

THE INFLUENCE OF CAPITAL STRUCTURE AND PROFITABILITY ON FIRM VALUE IN THE PHARMACEUTICAL SUB-SECTOR FOR THE PERIOD 2017-2021

Indira Tribhuwana Tungga Dewi¹ Rahmi Utami² Harry Jundrio³ Ardiansyah⁴ Shalfi Andri⁵

¹²³⁴⁵ Politeknik Tempo, Jakarta, Indonesia

Corresponding Author: Indira Tribhuwana Tungga Dewi, E-mail: indiratd@politekniktempo.ac.id

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ABSTRACT

Firm value is the consequence of a company's performance, as represented in its share price, which is determined by the relationship between supply and demand in the stock market. The aim is to test and assess the impact of capital structure (DER) and profitability (ROA) on Firm value (PBV) in pharmaceutical firms listed on the Indonesia Stock Exchange (BEI) between 2017 and 2021. Purposive sampling is used to establish sampling. Ten pharmaceutical businesses serve as the research population. During a 5-year observation period, 40 samples were chosen from 8 firms based on the specified criteria. The analytical approach used in this study is multiple linear regression. The data analysis test tool runs the IBM SPSS version 26.0 program on Windows. The findings of this study reveal that capital structure has a significant influence (sig. 0.000) on firm value as well as profitability (sig. 0.022).



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INTRODUCTION

Competition in the pharmaceutical sector makes every company improve quality so that company goals can be achieved along with economic development in the current era of globalization with competition between companies that gets tighter. Pharmaceutical companies are one of the companies with a fairly adequate level of management with the state of the world economy. The increase in Firm value is an achievement that is following the wishes of the owners.

The pharmaceutical sector was chosen by researchers because the pharmaceutical sector is one of the right companies for investors to invest in, which in Indonesia itself is a large market for the pharmaceutical industry. The company will review and manage its capital to ensure optimal capital structure and returns for shareholders by considering the efficiency of capital use based on operating cash flow and capital expenditure, as well as future capital needs.

Firm value is important to research because Firm value reflects the growth and performance of management, as well as the assets owned by the company. If the company's value is high, investors will easily be interested in investing in the company. We can judge the value of the company from its high and stable share price over a long period. A high Firm value will indicate the prosperity of shareholders. The prosperity of shareholders which is the company's goal can be known from the dividends distributed to shareholders. For companies that are running well, this ratio can increase by showing the stock market value is greater than its book value.

According to Gerstenberg, capital structure is the process of increasing the capitalization of a company. This includes various resources that can be controlled, including loans, reserves, shares and bonds. Capital structure will not be separated from funding requirements. Capital structure reflects the balance between long-term debt and own capital. The capital structure is said to be optimal if the capital structure can minimize the average cost of capital. Improper management of funds will hurt a company because it will cause various problems such as financial disruption, and decreased company profitability which will result in a decrease in Firm value.

Profitability is the company's ability to make a profit. Profitability measures how much profit the company can obtain. The greater the company's profit level, the better the management is at managing the company (Sutrisno, 2012). Companies with high profits tend to use more loans to obtain tax benefits. Profitability is the ratio of management effectiveness based on the returns obtained from sales and investments. Profitability ratios consist of profit margin, basic earning power, return on assets, and return on equity.

Large market capitalization, relatively high profits, and large book value can be obtained from companies that have large assets, which will increase the company's value in the eyes of investors. A company that has high total assets indicates that the company has reached the shareholder prosperity stage, where at this stage the company's cash flow is positive and good, which is considered to have good prospects for a relatively long period of time.

At the end of December 2019, the world community was shocked by the emergence of a virus that shocked the world. The virus is called Coronavirus (COVID-19) which causes the need for vitamins, supplements and herbal medicines to increase the body's immune system in general to increase, so the pharmaceutical industry which plays in this sector has experienced quite large growth. Throughout 2020, demand for pharmaceutical commodities and medical devices experienced a significant increase as a response from the public and government to anticipate and overcome the COVID-19 pandemic.

Pharmaceutical companies that have products related to the COVID-19 pandemic, in the form of promotional, preventive and curative products, are able to survive and continue to grow. During 2020–2021, the pharmaceutical industry's sales performance has increased and developed. The growth of medical equipment production facilities also continues to increase. From 2015 to 2021, the number of companies producing medical devices increased from 193 to 891. Furthermore, in the last five years, the domestic medical device industry experienced growth of 361.66 per cent or approximately 698 companies (Ministry of Industry, 2021)

LITERATURE REVIEW

Capital structure

Capital structure is a description of a company's financial proportions between the capital it owns, which comes from long-term liabilities, and its capital (shareholders' equity), which is the source of financing for the company. Every business always requires capital, whether using its own capital or borrowed capital (Fahmi, 2013). The capital structure is very influential in the company's financial position. The capital structure can also determine the fulfilment of the company's spending needs where the funds obtained come from long-term funds, which consist of two main sources, namely those from within and outside the company. Capital structure is a comparison in determining a company's spending needs; usually, companies will use debt, equity, and even bonds.

Profitability

The profitability of a company can be assessed in various ways depending on the profits and assets, or capital, that will be compared with each other. According to Kasmir (2019:114), profitability can be measured using return on equity (ROE). The greater the ROE ratio, the more the company's performance continues to improve. If an industry is good, the profitability ratio will be better. This shows the image of expertise in obtaining high profits from the company (Surmadewi & Saputra, 2019).

Firm Value

Every company has a goal, namely maximizing Firm value as a measure of a company's success in achieving its expected goals. Firm value is a form of reputation obtained by the company in carrying out company activities over a certain period of time. Firm value is defined as market value because the company can provide maximum prosperity to shareholders if the company's share price increases (Jasmi, 2019). According to Brigham and Houston (2015: 133) if the company's value is high, it will be easier to attract investors to invest their capital in the company. If you want to maximize the value of a company, management must take advantage of existing strengths and improve the company's weaknesses.

From the description of the previous theory, the research model is presented as below:

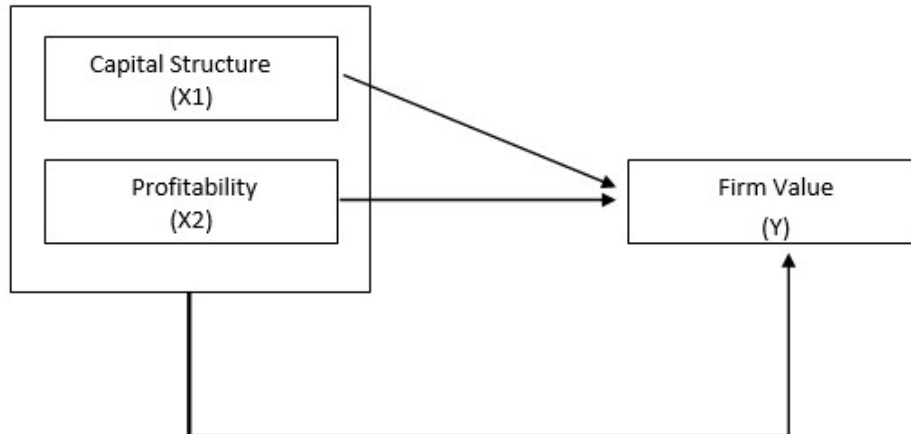


Figure 1. Framework

RESEARCH METHODS

Research Design

According to Sugiyono (2016: 35) there are two types of research methods, namely quantitative and qualitative research methods. Qualitative research is a research method used to examine the conditions of natural objects where the researcher is the key instrument. Meanwhile, quantitative research methods are methods based on the post-positivism philosophy that can be used to research a population or sample and sampling can use tools or instruments and analysis of the resulting data in statistical form. The method used in this research is quantitative.

Capital Structure (X1)

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100\%$$

Profitability (X2)

$$ROA = \frac{\text{Earnings before taxes}}{\text{Total Asset}}$$

Firm Value (Y)

$$PBV = \frac{\text{Price per Share}}{\text{Book Value per Share}}$$

Data Collection Technique

The data collection method in the research uses the non-participant observation method, namely that the researcher is not directly involved and only observes independently (Sugiyono, 2012:204). Secondary data collected in this research was obtained from the Indonesia Stock Exchange website in the form of annual financial reports on pharmaceutical sector companies for the 2017-2021 period.

Researchers observe and record related data in pharmaceutical sector companies by recording, observing and learning from several scientific works such as theses, and journals and accessing the internet on certain sites that are relevant to the research.

Population and Sample

The technique used in this research is the purposive sampling method, namely a sampling technique in which the samples are specifically selected based on predetermined criteria. Based on this method, the sample selection criteria used in this research are as follows: (1) pharmaceutical sector companies listed on the Indonesia Stock Exchange during the period 2017–2021; (2) pharmaceutical sector companies that did not experience losses in their financial statements during the 2017–2021 period; and (3) pharmaceutical sector companies that publish annual reports and financial reports consistently during the 2017–2021 period.

RESULTS AND DISCUSSION

Normality test

The normality test for this research was carried out by looking at the distribution of data points on the diagonal graph, so the research data had a normal distribution. Testing the graph by using the normal probability plot (P plot) to compare the cumulative distribution of the actual data with the cumulative distribution of the normal distribution.

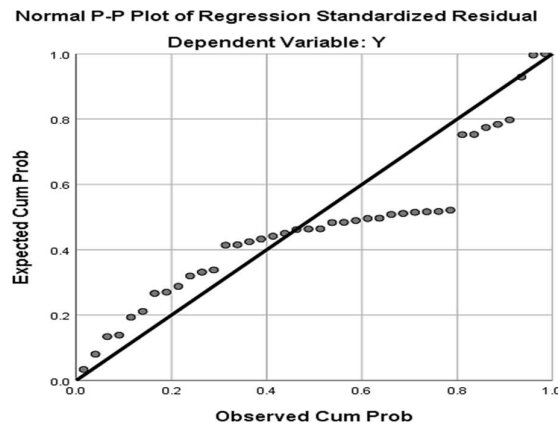


Figure 2. Normality Test Results

Multicollinearity Test

The multicollinearity test is used to determine whether there is a correlation between independent variables in a multiple regression model. If correlation occurs, it is said to have a multicollinearity problem. A good regression model should not have a correlation between independent variables. To be able to detect whether there is a multicollinearity problem in a regression model, this can be done by looking at the Variance Inflation Factor (VIF) value where the VIF value must be below 10. If the Variance Inflation Factor (VIF) value from the regression results is greater than 10 then it can be confirmed that there is multicollinearity among these independent variables. The following are the results of calculations using SPSS for the Variance Inflation Factor (VIF) value in the regression model used in the research model.

Table 1. Multicollinearity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Capital Structure	.526	1.900
Profitability	.526	1.900

From the calculation results, it can be seen that there is no VIF value that exceeds the value of 10 in the regression model. This shows that there is no multicollinearity problem in the regression model.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether the regression model has unequal variance from the residuals of one observation to another. A good regression model shows that there is no heteroscedasticity in this study using the Gletjser test. If a statistically significant relationship is found, it can be concluded that there is heteroscedasticity in the error variance and vice versa. The test used is the Glejser test by looks at the probability of significance above the 5% or 0.05 confidence level.

Table 2. Heteroscedasticity Test Result

Model	B	t	Sig.
1 (Constant)	3.014	.954	.350
Capital Structure	.053	.661	.516
Profitability	-.086	-.847	.406

Based on the table above, it is found that all independent variables have probability values greater than the 0.05 significance level, so it can be concluded that in the regression model, there is no heteroscedasticity.

Multiple Regression Analysis

Regression analysis is a statistical technique that is useful for examining and modelling relationships between variables. Multiple regression is often used to overcome regression analysis problems that result in the relationship of two or more independent variables. The results of multiple regression analysis are as follows:

Table 3. Multiple Regression Analysis Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.196	4.893		1.062	.300
Capital Structure	.617	.125	.666	4.922	.000
Profitability	.331	.157	.286	2.114	.046

The multiple linear regression equation in this research is as follows:

$$Y = 5.196 + 0.671X1 + 0.331X2$$

Information:

- Y : Firm Value
- X1 : Capital Structure
- X2 : Profitability

The regression equation above can be explained as follows:

- a) A constant value of 5,196 shows that if the capital structure and profitability are equal to zero, then the Firm value will be 5,196.
- b) The regression coefficient for the capital structure variable = 0.671, meaning that if the capital structure increases by one unit with the other independent variables remaining constant, the Firm value will increase by 0.671. This means that capital structure has a positive effect on Firm value.
- c) Regression coefficient for the profitability variable = 0.331, meaning that if profitability increases by one unit with the other independent variables remaining constant, profitability will increase by

0.331. This means that profitability has a positive effect on Firm value.

Hypothesis test

T-test

The t-test basically shows the extent of the influence of individual independent variables, namely capital structure and profitability, in explaining the influence of the dependent variable on Firm value.

Table 4. T-test Result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.196	4.893		1.062	.300
	Capital Structure	.617	.125	.666	4.922	.000
	Profitability	.331	.157	.286	2.114	.046

Capital Structure on Firm Value

Based on Table 4, the estimated results for the capital structure variable are $t = 4.922$ with a probability of 0.000. The significance value is below 0.05 (5%) which indicates that H_0 is rejected and H_a is accepted. Thus it can be concluded that "There is an influence between Capital Structure and Firm value".

Profitability on Firm Value

Based on Table 4, the estimated results for the profitability variable are $t = 2.114$ with a probability of 0.046. The significance value is below 0.05 (5%) which indicates that H_0 is rejected and H_a is accepted. Thus it can be concluded that "There is an influence between profitability and Firm value".

F Test

The F test is used to test one of the hypotheses in research that uses multiple linear regression analysis. The F test is used to determine the effect of independent variables together (simultaneously) on the dependent variable. The F test results are seen in the ANOVA table in the sig column. with the criterion that if the probability value is < 0.05 , then it can be said that there is a joint significant influence between the independent variables on the dependent variable.

Table 5. F-test Result

Model		F	Sig.
1	Regression	40.869	.000 ^b
	Residual		
	Total		

Where $\text{count} > \text{table}$ ($40,869 > 3.24$) and $\text{sig} < \alpha$ ($0.000 < 0.05$) then H_0 is rejected and H_a is accepted, then there is a significant influence between capital structure and profitability simultaneously on Firm value.

CONCLUSION

The results of testing hypothesis 1 show that the capital structure variable has a value of $t = 4.922$ with a probability of 0.000. The significance value is below 0.05 (5%) which indicates that H_0 is rejected and H_a is accepted. Thus it can be concluded that "There is an influence between capital structure and Firm value". The results of testing hypothesis 2 show that the profitability variable is $t =$

2.114 with a probability of 0.046. The significance value is below 0.05 (5%) which indicates that H_0 is rejected and H_a is accepted. Thus it can be concluded that "There is an influence between profitability and Firm value". The results of testing hypothesis 3 show that $\text{count} > \text{table}$ ($40,869 > 3.24$) and $\text{sig} < \alpha$ ($0.000 < 0.05$), so H_0 is rejected and H_a is accepted, so there is a significant influence between capital structure and profitability simultaneously on the Firm value.

Investors are expected to pay attention to the independent variables of capital structure and profitability because they have a significant influence on Firm value. Companies in the pharmaceutical subsector should pay attention to capital structure and profitability factors in making decisions regarding Firm value for the company's survival. Future researchers are expected to be able to add other independent variables that influence Firm value, such as business risk, liquidity, asset structure, and company sales growth.

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