



# The Effect of Profitability and Capital Structure on Company Value in Banking Companies

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**ABSTRACT:** The main goal of the company is to increase the value of the company and increase the prosperity of the company's shareholders. Companies need to pay attention to the company's profitability and capital structure to achieve its main goal. This study aims to analyze the effect of profitability and capital structure on firm value. The population of this study is banking companies listed on the Indonesia Stock Exchange for the 2017-2021 period with a sample of 14 companies selected using purposive sampling. The independent variables used in this study are profitability as measured by Return On Assets (ROA) and Return On Equity (ROE) and capital structure as measured by Debt to Total Asset Ratio (DAR) and Debt to Equity Ratio (DER). The dependent variable is the company's value as measured by price to book value (PBV). The analytical method used is descriptive statistics and multiple linear regression analysis. The results of this study indicate that profitability as measured by ROA has a positive and significant effect on firm value, while ROE has no significant effect on firm value, capital structure as measured by DAR and DER also has no significant effect on firm value.

**Keywords:** Profitability; Capital Structure; Firm Value

## I. Introduction

The banking sector plays an important role in spurring economic development towards increasing the welfare of the people at large. Apart from its role in the administration of payment traffic and its function as an intermediary institution, the banking sector is also a means of transmitting monetary policy. The large role of the banking sector causes any changes that occur in the banking sector to have an impact on other sectors (Lubiset *al.*, 2017).

In the midst of an economic slowdown, the ability of banks to make profits has also weakened, this can be seen from the profitability ratios such as the banking Return on Assets (ROA) which has decreased. Data from the Financial Services Authority (OJK) show that as of May 2020 the banking industry's ROA was at the level of 2.08%. This position decreased from the May 2019 period which was still in the range of 2.61%. Not only that, compared to previous years, the position of ROA in May 2020 can be said to be the lowest.

The above phenomena identify the company's ability to earn profits, but also the large use of debt by companies in carrying out their activities. The use of large and higher debt for the company will affect the level of profits obtained by investors because the greater the use of debt, the greater the interest expense will be borne thereby reducing the level of profit to be obtained by the company and will have an impact on firm value.

Profitability is the company's ability to generate profits by using owned sources such as assets, capital or sales of the company. The higher the level of profitability of a company, the greater the level of prosperity provided by the company will attract investors to the company and will have a positive impact on stock prices

in the market which will increase the value of the company (Niar, 2019).

In a company, the capital structure is needed to increase the value of the company because the determination of the capital structure in the company's funding policy determines the profitability and position of the company (Ayu et al., 2020). Will the company choose its own capital or take on debt in funding or developing the company. When funding its own capital, of course, it reduces dependence on outsiders or if by taking debt, of course the company is very dependent on obtaining funds from outside parties. But besides that, the company will experience limited capital because each company will try to develop its business, so that it requires large capital, apart from using its own capital, the company also needs loan capital (Sondakhet et al., 2019). Firm value has a large influence on investment decisions in a company. Investors in making investment decisions tend to see the value of the company first. Companies that have high corporate value will have good prospects for company growth in the future, so that they can attract investors to invest and vice versa (Afiezant et al., 2020). Firm value can also be influenced by the size of the profitability generated by the company. The company's profitability is very important because the company to be able to carry out its operating activities must be in a profitable condition *profitable* in order to attract capital from outside (Aliet et al., 2021). Without company profits, it will be difficult to attract capital from outside the company. Company profitability is also used as an indication that can affect a company's value. With high profitability, it shows that the company's prospects are good and investors will respond positively to the high level of company profitability so that the company's value will also increase (Siswanti & Ngumar, 2019).

In this study, researchers measured the value of the company with the Price to Book Value (PBV) ratio, namely the ratio for determining the fair price of a share by calculating the final stock price at the book value of the company's annual financial statements (Mahayatiet et al., 2021). PBV is the relationship between stock price and book value per share. Companies that are doing well generally show a PBV value above one, meaning that the market value of the stock is greater than the book value. The greater the PBV ratio, the higher the firm value, so that the return received by shareholders will be higher than the funds that have been invested in the company. A high PBV will make investors believe in the company's prospects in the future.

## II. Literature Review and Hypotheses Development

### Trade off theory

According to the trade-off theory put forward by Myers (2001) companies will owe up to a certain level of debt, where tax savings (tax shields) with additional debt equal the cost of financial distress (financial distress). The trade-off theory in the capital structure is to balance the benefits and sacrifices arising from the use of debt.

### Signalling Theory

Signalling Theory explain the importance of information that describes the state of a company as a basis for making investment decisions. The information disclosed will be a signal for investors (Jogiyanto, 2000). Information that is positive will have a good impact on the company so that investors are interested in investing in the company. Disclosure of financial and non-financial information contained in the annual report can be used as a signal to outside parties, both investors and creditors. Capital market implementers will conduct an analysis of the information that has been informed by the company as good news or bad news.

### Pecking Order Theory

The pecking order theory assumes that insider (managers) have more information about the prospects of the firms than the outsiders (investors) do and hence managers act in the best interest of the owners of the firms (Modigliani and Miller, 1958). This theory is an alternative to the trade-off theory suggesting that firms prefer internal financing (such as retained earnings) to external financing. However, debt financing is preferred only when equity funds are not sufficient to finance the growth of the firm. Contrary to trade-off theory there is no optimal debt ratio in pecking order theory rather it suggest that capital structure of firm depends on the financing requirements of the firms over time. Accordingly, there is no concept of optimum capital structure (Beattie et al., 2004).

### Profitability

If ROA has a positive effect on firm value, then this shows that the better a company's financial performance, the higher the company value and stock price. This is in line with Nafisah's research *et al.*, (2018) which explains that ROA has a positive effect on firm value. This research is in line with research conducted by (Siswanti & Ngumar, 2019) that profitability as measured using (ROA) has an effect on company value.

#### H1a: ROA has an effect on firm value.

Higher ROE will increase stock prices, and will attract investors to invest in the company. Thus, there will be a positive relationship between profitability and stock price where the high stock price will affect the value of the company. This is in line with research conducted by (Aliet *et al.*, 2021) which states that profitability as measured by ROE has a positive and significant effect on firm value. However, in the research conducted (Nafisah *et al.*, 2018) said that ROE has no effect on firm value.

#### H1b: ROE has an effect on firm value.

### Capital Structure

If the DAR ratio is high, it means that there is more funding with debt, it will be more difficult for the company to obtain additional loans because it is feared that the company will not be able to cover its debts. Vice versa, if the ratio is low, the smaller the company is financed with debt (Jihadiet *et al.*, 2021). According to research conducted (Deffiet *et al.*, 2020) states that DAR has a significant and insignificant effect on firm value.

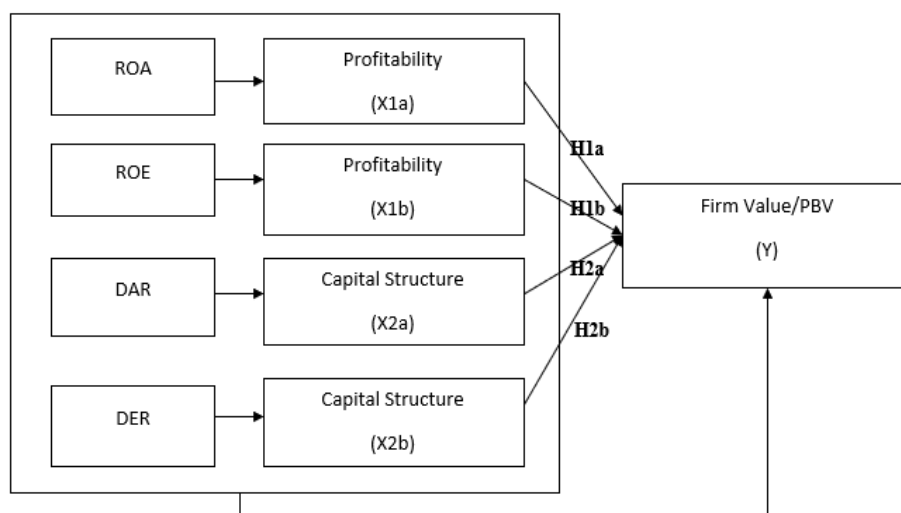
#### H2a: DAR has an effect on firm value.

DER is the ratio used to assess debt to equity. This ratio is useful for knowing the amount of funds provided by borrowers (creditors) with company owners. In other words, this ratio is to find out every rupiah of own capital that is used for money loans (Fatin & Jufrizen, 2020). This statement is reinforced by (Nafisah *et al.*, 2018) states that DER has a significant effect on firm value.

#### H2b: DER has an effect on firm value.

## III. Conceptual Framework

In accordance with the literature review that has been stated above, and by looking at the results of research related to the effect of profitability by proxy (ROA, ROE) and capital structure by proxy (DAR, DER) the authors developed a theoretical framework related to research as a basis for determining hypotheses, in the form of a systematic diagram through chart described below.



#### IV. Research Method

The population in this study are banking companies listed on the Indonesia Stock Exchange (IDX) during the 2017-2021 period. part of the number and characteristics possessed by a population. The sampling technique in this study uses the method *purposive sampling*. *Purposive sampling* is a sample on the basis of suitability of the characteristics of the sample with the specified sample selection criteria. The sample selection criteria are as follows:

1. Banking companies are still listed on the Indonesia Stock Exchange from 2017 to 2021.
2. Banking companies that publish annual financial reports for the period 2017 to 2021 on the IDX in full which contain the data and information used in this research.
3. Banking companies that have never experienced a loss in a row 2017-2021.
4. Banking companies that are still operating in the 2017-2021 period.

##### Data analyst

The magnitude of the regression coefficient is obtained from the following equation:

$$PBV : \alpha + \beta_1ROA + \beta_2ROE + \beta_3DAR + \beta_3DER + e$$

##### Independent Variable

###### Return On Assets (ROA)

ROA is a ratio to measure a company's ability to generate net profit based on a certain level of assets.

$$ROA = \frac{\text{Net profit}}{\text{Total Assets}} \times 100\%$$

###### Return On Equity (ROE)

ROE is the net income available to common stockholders, ROE is also used to measure the ability of a company's capital to generate profits.

$$ROE = \frac{\text{Net profit}}{\text{Equity}} \times 100\%$$

###### Debt to Asset Ratio (DAR)

DAR is the ratio between total debt and total assets used to give an idea of how much percentage of total assets is financed by debt.

$$DAR = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\%$$

###### Debt to Equity Ratio (DER)

DER is the ratio of total debt to total equity of the company.

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

##### Dependent Variable

Firm value is measured using Price to Book Value. This variable is measured quantitatively by comparing the closing price per share with the book value per share.

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

## V. Result and Discussion

### 1. Descriptive statistic

Variabel	N	Minimum	Maximum	Mean	Std. Deviasi
ROA	64	0,00020	0,03250	0,0128703	0,00863962
ROE	64	0,00000	0,18000	0,0812688	0,04883572
DAR	64	0,61450	0,91890	0,8057563	0,06103198
DER	64	1,59370	16,07860	5,7376859	2,98006123
PBV	64	0,42960	4,73230	1,5608250	0,92729533
Valid (listwise)	N 64				

- ROA has the lowest (minimum) value of 0.00020 and the highest (maximum) value of 0.3250 with an average (mean) of 0.128703 and a standard deviation of 0.0086396.
- ROE has the lowest (minimum) value of 0.00000 and the highest (maximum) value of 0.1800 with an average (mean) of 0.0812688 and a standard deviation of 0.04883572.
- DAR has the lowest (minimum) value of 0.61450 and the highest (maximum) value of 0.91890 with an average (mean) of 0.8057563 and a standard deviation of 0.06103198.
- DER has the lowest (minimum) value of 1.59370 and the highest (maximum) value of 16.07860 with an average (mean) of 5.7376859 and a standard deviation of 2.98006123.
- PBV has the lowest (minimum) value of 0.42960 and the highest (maximum) value of 4.73230 with an average (mean) of 1.5608250 and a standard deviation of 0.92729533.

### 2. Hypothesis Testing

#### a. Multiple linier regression test

In this study, hypothesis testing was carried out using the multiple linear regression analysis model which was tested using the statistical tool SPSS version 26. The following is a table of multiple linear regression analysis:

Variable	Unstandardized B	t	Sig
ROA	66,344	2,202	0,032
ROE	-0,437	-0,088	0,930
DAR	-3,757	-1,448	0,153
DER	0,072	-1,143	0,258

Based on the predetermined regression formula, the regression model is obtained as follows:

$$PBV = 3,359 + 66,344BROA - 0,437BROE - 3,757BDAR + 0,072BDER + e$$

#### b. Statistical Test (T test)

Variable	Unstandardized B	t	Sig
ROA	66,344	2,202	0,032
ROE	-0,437	-0,088	0,930
DAR	-3,757	-1,448	0,153
DER	0,072	-1,143	0,258

The T test will basically show the effect of the independent variables individually on the dependent variable. The results of the T test that has been carried out by researchers can be seen in table. From the table above, it can be explained as follows:

1. The effect of ROA on PBV based on the test results obtained t value of 2.202 with a significance value of 0.032. The significance value is smaller than the specified error tolerance ( $0.032 < 0.05$ ). This shows that  $H_{1a}$  accepted and  $H_0$  rejected. It can be concluded that ROA has a positive and significant effect on PBV.
2. The effect of ROE on PBV based on the test results obtained t value of -0.088 with a significance value of 0.930. The significance value is greater than the specified error tolerance ( $0.930 > 0.05$ ). This shows that  $H_{1b}$  rejected and  $H_0$  be accepted. It can be concluded that ROE has no effect on PBV.
3. The effect of DAR on PBV based on the test results obtained t value of -1.448 with a significance value of 0.153. The significance value is greater than the specified error tolerance ( $0.153 > 0.05$ ). This shows that  $H_{2a}$  rejected and  $H_0$  be accepted. It can be concluded that DAR has no effect on PBV.
4. The effect of DER on PBV based on the test results obtained t value of -1.143 with a significance value of 0.258. The significance value is greater than the specified error tolerance ( $0.258 > 0.05$ ). This shows that  $H_{2b}$  rejected and  $H_0$  be accepted. It can be concluded that DER has no effect on PBV.

### c. F test

The F-statistic test is used to test the magnitude of the influence of all variables independently (simultaneously) on the dependent variable. The results can be seen in the following ANOVA table:

ANOVA		
Model	f	Sig
Regression	7,304	0,000

Based on the table above, the results of the F test show a significant value of 0.000 (significance value  $< 0.05$ ) so it can be concluded that the regression model is feasible to use as a model in this study.

### d. Autocorrelation Test

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate	Durbin Watson
1	0,575	0,331	0,286	0,78364389	2.228

From the model summary table above, it shows that the Durbin-Watson value (DW) of 2.228. This value will be compared with the value in the DW table at a significance level of 0.05. The number of samples is 64 (n) and the number of variables is 5 (k-1); k = 4, then in the DW table the values n = 64, dL = 1.5029, and dU = 1.7303 are obtained. Because DW lies between dU and 4-dU ( $dU < DW < 4-dU$ ) =  $1.7303 < 2.228 < 2.2697$ , it can be concluded that the residuals in this study did not contain either positive or negative autocorrelation.

## VI. Conclusion

This study aims to determine the effect of profitability and capital structure on banking companies listed on the Indonesia Stock Exchange in 2017-2021. This study uses a quantitative approach using secondary data. Based on the research sample criteria, the final sample is 64 banking companies listed on the Indonesia Stock Exchange for the 2017-2021 period. Based on the test results, the conclusion of this study is that profitability (ROA) has a positive and significant effect on PBV, which means that asset turnover in banking companies in Indonesia is very important for increasing stock prices and also company value. Meanwhile, profitability (ROE) has no significant effect on PBV, which means that equity turnover in banking companies in Indonesia has no significant effect on increasing stock prices and company value. The capital structure (DAR) has no significant effect on PBV, which means that the ratio of total debt to total assets of banking companies does not affect the increase in share prices or company value. While the capital structure (DER) has no significant effect on PBV, which means that the ratio of total debt and total equity in banking companies does not affect the increase in

share prices or company value. ROA has the most dominant influence on Price to Book Value in banking companies on the Indonesia Stock Exchange. This means that banking companies already have good corporate value and it is hoped that this can be further improved because ROA is a reflection of the company in front of investors and the public about the company's prospects in the future. The research results can be used for the development of financial management science, especially for ROE, DAR and DER. In this study, only a few variables were used which were limited in influencing PBV, while other factors also had an influence on PBV which had not been disclosed how big their influence was. It is hoped that future research can discuss other factors that have not been studied in this study.

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