaya Juliana Dillak (2021) which states that company size has a positive and significant effect on financial distress.

#### **The Effect of Cash Flow on Financial Distress**

The results of the regression test show that the Cash Flow variable has a tcount of 2.350 which is greater than the ttable of 2.02108 and a significance value of 0.026 which is smaller than the alpha value of 0.05. This result means that cash flow has a positive and significant effect on financial distress in financial institutions. Thus the fourth hypothesis is accepted. The results of this study are in line with the results of previous studies including Cesty Calestia (2018) which states that cash flow has a positive and significant effect on financial distress.

## **CONCLUSION**

Partially, debt has a significant effect on financial distress in financial institution companies; Partially, profit has a significant effect on financial distress in financial institution companies; Partially, company size has a significant effect on financial distress in financial institution companies; Partially, cash flow has a significant effect on financial distress in finance companies; Simultaneously, debt, profit, company size, and cash flow have a significant effect on financial distress in financial institution companies.

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