

Relationship between Leverage, Company Size and Total Assets

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ABSTRACT

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The purpose of this study is to examine how leverage and firm size influence total assets in the banking industry on the Indonesian stock exchange for the 2019-2021 period. The shares in banking companies are either partially or simultaneously. The data used comes from the financial statements of each company and comes from IDX. . The sample of this research is manufacturing companies listed on the Indonesia Stock Exchange from 2009-2013. The number of samples that meet these criteria are 9 companies from 32 banks. To prove the hypothesis was tested using multiple linear regression analysis, t test, and f test and to prove there was no deviation in the regression results were tested using the classical assumption test (normality, multicollinearity, heteroscedasticity and autocorrelation). Multiple regression equation $(Y) = LN TA = 2.620 + 0.001 DER + 0.996 LN UP + 0.007 OWN$. The constant coefficient $a = 2.620$, meaning that if all independent variables have zero (0) then the total asset growth is 2.620. The coefficient $1 = 0.001$, is the DER regression coefficient value of 0.001, meaning that every one unit increase in DER, the growth of total assets will increase by 0.001 with the assumption that the other independent variables of the regression model are fixed. The DER regression coefficient is positive, meaning that between DER and total asset growth is directly proportional, meaning that if DER increases, total asset growth will decrease by the regression coefficient. The coefficient $2 = 0.966$, is the value of the firm size regression coefficient of 0.996, meaning that for every one unit increase in firm size, the growth of total assets will increase by 0.996 assuming the other independent variables of the regression model are fixed. The regression coefficient of firm size is positive, which means that the size of the company and the growth of total assets is directly proportional, meaning that if the size of the company increases, the growth of total assets will decrease by the regression coefficient. The coefficient $3 = 0.007$, is the regression coefficient value of ownership (dummy variable) of 0.007, meaning that ownership affects the LN of total assets. If DER and LN the size of state-owned and non-BUMN banking companies increases by one unit. When the DER and LN sizes of state-owned and non-BUMN banking companies increase by one unit, the difference in the average value of LN total assets is 1.004.

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1. Introduction

The national development of a nation includes all sectors that can support the improvement of people's welfare, including economic development. The role of financial institutions to finance development is very necessary, because to carry out development, funds are needed. In addition, economic development can create a multiplier effect for increasing national income which in turn can improve people's welfare. Therefore, the existence of financial institutions in financing development is very necessary as a source of development funds for a country (Wahyuni et al., 2020).

Financial institutions involved in financing economic development are divided into two based on statutory regulations, namely bank financial institutions (LKB) and non-bank financial institutions (LKBB). LKB can collect funds from the public in the form of deposits and distribute them to the public in the form of

credit or other forms and in their activities provide services in payment traffic, also called depository financial institutions. LKB according to the Banking Law is divided into two types, namely Commercial Banks and Rural Banks (BPR). While LKBB is a financial institution which in its business activities is not allowed to collect funds directly from the public in the form of deposits, often called non-depository financial institutions, consisting of financing companies, venture capital companies, insurance companies, pension funds, securities companies and pawnshops. (Zuchrinata & Yunita, 2019).

Banking institutions still dominate the Indonesian financial system in terms of total assets that have been accumulated with a market share of around 78.2% of the total assets of financial institutions. Other financial institutions that play a significant role are insurance companies, finance companies and pension funds. And the following composition of assets of financial institutions in Indonesia will be presented in table 1 below.

Table 1
Composition of financial institution assets

No	Type of financial institution	Asset percentage
1	Bank	77%
2	Insurance	9,8%
3	Financing Company	5,5%
4	Mutual Fund	2,8%
5	Pension fund	2,5%
6	BPR	1,7%
7	Securities Company	0,7%
8	Pawnshop	0,4%
9	Credit Guarantee Company	0,1
10	Venture Capital Company	0,1%

Source: Bank Indonesia, Ministry of Finance

As a financial institution under the supervision of the monetary authority (Bank Indonesia), the bank is a place where the monetary authority uses it as a means of implementing monetary policy. Monetary policy is a policy carried out by the monetary authority to influence the money supply. Through the transmission mechanism, monetary policy what the monetary authority does can affect the real sector in the form of changes in national income.

Therefore, banks play a very important role in the economy of a country, not only as financial intermediary institutions between the owners of capital (fund suppliers) and users of funds (fund users), but institutions which are used as a means to carry out monetary policy by the monetary authority. Finance is included in the financial system which is a set of markets, institutions, rules and techniques by which securities are traded, interest rates are determined and financial services are produced and offered to all parts of the world. The financial system is very important for the modern economy, not only proven in the mechanism between parties who lack funds and people who have excess funds, but also as a key service in the economy called risk sharing liquidity and sources of information. The financial system consists of the money market or capital market and financial intermediaries such as banks, mutual funds and pension funds (Nurmindia et al., 2017).

Growth is how far the company puts itself in the overall economic system or the economic system for the same industry. In general, companies that grow quickly get positive results in terms of strengthening their position on the competitive map, enjoying significantly increased sales and accompanied by an increase in market share.

The company's long-term goal is to optimize the company's value by minimizing the company's cost of capital. The higher the value of the company, the more prosperous the owner of the company is. The use of debt policy can be used to create the desired company value, but the debt policy also depends on the growth of the company which is also related to the size of the company. This means that large companies with good growth rates are relatively easier to access the capital market. This convenience indicates that large companies are relatively easy to meet sources of funds from debt through the capital market, companies that have good company growth rates show the company's ability to pay interest on debt if they use debt to run the company's operations. Therefore, linking capital structure with firm growth and firm value becomes relevant (Listiwati & Paramita, 2018).

The principle of company management demands that both in obtaining and using funds must be based on efficiency and effectiveness. Efficiency in the use of funds means that any amount of funds invested in assets must be used as efficiently as possible to generate the maximum level of return on investment. The function of the use of funds includes planning and controlling the use of assets in current assets and fixed assets, so that the funds embedded in each of these assets are not too small on the one hand, so that they do not interfere with liquidity and business continuity, and on the other hand are not too large. amount, causing unemployment.

In addition to the element of leverage (can be verified by DER), differences in the scale/size of the company can affect the company's growth. Benchmarks that show the size of a company include total sales, total assets, and number of regular customers. Large companies can more easily access the capital market than small companies. The availability of funds will make it easier for companies to carry out existing investment opportunities. So based on the background above, the author tries to identify how the influence of DER and company size affect total assets in the banking industry on the Indonesia Stock Exchange??"

2. Method

The analytical method used in this study is causal (cause and effect) to determine the causal relationship of the variables to be studied. However, because this study also aims to provide an overview of the meaning of the variables studied, a descriptive design is also used, so that this study uses 2 (two) designs, namely causal and descriptive. While the type of data used in this research is quantitative data, namely data measured on a numerical scale (numbers), but because the data is taken from outside the place where the research is conducted, the type of data is external data.

This study uses secondary data, namely data that has been collected by data collection institutions and published in the data user community. The data in this study were obtained from the publications of the Indonesia Stock Exchange (IDX) in the form of stock prices and company financial statements. Data analysis was performed using multiple regression analysis method which was preceded by classical assumption test and also hypothesis testing. The multiple regression analysis is an analysis used to determine the relationship and influence of several independent or independent variables on the dependent variable (Jannah, 2019).

3. Results and Analysis

3.1 Description of Research Variables Statistics

To analyze the effect of DER and firm size on total assets in the banking industry on the Indonesian stock exchange, it is necessary to use the company's financial statement data as the research sample. So based on the results of statistical descriptive analysis, table 7 shows the characteristics of the samples used in this study including: number of samples (N), sample average (mean), maximum value, minimum value, and standard deviation, for each DER variables, firm size LN, and total assets LN on stock returns (Rachmawati, & Purwanti, 2017).

Table 2
Description of Research Variables

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Total Asset Growth	45	14,67	20,41	803,94	17,8654	1,91501
Debt to Equity Ratio	45	303,00	1354,00	40229,00	893,9778	214,68100
Company Size	45	12,34	18,06	701,50	15,5890	1,90094
Shareholding	45	,00	1,00	15,00	,3333	,47673
Valid N (listwise)	45					

Source: Processed secondary data

The table above shows the amount of data used in this study as many as 45 samples studied during the 2019-2021 period. Based on the calculation results above, it appears that the highest DER value of 1354.00% is found in BKSJ in 2019 and the lowest (minimum) DER value of 303.00% is found in BKSJ in 2021. The standard deviation of 214.68-100% is smaller than with a mean (average) value of 893.9778%, it means that the DER deviation can be said to be relatively good (Fauzan, 2020).



The highest foreign company size of 18.06% was found in BRI companies in 2017 and the lowest company size value of 12.34% was found in BKSU in 2018. The standard deviation value of 1.90094% is smaller than the mean value (average).) that is equal to 15.5890%, so that the deviation of the data on the Firm Size variable can be said to be good. LN The highest total share assets of 20.41% was at BMRI in 2019 and the lowest value of 14.67% was at BKSU in 2018. The mean (average) value was 17.8654% and the standard deviation was 1.91501 %. This shows that the total asset LN data deviation can be said to be good.

3.2 Normality test

Normality test aims to test whether in the regression model the dependent variable, the independent variable or both have a normal distribution or not have a normal distribution. This test was conducted to avoid bias in the regression model. One method to determine normality is to use the method of graph analysis or statistical tests. Graph analysis can be seen by looking at the histogram graph or by looking at the normal P-P Plot of regression standardized residual. The normality test can be seen on the histogram graph as shown in Figure 1 below:

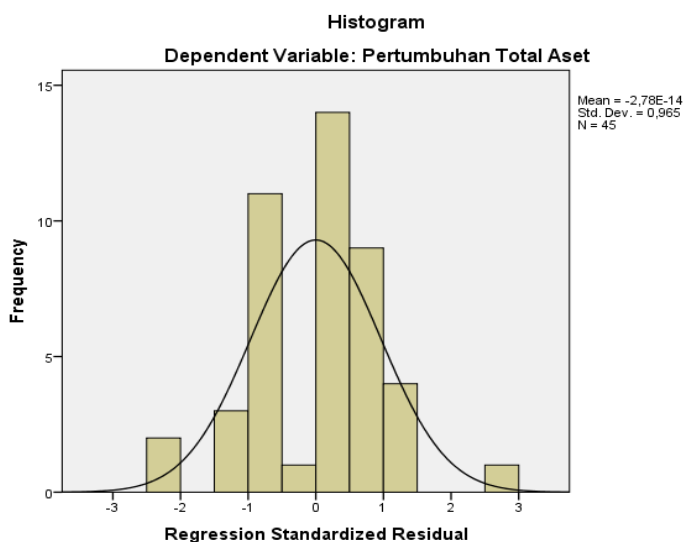


Fig 1. Histogram graph
Source: SPSS data processing

From the picture above, it can be seen that the distribution pattern is close to normal, but if the conclusion is normal or not the data is only seen from the histogram graph, then this can be misleading, especially for a small sample size. Another method used in graph analysis is to look at the normal probability plot which compares the cumulative distribution of the normal distribution. If the distribution of residual data is normal, then the line that will describe the actual data will follow the diagonal line. Normality test by looking at the normal Probability Plot can be seen in the following figure:

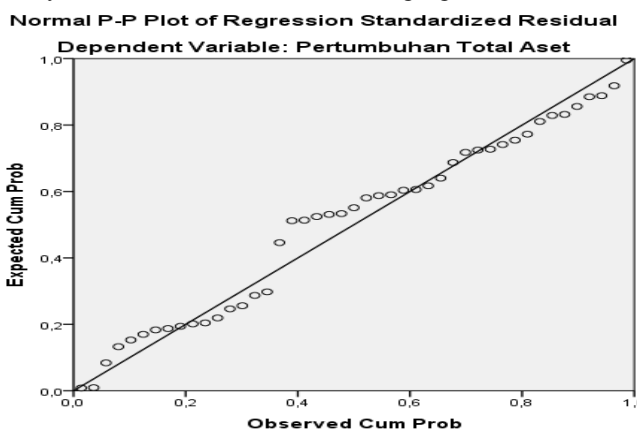


Fig 2. Normal Probability Plot
Source: SPSS data processing

The picture above shows the results of the normality assumption test of the data. From the picture above, it can be seen that the data in the regression model with the dependent variable Total Asset Growth meets the assumption of data normality.

3.3 Autocorrelation Test

The autocorrelation test is used to determine whether or not there is a correlation between the residuals in one observation and other observations in the regression model. The prerequisite that must be met is the absence of autocorrelation in the regression model (Suhardiyah, 2018).

Table 3
Autocorrelation
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,997 ^a	,993	,993	,16552	1,013

Source: SPSS data processing

From the table above, it can be seen that the DW value is 2,331, according to the applicable provisions, DW is between -2 to 2, meaning there is no autocorrelation.

3.4 t test

The t-test is intended to determine whether there is a partial (individual) effect of the independent variables (DER, LN firm size) on the dependent variable (total asset growth), the degree of significance used is 0.05 (for two tails to 0.025). If the significance value is less than the degree of confidence, then Ho is rejected, which states that an independent variable partially has no significant effect on total assets. T-test analysis can be seen in the table below:

Table 4
Results of t test (t test)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2,62	0,274		9,565			
	Debt to Equity Ratio	0,001	0	-0,036	-2,701	0,967	0,967	1,034
	Company Size	0,996	0,016	0,989	63,879	0,709	0,709	1,411
	Shareholding	0,007	0,061	0,002	0,108	0,729	0,729	1,371

Source: SPSS data processing

The results of the t-test based on the data in table 12 above are as follows:

- a. DER to LN Total Assets

In the table above in the sig column there is a sig value of 0.967 which is greater than the probability value of 0.05 or a value of $0.967 > 0.05$, then Ho is accepted, meaning the DER coefficient is not significant to total assets.

The DER variable has a t count that is -2.701 with t table = 2.018 so t count < t table it can be concluded that the DER variable is not significant to the LN of total assets.

The area of acceptance and rejection of Ho for DER against ROA is presented in the figure below.



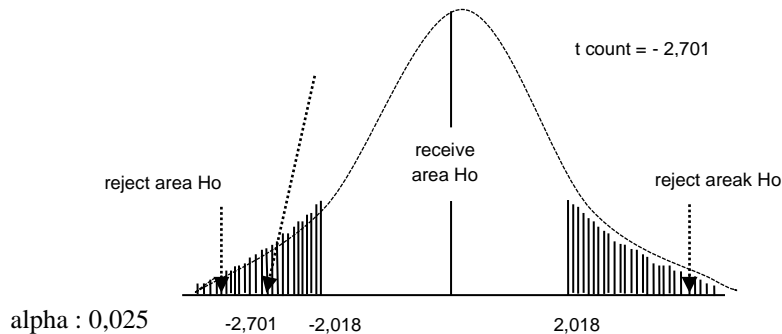


Fig 3. Areas of acceptance and rejection of Ho for DER against LN Total Assets
Source: Processed secondary data

1) Company Size to LN Total Assets.

In Table 12, the sig value of 0.967 is greater than the probability value of 0.05 or the value of $0.967 > 0.05$, then Ho is accepted. The LN variable Company Size has a t count of 63,879 with t table = 1,411 so $t \text{ count} < t \text{ table}$ it can be concluded that the LN variable Company Size has a contribution to the LN total assets, a positive value indicates that the LN company size has a direct relationship with the LN total assets so it can be concluded that firm size foreign exchange has a significant influence on total asset foreign exchange. The area of acceptance and rejection of Ho for DER against ROA is presented in the figure below.

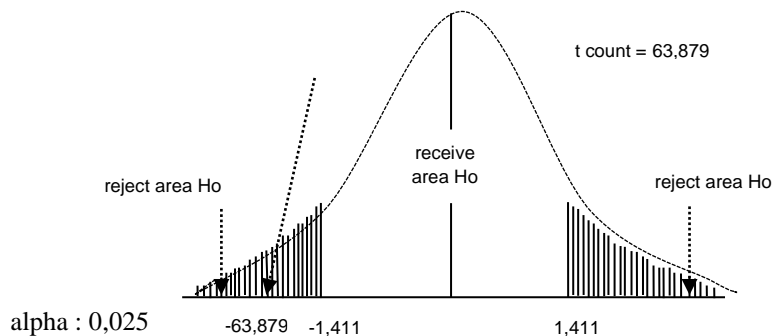


Fig 4. Areas of acceptance and rejection of Ho for DER against LN Total Assets
Source: Processed secondary data

2) Share Ownership of LN Total Assets.

In the table above, it can be seen that the sig value of 0.729 from a probability value of 0.05 or a value of $0.729 > 0.05$, then Ho is accepted. The share ownership variable has a t count of 0.108 with t table = 1.371 so $t \text{ count} < t \text{ table}$ it can be concluded that the share ownership variable is not significant to LN Total Assets, a negative value indicates that share ownership has an opposite relationship with Total Asset Growth so it can be concluded ownership stocks do not have a significant effect on Total Assets Foreign Exchange (Maharani et al., 2021)

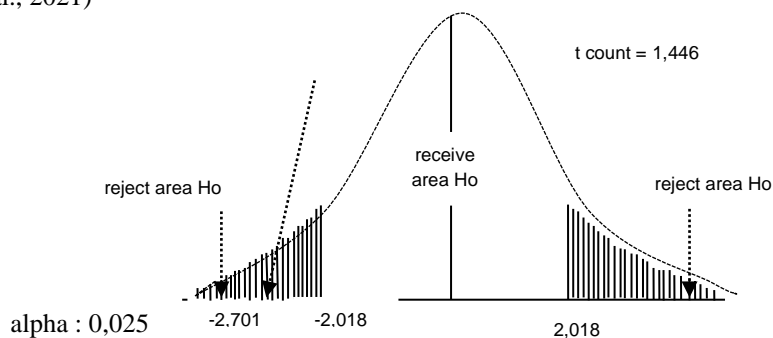


Fig5. Areas of acceptance and rejection of Ho for LN against LN Total Assets
Source: Processed secondary data

3.5 Goodness of Fit Test

To prove the truth of the hypothesis. The researcher uses the F test, namely the feasibility test of the model to determine the effect of the independent variables (DER, Company Size and Share Ownership) simultaneously (together) on the dependent variable of Total Asset Growth. The hypotheses used are:

Ho : model fit with data

H1: the model does not fit the data

Ho is accepted if the significance is < 0.05 or how to compare Fcount with Ftable. The results of the F test are shown in the table below:

Table 5
F Test Results (F Test)
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	160,236	3	53,412	1949,586	,000 ^b
	Residual	1,123	41	,027		
	Total	161,359	44			

a. Dependent Variable: Total Asset Growth

b. Predictors: (Constant), Shareholding, Debt to Equity Ratio, Company Size

Source: SPSS data processing

From the results of the F test, it can be seen that simultaneously (simultaneously) the value of sig < 0.05 , means Ho is accepted and H1 is rejected, thus the model fits the data. Likewise, it can be proven from the calculated F value of 1,949,586 while the F table at a significant level of 5% is 6.59 so that from the calculation results it appears that Fcount is smaller than F table ($1,949.586 < 6.59$), so Ho is accepted and H1 is rejected. Thus, the regression model can be used to predict the growth of total assets or it can be said that DER and firm size simultaneously have a significant effect on the growth of total assets (Lontoh et al., 2019).

Table 6
Hypothesis Data Testing

No	Hypothesis	Research result	Explanation
1	DER has a significant positive effect on total LN assets	DER has no significant positive effect on LN total assets	Not in accordance with the hypothesis, this is because the average value is good for DER is between 150 to 200, in the research conducted the average value of
2	LN Company Size	It is suspected that the size of the company's foreign exchange has a positive and significant effect on total assets	
3	DER, debt to equity, and return on assets affect stock returns	No effect on stock returns	Not in accordance with the hypothesis, because the three variables do not entirely affect stock returns but are explained by other variables and external factors

4 Conclusions

Based on the results of data processing and analysis as well as proving the hypothesis through research procedures that have been carried out, the authors make several conclusions, among others, the regression equation is stock return = $47,098 - 0,057 CR - 0,335DER + 2,230ROA$, constant value 47,098, then DER coefficient value of -0.335, meaning that for every one unit increase in DER, the stock return will increase by -0.335. The DER variable has no effect on stock returns. The ROA coefficient value is 2.230, meaning that for every one unit increase in ROA, the stock return will increase by 2.230. ROA variable is 2.6244%. The ROA variable has no effect on stock returns, while the CR, DER, and ROA variables have an influence of 0.038% on stock returns as evidenced by the results of the simultaneous determination test (R²) of 0.038 or 3.8%. The variables CR, DER, and ROA simultaneously do not have a significant effect on stock returns, it



can be seen from the calculated F that is 0.899 while the F table is 3.314, so F arithmetic $<$ F table can be concluded that simultaneously CR, DER, and ROA have no significant effect to stock returns.

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