

# ANALYSIS OF THE INFLUENCE OF FUNDAMENTAL FACTORS ON FIRM VALUE IN TELECOMMUNICATIONS COMPANIES LISTED ON THE BEI

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## Abstract

*This study aims to determine the effect of liquidity, solvency, and profitability on firm value. The independent variables in this study are liquidity, solvency, and profitability. The dependent variable in this study is firm value. The population in this study is telecommunications companies listed on the IDX for the period 2015-2022. The method of determining the sample that was used in this study was purposive sampling, namely the sampling technique using certain criteria, obtained 5 companies that met the sample criteria in this study so that the total sample in this company was 40 samples. The analysis method used in this study is multiple linear regression analysis method. The results of this study indicate that liquidity has a negative but insignificant effect on firm value while solvency and profitability have a positive and significant effect on firm value.*

**Keywords:** *Liquidity, Solvency, Profitability, Firm Value*

## INTRODUCTION

With the development of technology, companies must have clear goals. One of the main objectives of establishing a company is to make a profit and increase company value. The founder of a company establishes a company with the hope that the company can generate higher profits than the operational costs and investment costs incurred, another goal of the company is to maximize the shareholders' value. The value of wealth can be seen by developing the company's share price (common stock) in the market.

The development of telecommunications in Indonesia is increasing, this is supported by tools and the community's need for greater information. Telecommunication services are present to provide facilities for increasingly sophisticated communication tools needed by the community. This is supported by data obtained from the official website of the Central Statistics Agency (BPS) which shows that 66.48% of Indonesia's population has access to internet in 2022, this figure has increased when compared to 2021 which reached 62.10%. The high number of internet usage in Indonesia is inseparable from the rapid use of cellular phones. According to data from the official website of the Central Statistics Agency (BPS) which shows that 67.88% of Indonesia's population has owned a cellular phone in 2022. This figure increased when compared to 2021 which reached 65.87%.

In addition to considering the company's profits, it must also consider the risks to be able to maximize the share price, and whether to pay back as dividends or the profits are retained and reinvested in the business. For an investor, company value is quite important because company value describes the prosperity of shareholders and company performance. The higher the company value shows the better the company's performance. The company can run its business from funds obtained from business owners or from debt, then the funds obtained are used for company operations such as paying salaries, and other company operations.

The increasing competitiveness of a company will attract the attention of investors, this will have an impact on increasing the company's share price, with an increase in share price, the company's value also increases. At present, people's need for information continues to increase, the telecommunications industry makes a significant contribution to the economy, the opportunities seen by investors from the telecommunications industry encourage investors to invest in the telecommunications industry. The value of companies listed on the IDX can be seen from the share price circulating in the company, the higher the share price, the higher the company value. Fundamental factors in this research are proxied as Liquidity Ratio, Solvency Ratio, and Profitability

Ratio. The following is a list of telecommunications companies listed on the Indonesia Stock Exchange (IDX).

**Table 1. Telecommunication companies listed on the IDX**

No	Company Name	Company Code
1	PT Tower Bersama Infrastructure Tbk	TBIG
2	PT Bali Towerindo Sentra Tbk	BALI
3	PT Inti Bangun Sejahtera Tbk	IBST
4	PT Telkom Indonesia (Persero) Tbk	TLKM
5	PT Link Net Tbk	LINK

*Source: Indonesia Stock Exchange (IDX)*

Liquidity ratio is a ratio used to see how liquid a company is in paying off its short-term obligations. The solvency ratio is a ratio used to see how much the company is financed by debt, or describes the ability of a company to be able to pay off its long-term obligations. The profitability ratio is a ratio used to see the profitability of a company by seeing how much profit the company has generated.

## METHOD

The type of research used in this research is quantitative research. Quantitative research is research that provides data in the form of numbers and uses an empirical approach in order to collect, analyze, and present data and results from research. The population in this study is telecommunications companies listed on the IDX. The sampling technique, namely using Purposive Sampling, is a technique used to select a population that will be sampled based on certain criteria.

Data analysis in this study uses multiple analysis methods, the tool used is SPSS24, the reason for using multiple regression is because multiple regression analysis tools can determine the effect of independent variables and the dependent effect. Descriptive statistical analysis, classical assumption tests include: the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Multiple regression tests and hypothesis testing

## RESULTS AND DISCUSSION

### RESULTS

#### Descriptive statistical test

**Table 2. Descriptive statistical test**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Current Ratio	39	0.05	2.50	0.6646	0.52442
Debt to Equity Ratio	39	-0.02	9.97	1.1486	1.75532
Return on Asset	39	-0.01	0.14	0.0516	0.04498
PBV	39	0.50	9.14	2.3826	1.71922
Valid N(listwise)	39				

*Source : IBM SPSS Statistic 24(data processed 2023)*

Based on table 2, namely the results of descriptive statistical analysis, it can be seen that the number of samples (N) is 39 samples. From 39 samples, the lowest value (minimum), highest value (maximum) and standard deviation (std. Deviation) were obtained, the following is an explanation of each variable:

#### Normality test

**Table 3. normality test**

One-Sample Kolmogorov-Smirnov Test		
Unstandardized Residual		
N		39
Normal Parameters <sup>a,b</sup>	Mean	0.0000000
	Std. Deviation	1.11579599
Most Extreme Differences	Absolute	0.097
	Positive	0.097
	Negative	-0.096
Test Statistic		0.097
Asymp. Sig. (2-tailed)		0.200 <sup>c,d</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

*Source : IBM SPSS Statistic 24(data processed 2023)*

Based on the results in table 3 above, the one sample kolmogrov-simirnov test shows the Sig part which is 0.200<sup>c,d</sup> which means that these results are greater than 0.05 so it can be concluded that the residual value is normally distributed or has met the normality requirements.

#### Multicollinearity test

**Table 4. multicollinearity test**

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.301	0.458		2.843	0.007		
	Current Ratio	-0.323	0.378	-0.099	-0.854	0.399	0.904	1.106
	Debt to Equity Ratio	0.719	0.115	0.734	6.235	0.000	0.867	1.153
	Return on Asset	9.115	4.303	0.238	2.118	0.041	0.949	1.053

a. Dependent Variable: PBV

*Source : IBM SPSS Statistic 24(data processed 2023)*

In table 4 above, it can be seen that the VIF value on all variables is not more than 10 and the tolerance value on each independent variable is greater than 0.10. It can be concluded that the variables Current Ratio (X1), Debt to Equity Ratio (X2), Return on Asset (X3) are free from multicollinearity classical analysis.

#### Autocorrelation test

**Table 5. Autocorrelation test**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.918 <sup>a</sup>	0.843	0.830	1.37546	1.359
a. Predictors: (Constant), ROA, CR, DER					
b. Dependent Variable: PBV					

**Source : IBM SPSS Statistic 24(data processed 2023)**

Based on the results of the above calculations,  $1.6589 > 1.359 < 2.3411$ . So the conclusion is that there is autocorrelation in this study. Then the author overcomes this autocorrelation problem using Cochrane Orcutt. The Cochrane Orcutt method is a method used to solve autocorrelation problems by calculating the autocorrelation coefficient value using the error value in regression. The following are the results of autocorrelation treatment using the Cochrane Orcutt method.

**Table 6. Autocorrelation test using Cochrane Orcutt**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.761 <sup>a</sup>	0.579	0.543	1.16263	1.782
a. Predictors: (Constant), Lag_X3, Lag_X1, Lag_X2					
b. Dependent Variable: Lag_Y					

**Source : IBM SPSS Statistic 24(data processed 2023)**

Based on the above results, it can be concluded that  $1.6589 < 1.782 < 2.3411$ . So it can be concluded that there is no autocorrelation in this study.

#### Heteroskedasticity test

**Table 7. Heteroskedasticity test**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	1.132	0.286		3.959	0.000
	Current Ratio	-0.345	0.236	-0.244	-1.461	0.153
	Debt to Equity Ratio	0.045	0.072	0.106	0.619	0.540
	Return on Asset	-2.530	2.690	-0.154	-0.941	0.353
a. Dependent Variable: Abs_Res						

**Source : IBM SPSS Statistic 24(data processed 2023)**

Based on the results of the heteroscedasticity test above, it can be concluded that the significance value of the Current Ratio (X1), Debt to Equity Ratio (X2), Return on Asset (X3) variables is greater than 0.05 (0.153, 0.540 and 0.353 respectively). Based on this, it is concluded that in this study there is no heteroscedasticity problem.

## Multiple linear regression test

Table 8. Multiple linear regression test

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	1.301	0.458		2.843	0.007
	CR	-0.323	0.378	-0.099	-0.854	0.399
	DER	0.719	0.115	0.734	6.235	0.000
	ROA	9.115	4.303	0.238	2.118	0.041

a. Dependent Variable: PBV

Source : IBM SPSS Statistic 24(data processed 2023)

Then the results of the multiple linear regression equation are obtained as follows:

$$Y = 1.301 - 0.323 + 0.719 + 9.115 + e$$

- Constant (a) = 1.301 a positive constant value indicates that the positive effect of the independent variable, where if an independent variable consisting of Current Ratio (X1), Debt to Equity Ratio (X2), Return on Asset (X3) = 0 then, PBV (Y) will be 1.301.
- The coefficient X1 = -0.323 indicates that the current ratio variable (X1) has an opposite direction (negative) to the Price to Book Value (Y) variable, which means that every one point increase in the current ratio variable will reduce the Price to Book Value (Y) 0.323.
- The coefficient X2 = 0.719 indicates that the Debt to Equity Ratio (X2) variable has a unidirectional (positive) effect on the Price to Book Value (Y) variable, which means that every one point increase in the Debt to Equity Ratio variable increases the Price to Book Value (Y) level by 0.719.
- The coefficient X3 = 9.115 indicates that the return on assets (X3) variable has a unidirectional (positive) effect on the Price to Book Value (Y) variable, which means that every one point increase in the return on assets (X3) variable will increase the Price to Book Value (Y) by 9.115.

## Test the coefficient of determination

a. Analysis of the coefficient of determination (R<sup>2</sup>)

Table 9. Test the coefficient of determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.761 <sup>a</sup>	0.579	0.543	1.16263

a. Predictors: (Constant), ROA, CR, DER

Source : IBM SPSS Statistic 24(data processed 2023)

Based on the table above, it can be seen that the Adjusted R Square is 0.543, it can be concluded that the Price to Book Value (Y) variable is 54.3% influenced by the Current Ratio (X1), Debt to Equity Ratio (X2), Return on Asset (X3) variables.

## b. Partial Significance Test (T Test)

Table 10. Partial Significance Test (T Test)

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
				Beta		

1	(Constant)	1.301	0.458		2.843	0.007
	CR	-0.323	0.378	-0.099	-0.854	0.399
	DER	0.719	0.115	0.734	6.235	0.000
	ROA	9.115	4.303	0.238	2.118	0.041
a. Dependent Variable: PBV						

*Source : IBM SPSS Statistic 24(data processed 2023)*

1. Hypothesis testing (H1)

From the results of the analysis above, a significance value of 0.399 is obtained with a t value of -0.854, where it can be concluded that H1 is accepted, meaning that there is a negative but insignificant effect of the current ratio variable (X1) on the price to book value variable (Y).

2. Hypothesis testing (H2)

As for the second hypothesis, a significance value of 0.000 is obtained with a t value of 6.235, where it can be concluded that H2 is accepted, meaning that there is a positive and significant effect of the debt to equity ratio variable (X2) on the price to book value variable (Y).

3. Hypothesis testing (H3)

In the third hypothesis, a significance value of 0.041 is obtained with a t value of 2.118, where it can be concluded that H3 is accepted, meaning that there is a positive and significant effect of the variable return on assets (X3) on the price to book value variable (Y).

**Simultaneous significance test (F test)**

**Table 11. Simultaneous significance test (F test)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.008	3	21.669	16.031	0.000 <sup>b</sup>
	Residual	47.310	35	1.352		
	Total	112.318	38			
a. Dependent Variable: PBV						
b. Predictors: (Constant), return on asset, Current ratio, Debt to equity ratio						

*Source : IBM SPSS Statistic 24(data processed 2023)*

Based on the simultaneous test results, the significance value obtained is  $0.000 < 0.05$  and the calculated F value is  $16,031 > 2.87$ . So it can be concluded that H4 is accepted, in simultaneous testing the Current Ratio (X1), Debt to Equity Ratio (X2), Return on Asset (X3) variables simultaneously have a significant and positive effect on the price to book value (Y) variable.

**DISCUSSION**

**The effect of liquidity on firm value**

Current ratio is a ratio used to measure the company's ability to pay off its short-term debt using assets that can be disbursed in a short time, or within one year. Based on the results of the regression hypothesis test, it shows that H1 is accepted, which means that liquidity, which is witnessed by the current ratio, has no negative but insignificant effect on firm value, which is witnessed by price to book value (PBV) in telecommunication companies listed on the IDX. This means that if the company's liquidity value is higher, it will actually reduce the company's value, because there are assets that are idle in the company and are not utilized by company management.

The results of this research analysis are supported by research conducted by Dewi & Abudanti (2019) and research conducted by Dewi & Rahyuda (2020) which claims that liquidity has a negative but insignificant effect on firm value.

**The effect of solvency on firm value**

This ratio describes the extent to which a company utilizes debt to obtain additional profits. This ratio is also used to measure the level of risk in a company and helps in making investment decisions. The regression test results show that hypothesis 2, namely solvency as proxied by the debt to equity ratio, has a positive and significant effect on firm value as proxied by price to book value in telecommunications companies listed on the IDX. This is supported by signaling theory, namely if the solvency ratio in a company is high, it will give a bad signal to investors about the health of a company.

This research is supported by research conducted by Hanifah (2020) which claims that the solvency ratio has a positive and significant effect on firm value.

**The effect of profitability on firm value**

Return on assets is a ratio used to measure the level of effectiveness in a company, or measure how efficiently a company generates profit from the assets it uses. Based on the test results, it shows that the third hypothesis is accepted, namely the profitability ratio proacted by return on assets has a positive and significant effect on firm value proacted by price to book value in telecommunications companies listed on the IDX. This means that the higher the profitability of a company, the value of the company will also increase.

This is supported by signaling theory, namely that the higher the profitability ratio in a company will describe the higher the profit obtained by the company so that this will increase the value of a company. This research is supported by research conducted by Komala, et al (2021) which claims that profitability has a positive and significant effect on firm value.

**The effect of liquidity, solvency and profitability simultaneously on firm value.**

Hypothesis 4 is accepted, meaning that there is a simultaneous influence of liquidity, solvency and profitability on firm value. This means that together liquidity, solvency and profitability are factors that determine firm value. This research is supported by research conducted by Lumentut & Magantar (2019) which claims that liquidity, profitability, solvency and activity ratios simultaneously affect firm value.

**CONCLUSION**

Based on the results of research using multiple regression analysis which aims to determine the effect of liquidity, solvency and profitability on firm value, namely as follows:

1. The liquidity variable proxied by the current ratio has a positive but insignificant effect on firm value. This is indicated by the significant value obtained is  $0.399 > 0.05$ .
2. The solvency variable proxied by the debt to equity ratio has a positive and significant effect on firm value. This is indicated by the significant value obtained is  $0.000 < 0.05$ .
3. The profitability variable proxied by return on assets has a positive and significant effect on firm value. This is indicated by the significant value obtained is  $0.041 < 0.05$ .
4. Liquidity variables, solvency, profitability simultaneously affect firm value.

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