



## THE ANALYSIS OF FIRM VALUE IN INDONESIA PROPERTY AND REAL ESTATE COMPANIES

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### Abstract

Firm value is one of the factors that can affect investors and the public. Investors tend to invest their capital in companies that have good firm value because if firm value is good it will have a good impact on dividend distribution and shareholder welfare. While from the community point of view, the public will use a product or service of a company that has a brand image or a good image because with a brand image or a good image, the public will have the view that the company has good quality and performance. The purpose of this study is to examine the effect of profitability, capital structure, managerial ownership and institutional ownership on the firm value of property and real estate companies listed on the Indonesia Stock Exchange in 2014-2017. Sample of this study is purposive sampling method. The analytical method of the study is multiple regression analysis. The results showed that the regression model was able to explain well the effect of profitability, capital structure, and managerial ownership on the firm value. This is indicated by the value of Adj R-Square = 80.34%. Hypothesis test results inform that profitability, capital structure and managerial ownership affect the firm value.

### Introduction

The Firm Value has an important meaning in the business, because the Firm Value is a brand image or a company image that can affect the good name of the company in public. If a company has a brand image or a good image, the public will be confident and believe in the company and investors will be interested in investing in the company. If a company has a brand image or a bad image, the public is not sure and will not trust the company and investors will not be interested in investing in the company. Firm value can be said to be a market value which is closely related to stock prices by giving investors an insight into the risks and prospects of the company in the future [1]. The Firm Value is very important because with high firm value, it will be followed by the high prosperity of shareholders. Thus it can be concluded that, a good firm value will have a good impact on investors and dividend distribution, this will attract investors to invest in a company.

In this study, the discussion of the factors that influence the Firm Value is applied to the data of property and real estate companies in 2014-2017 period. Firm value is one of the factors that can affect investors and the public, investors tend to invest their capital in companies that have good firm value because if the Firm Value is good it will have a good impact on dividend distribution and shareholder welfare while from the community point of view, the public will use a product or service of a company that has a brand image or a good image because with a brand image or a good image, the public will have the view that the company has good quality and performance. Property and real estate companies are used in this study because of the development carried out by the Indonesian government regarding city and regional arrangements, more property and real estate companies have sprung up to fulfill these demands. Whereas for the study period, 2014-2017 was chosen because the economic development in Indonesia in that period experienced a decline according to the Central Statistics Agency. The period was interesting to be chosen as a period of research because with a declining economy does the Firm Value have a consistently stable value in the period research.

Several studies that examine the factors that influence the firm value, among others, [2] conclude that firm value can be influenced by capital structure, company size and company risk. [3,4] concluded that firm value can be influenced by capital structure, investment decisions and dividend policies. [5,6] firm value can be influenced by managerial ownership and institutional ownership. [7,8,9]. Conclude that firm value can be influenced by capital



structure, profitability, and company size. [10] Concluded that firm value can be influenced by company performance with dividend policy as moderation, financial performance used is liquidity, profitability, leverage. From the research above, the researchers made a review of the factors that influence the Firm Value by combining previous studies.

## Literature Review

### Signalling theory

Signaling theory reveals how a company should give a signal to users of financial statements. The signal is in the form of information about what has been done by management to realize the ownership of the owner. The signal can also be in the form of information stating that the company is better than other companies. The signal is given by managers to reduce information asymmetry between management as company managers and parties with an interest in the information [11].

According to [11], there are two kinds of information asymmetry, namely: 1. Adverse selection, namely that managers and other insiders usually know more about the situation and prospects of the company than outside parties, and there may be facts that are not conveyed to the principal. 2. Moral hazard, namely that the activities carried out by a manager are not entirely known to investors (shareholders, creditors), so that managers can take actions beyond the knowledge of shareholders who violate the contract and actually ethically or normally may not be feasible.

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### Stakeholder theory

Stakeholder theory states that all stakeholders have the right to be provided with information about how organizational activities affect stakeholders even when stakeholders choose not to use the information and even when stakeholders cannot directly play a constructive role in survival [12]. The main objective of stakeholder theory is to help corporate managers understand the environment of stakeholders and manage more effectively among the existence of relationships within the company. A broader goal is to help corporate managers increase the value of the company from the impact of stakeholder activities and minimize losses to stakeholders.

### Agency theory

Agency theory proposed by Jensen and Meckling in 1976 is a theory used to explain the relationship between the agent (who receives authority) and the principal (the party who gives authority) that is built so that the company's objectives can be achieved optimally [13]. The main principle of this theory states that there is a working relationship between the party that gives authority, namely the investor with the party who receives authority, namely the manager. This shows that the agency relationship is a contract whereby one or more people (principals) involve another person (agent) to do some services on their behalf which involves some decision-making authority to the agent. Based on agency theory, the manager as an agent must run the company in accordance with the mandate of the investor as the principal well so as to produce good performance that affects the value of the company.

### Firm Value

The main purpose of the company is to maximize the value of the company. Companies that maximize the value of their company, can be said that companies also maximize the welfare of the company's shareholders. The value of the company is the investor's perception of the success rate of the company which is reflected in the company's stock price [14]. High stock prices make the value of the company also high and vice versa. This will have an impact on the level of market confidence in the company for prospects in the future.

**Profitability on Firm value**

Profitability becomes a measuring tool used by investors to determine whether a company is healthy or not, so that profitability is one of the attractions for investors to invest in a company. If profitability is high, the Firm Value is good, on the contrary if profitability is low, the Firm Value is low. Profitability is closely related to sales where if a company has high sales, indirectly high profitability, but this is inseparable from the existence of a brand image or company image where the company must have a brand image or a good image so that customers or consumers will be sure and believe in the quality of the company. Consumers tend to choose a product or service from a company with good quality and trusted. If a company has a brand image or a good image it can generate high sales and will have an impact on high profitability and followed by high Firm Value.

In this study profitability is measured by using Return on Equity (ROE) in line with research conducted by [7] and [10] which uses Return On Equity (ROE) as a measuring tool to measure profitability. [7] stated that Return On Equity (ROE) had a significant positive effect on firm value, the statement was in line with the research of [10] which states the same thing that Return On Equity (ROE) has a significant positive effect on firm value.

H1: There is an influence of ROE on Firm value

**Capital Structure on Firm value**

Companies can be said to have good firm value if they have less debt than equity. Equity can increase by increasing the share capital owned by the company by giving signals or information to investors that the company has a good performance so investors are interested in investing in the company. Signals or information submitted can be in the form of new products that will be marketed, company projects or activities, awards they have, achievements that have been achieved. It can be delivered through media that is easily accessible to investors such as websites, mass media, so investors can know that the company has a good performance. Investors tend to invest in companies that have good quality. If investors invest their capital in the company, the company's equity will increase and will have an impact on increasing the Firm Value.

In this study the capital structure was measured using Debt to Equity Ratio (DER) in line with research conducted by [2,3,5,7]. [2] stated that Debt to Equity Ratio (DER) had no significant positive effect on firm value, [3] had the result that Debt to Equity Ratio (DER) had a significant positive effect on firm value while [7] stated that Debt to Equity Ratio (DER) had a significant negative effect on firm value.

H2: There is an influence of DER on Firm value

**Ownership Structure on Firm value**

Ownership structure is one of the factors that can be considered to invest because with the ownership structure, a company can be said to have good corporate value. Ownership structure which is basically a combination of external parties with internal parties in share ownership related to brand image or company image. Brand image or corporate image is the view of investors regarding the quality and performance of a company. If a company has a good performance it will have a good impact on the quality of the company and can affect the brand image or corporate image. Investors tend to invest in companies that have a brand image or a good image, because by having a brand image or a good image, the company can be said to have a good performance that will affect the quality of the company and can increase the Firm Value.

Ownership structure can reduce all activities that can harm the company through managerial ownership and institutional ownership. Managerial ownership oversees all internal activities of the company directly and can minimize these activities so that the company has good performance and good quality and good firm value. Institutional ownership can oversee all company activities by utilizing information held by the institution or institution so that the company has a good performance with good quality and good firm value.



In this study the ownership structure is measured using managerial ownership and institutional ownership in line with the research conducted by [5] which uses managerial ownership and institutional ownership as a measurement tool to measure ownership structure. [5] stated that managerial ownership does not affect the Firm Value while institutional ownership has a positive effect on the Firm Value.

H3: There is influence of Managerial Ownership on Firm value

### Framework and Research Hypothesis

Based on previous theory and research, the thinking framework and hypothesis in this study are as follows:

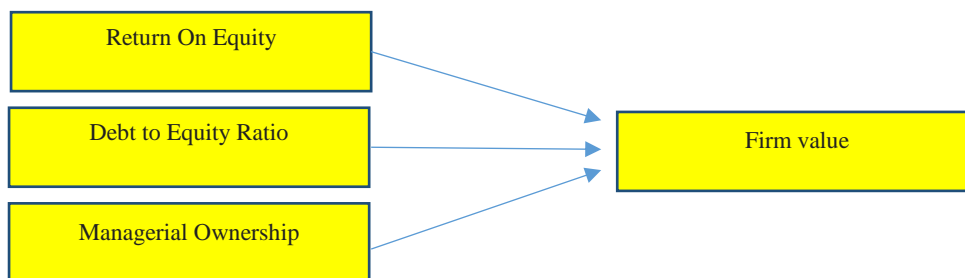


Figure 1. Framework

### Research Methods

The population used in this study are property & real estate companies listed on the IDX (Indonesia Stock Exchange). The samples used are property & real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2014-2017 period that meet the predetermined criteria. With the provisions of the sample using the purposive sampling method, with the following criteria:

1. Property & real estate companies listed on the IDX (Indonesia Stock Exchange) in the 2014-2017 period.
2. Property & real estate companies that publish financial statements that end on December 31.
3. Property & real estate companies that disclose information in accordance with applicable standards in Indonesia.
4. Property & real estate companies that use rupiah currency.
5. Property & real estate companies that have been audited for five years.
6. Property & real estate companies that disclose their ownership structure in full.

The variables used in this study are divided into 2 variables, the dependent variable, the firm value as measured by TOBIN'S Q, while the independent variable, profitability as measured by ROE, the capital structure as measured by DER, the ownership structure measured by managerial ownership. Multiple regression analysis is used to analyses the data.

### Firm Value

[16] also stated that firm value can be reflected in its share price which is a reflection of investment, financing and asset management decisions. If the value of the stock is high, it can illustrate that the firm value is also high. According to [16] states that firm value is the investor's perception of the company's success rate which is often associated with stock prices. High stock prices make firm value also high, and the higher the firm value indicates the high prosperity of shareholders. Firm value is calculated using Tobin's Q calculations (Tobin and Brainard, 1968). Tobin's Q value describes a company's investment opportunity condition [17] or the company's growth potential (Tobin, 1969). Tobin's Q version in simple terms [18] can be formulated mathematically as follows:

$$\text{Tobin's Q} = \frac{\text{Total Market value} + \text{Total Book Value of Liabilities}}{\text{Total Book Value of Asset}}$$



### Debt to Equity Ratio (DER)

The addition of debt into the balance sheet if the cost of debt is smaller than equity is expected to increase profitability and increase stock prices so as to improve the welfare of stockholder and increase company growth [19]. The vertical conservative financial rules stipulate that the amount of foreign capital must not exceed its own capital with a ratio not exceeding [19]. The Debt to Equity Ratio formula is as follows:

$$\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

For creditors, the greater the DER value, the greater the risk of failure that might occur in the company. For companies, the lower the DER value, the higher the funding that comes from the owner and the greater the security limit for the borrower if the loss or depreciation of assets [16].

### Return on Equity (ROE)

Return On Equity (ROE) is a profitability ratio to measure the company's ability to generate profits based on the company's share capital. ROE is used to measure the company's rate of return for the effectiveness of the company in generating profits by utilizing the equity owned by the company. If this ratio increases, management is seen to be more efficient from the perspective of shareholders. ROE is a comparison between net income generated with own capital or equity [16]. According to [16] the formula for calculating ROE is

$$\text{Return on Equity} = \frac{\text{Earning After Tax}}{\text{Equity}}$$

### Managerial Ownership

Managerial ownership is measured by the percentage of share ownership by the company institutions. The formula for calculating the percentage of managerial ownership based on [16, 8] is as follows:

$$\text{Debt Equity Ratio} = \frac{\text{Number of managerial stock}}{\text{Outstanding stock}}$$

## Results and Discussion

Population of this research is property & real estate companies. Samples obtained based on predetermined criteria, then get 15 property & real estate companies in accordance with research needs. Furthermore, descriptive statistical analysis was carried out to provide an overview of each variable in the form of mean, standard deviation, maximum, minimum values based on the data studied. The dependent variable in the study is firm value (TOBIN'S Q), while the independent variable consists of profitability (ROE), capital structure (DER), and ownership structure (managerial ownership). The method used in this study is multiple linear regression. Multiple linear regression is a parametric regression. Parameters that are expected to be fulfilled are, residuals is in normal distribution, residuals do not occur autocorrelation, residuals do not occur heteroscedasticity and inter-independent variables do not occur in multicollinearity cases. Multiple linear regression models can be said to be fit models, if all parametric requirements are met and known as BLUE (Best Linear Unbias Estimation).

### Normality test

The normality test is to test the normality of the residual regression was done using the Kolmogorov-Smirnov test. Error regression model is said to be normally distributed if the significance value of Kolmogorov-Smirnov = 0.001  $\geq \alpha = 0.05$ . The normality test hypothesis is as follows:

H0: Residuals are normally distributed

H1: Residual is not normally distributed



The results of the normality test showed that the significance value =  $0.341 > \alpha (0.05)$ ,  $H_0$  is accepted, it can be concluded that the residuals are normally distributed.

### Heteroscedasticity Test

Heteroscedasticity test shows the existence of variance inequality from residuals on an observation to other observations. One method for testing heteroscedasticity is the Glejser test. Glejser test is done by regressing the independent variable with absolute residual value, if there is a regression value of  $t$ -test  $< 0.05$  results of the regression, then it is concluded that the regression model occurs heteroscedasticity. Glejser test results show that all  $t$ -test significance values are greater than 0.05, it can be concluded that the residuals do not experience heteroscedasticity cases

### Autocorrelation Test

The autocorrelation test shows in residual there is a disturbing error in the time period with an error in the previous time period. A good regression model is free from autocorrelation. Detection of the presence or absence of autocorrelation can be done using a run test. An observation is said to not occur autocorrelation if the significance value of the run test  $\geq 0.05$  states that the residual value is spread randomly and no autocorrelation symptoms occur. The autocorrelation test hypothesis is as follows:

$H_0$ : There are no cases of autocorrelation

$H_1$ : There is a case of autocorrelation

The results of the run test showed that the significance value of the run test was  $0.415 > 0.05$ , failed to reject  $H_0$ , it can be concluded that there is no autocorrelation in the regression model.

### Multicollinearity Test

Multicollinearity test to determine the closeness of the relationship between independent variables. A good regression model does not contain multicollinearity to detect the presence or absence of multicollinearity using Variance Inflation Factor (VIF), if all tolerance values  $> 0.10$  or VIF value  $< 10$ , it can be concluded that there are no multicollinearity cases between independent variables in the regression model. Multicollinearity test results show that all tolerance values  $> 0.10$  and VIF values  $< 10$ . Thus it can be concluded that the regression model does not occur in multicollinearity cases

Based on the parametric test above, it can be concluded that the analysis of firm value using multiple regression methods can be continued because all parametric assumption tests are met. Further testing will be conducted on regression models and hypothesis testing. Based on the results of testing with SPSS 24, it can be concluded that the suitability test value of the model using the F test informs that the firm value model uses significant multiple regression method, which means that the model is able to explain the relationship of profitability, capital structure and ownership structure to firm value. This is shown by the F test significance value of  $0.321 > 0.005$ . The Adj R-Square value of the firm's value model is 0.8234, this informs that the magnitude of the effect of profitability, capital structure and ownership structure on the firm's value is 80.34%. Hypothesis testing shows that all  $t$  test significance values are smaller than 0.05. This shows that all hypotheses are accepted which means that profitability, capital structure and ownership structure significantly influence the firm value, which means that any changes in profitability, capital structure and ownership structure will affect changes in firm value. The results of hypothesis testing are presented in the table as follows:

Table 1. Hypothesis Test

Variable	Regression coefficient	Pvalue	Information
ROE $\rightarrow$ TOBIN'S Q	0,578	0.003	Affected
DER $\rightarrow$ TOBIN'S Q	0.653	0.001	Affected
Managerial Ownership $\rightarrow$ TOBIN'S Q	0,165	0.025	Affected



### Effect Of ROE On Firm Value

Return on Equity (ROE) is one ratio that can show how much the rate of return on investment with the use of corporate capital [1]. The company is expected to have high ROE because with a high ROE level, the return on capital is high and the company is considered a good or healthy company. The results of this study are in line with the theory which states that the higher the ROE of a company, the greater the Firm Value of a company. The results of this study are supported by research conducted by [7] and research by [10], which states that ROE has a significant effect on firm value.

### Effect of DER on Firm Value

Debt to Equity Ratio (DER) is a tool to find out how much company funds are used to guarantee liabilities [16]. By comparing total liabilities and total equity to find out the total funds provided by creditors for the company. From the creditor's point of view, if a company has a high liability then it is considered not profitable because it has a high risk of failure, on the contrary if from the company's point of view, the higher the level of liability, the better the firm value [16]. The results of this study are in line with the theory that if a company has a high DER level then the Firm Value owned is high. The results of this study contradict the research conducted by [2], research by [5], research by [7] which states that DER affects the firm value.

### Effect of Managerial Ownership on Firm Value

Managerial ownership is the ownership of shares owned by management who are active in company activities [8] with the existence of managerial ownership, shareholders and management have an equal position. If a company has a high ownership value, it will have a good impact on the supervision of company management. The results of this study are in line with the theory, if managerial ownership in a company is high, the Firm Value owned by the company is high. The results of this study are in line with research conducted by [5] which states that managerial ownership affects the firm value.

### Conclusions and Suggestions

The results of the study inform that the analysis of firm value with multiple regression methods is able to explain the relationship of profitability, capital structure and ownership structure to firm value. This is indicated by the results of parametric assumption that is fulfilled, namely, normality, Heteroscedasticity, autocorrelation and multicollinearity. The accuracy of the analysis using multiple regression is supported by a significant F test with Adj R-Square value = 80.34%. This shows that the analysis of firm value using multiple regression has high accuracy. Profitability, capital structure and ownership structure can change the firm value by 80.34%. Hypothesis testing in this study informs that profitability, capital structure and ownership structure have a significant effect on firm value. This study has limitations that only use one indicator in each variable, so that it is suggested that further research can add other indicators to measure variables. For further research, the SEM method can be used so that we can see which indicators can best measure the variables of capital structure, profitability, ownership structure and firm value.

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