

## THE IMPACT OF FIRM SIZE AND PROFITABILITY (ROA) IN INDONESIA REAL ESTATE SECTOR COMPANIES (IDX)

Franco Benony Limba<sup>1</sup>, Agnes Soukotta<sup>2</sup>, Jabida Latuamury<sup>3</sup>, Ratih Kusumastuti<sup>4</sup>

<sup>1,2,3</sup> Universitas Pattimura, <sup>4</sup> Universitas Jambi

### ARTICLE INFO

#### Keywords:

company size;  
Profitability;  
The value of the company.

#### E-mail:

[Francob.limba@gmail.com](mailto:Francob.limba@gmail.com)  
[agnes21makoy@gmail.com](mailto:agnes21makoy@gmail.com)  
[jabida.latuamury@gmail.com](mailto:jabida.latuamury@gmail.com)  
[ratihkusumastuti@unja.ac.id](mailto:ratihkusumastuti@unja.ac.id)

### ABSTRACT

The purpose of this study was to determine the effect of firm size and profitability (ROA) on firm value. The sampling technique used purposive sampling method. Purposive sampling is a sample determination method based on certain criteria. The form of this research is associative research. Data analysis techniques were performed using descriptive statistical analysis, classical assumption test, multiple linear regression analysis, multiple correlation coefficient test, coefficient of determination, model feasibility test and t test. After processing and testing the data, it shows that the variable company size (Firm Size) has no effect on firm value (Firm Value), and profitability (ROA) has an influence in a positive direction on firm value (Firm Value).

Copyright © 2023 Economic Journal. All rights reserved.  
is Licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

### 1. INTRODUCTION

Companies are generally established with the aim of obtaining optimal profit, developing from time to time, optimizing firm value. Optimizing the value of the company (firm value) can also be interpreted by optimizing the prosperity of stockholders which is the purpose of the establishment of the company. The value of a company can be interpreted as a financial measure that potential investors are willing to spend on that company. Firm value is always correlated with the company's stock price, which if a company's stock price increases, the firm value is also getting better.

The value of a company reflects the level of success that the company has experienced since its establishment until now and also provides an overview of the achievement of the company's financial performance at a certain point so that it can influence the perceptions of potential investors and investors towards the company. The good value of the company is the desire of the owner of the company and prosperity for stockholders, where the prosperity of shareholders is the main goal of a company. Factors that can affect firm value include firm size and profitability.

Company size (Firm size) describes the size of a company. The size of the company is divided into three parts, namely large companies, medium companies and small companies. The size of the company can be seen from the total assets, total sales and also seen from the number of employees of the company. Company size is also a benchmark for potential investors in making decisions to invest in the company. Because most investors are more interested in investing in large-scale companies. In this study, company size is seen from total assets and naturalized logarithms. The goal is to do natural logarithms so that deviations in total asset data that vary, such as in billions or even trillions of rupiah, can be minimized. Increasing company assets the company is getting bigger too. If the company has a large size, then investor confidence will also increase which in turn will increase the value of the company[1].

Profitability describes the company's ability to generate profit levels by utilizing assets, capital and sales so as to influence investors' perceptions of the company regarding the company's development prospects in the future. Profitability is an indicator that must be considered and examined in depth by the company in order to maintain the continuity of its business, this is because profitability provides an overview of the profits that the company can generate by utilizing assets, capital and sales activities carried out. With a high level of profitability, the higher the interest of investors to invest, which in turn will increase the value of the company. In this study, profitability is measured by Return On Assets (ROA). ROA describes a company's ability to utilize its assets to generate profits for the company. In other words, ROA is used to measure how efficient a company is in utilizing its assets to generate profits for the company[2].

The property and real estate sub-sector is one of the most important sub-sectors in a country, because it can be used as an indicator to analyze the health of the economy in a country. Property and real

estate includes land, buildings (buildings and housing) as well as ownership rights (certificates) and others. Investments in property and real estate are generally long-term in nature and are believed to be one of the most promising investments for investors. This is due to the increase in land and building prices which tend to rise along with the increase in population from time to time so that basic human needs, one of which is the need for a place to live, also increase. Based on the description above[3]

## **2. LITERATURE REVIEW**

### **2.1. Firm Value**

Firm value (Firm value) describes how the perceptions of potential investors and investors towards the company are correlated with the company's stock price. If investor confidence in a company increases, then the stock price tends to increase which in turn has a tendency to increase the value of the company. According [4]: Increased firm value is an achievement that has been achieved by the company and of course in accordance with the wishes of the owners. By increasing the value of the company, the welfare of the owners will also increase. Companies that have gone public have a goal of optimizing the prosperity of owners or shareholders through increasing firm value.

The prosperity of shareholders can be seen from the high and low value of the company. High corporate value can be seen from the company's stock price. According to [5]: company value can be proxied through three ways, namely book value, liquidation value, or market value (shares). According to [6]: The market value of shares, or market price, is the price at which potential investors and investors can make a decision to buy or sell a share. Net profit earned by the company, financial position, and economic conditions of a country in general can provide an overview of the variations in market value.

In this study, firm value is proxied using price to book value (PBV). According to [4]: price to book value ratio (PBV) is the ratio that shows the results of the market price per share compared to the book value per share. Price to book value (PBV) illustrates that the book value of a company's shares is valued by the market at what level. Companies that have good financial performance generally have a price to book value (PBV) above one, which illustrates the condition that the market value of the shares is greater than the book value. Price to book value can be compared between similar companies to show whether stock prices are cheap or expensive. The value of price to book value (PBV) can describe the price movement of a stock, so that from the description given, it can indirectly influence the stock price. The price to book value is obtained by dividing the market price by the book value per share or the market price per share compared to the book price per share. The factors that are expected to affect the value of the company include, namely firm size and profitability[7].

### **2.2. Firm Size**

The size of a company in general can be categorized as large or small. The size of a company can be determined from the total sales and total assets seen from the financial statements and the number of employees in the company. Company size (Firm size) is a company scale which can be seen from the total assets at the end of the year's book closing. The total sales obtained can also be used as a benchmark to measure the size of the company. A large sales level indicates that the company has large capital and assets so that it can support production process activities on a large scale. So that with a large level of sales, it can be ascertained that it will affect the value of a company. Large companies tend to need a good image in order to get relations or investors. The larger the company can assume that the company is known by the wider community so it is easy to increase the value of the company. Company size is one of the factors that determine the company's ability to generate profits.[8]

A company can be classified as a company with a large size, if it has a large amount of wealth. And vice versa, a company can be said to have a small size, if the wealth it has is limited. In general, the company's physique will be used as a benchmark or basis for an assessment by the public of the size of the company in the big or small category. So it can be concluded that the physical appearance of the company from the outside looks magnificent and is a large-scale company. However, it is possible that a company that physically looks so grand and big from the outside, may not have a very good financial performance.

According to [4]: the ability to bear risks that may arise from various situations can be influenced by the size of a company. Companies with a large size have a lower risk than companies with a small size. This is of course because companies with a large size have better control (greater control) and have a quick response in various economic situations so that they are able to face competition. In this study, company size is proxied by the natural logarithm of total assets. According to Mulyawan [9]: firm size indicates that the larger the size of a company, the greater the level of debt.

Large company sizes tend to increase investor confidence in investing so that firm value will certainly increase. Companies with a large size can also easily access the capital market, this is because they have the flexibility and ability to obtain funds. This convenience is seen by potential investors and investors as a positive and good signal for making investment decisions, which can reflect the company's value in the future where growth prospects are good so that the size of the company can have a positive influence on firm value (firm value). This is supported by research conducted by [10]

H1: firm size has a positive effect on firm value

### **2.3. Profitability (ROA)**

Profitability describes a company's ability to generate profits by utilizing assets, capital and sales. According to [11]: The profitability ratio is the ratio used to measure a company's ability to profit from its business activities. Profitability can be used for measuring financial performance. Good financial performance can be demonstrated through the level of success of company management in obtaining optimal profit for the company. If the management is able to manage the company well and the costs to be incurred can be reduced to be smaller or more efficient but with this efficiency it does not hinder operational activities, then the profit that can be obtained can be greater or as expected.

Profitability provides an illustration of the level of profit that has been successfully obtained by the company while carrying out its operations by utilizing its financial resources. The share of profits that will be distributed to shareholders (Stockholders) is profit after deducting interest and taxes. The greater the profit generated, the better the company's ability to maximize the operation of the assets owned by the company. It can be said that a high profit rate reflects a good manager's performance so that the company's future prospects are also good. In this study, the profitability ratio is proxied by the return on assets [12].

According to [2]: The rate of return on assets is a ratio that shows the size of the contribution of assets to generate net income. According to [13]: return on assets, measures the company's use of assets in generating profits for the two groups that finance the business, namely creditors to whom the company owes and shareholders who own company shares. This ratio is used to measure the amount of net profit generated from every one rupiah embedded in total assets.

If the rate of return on assets is high, the greater the profit obtained from each embedded fund. Conversely, the smaller the rate of return on assets, the smaller the profit that can be obtained from each invested fund. The high return on assets will affect the value of a company, because how much profit the company gets will affect investors in investing their capital. Return on assets that show a large value gives an indication of good growth prospects so that it can influence potential investors and investors to participate in increasing demand for shares. Increasing demand for shares can cause firm value to also increase. Supported by previous research conducted by [14]

H2: profitability (ROA) has a positive effect on firm value

## **3. METHODS**

The form of this research is associative research. Associative research is research that seeks the influence between the independent variables and the dependent variable. The data in this study are secondary data in the form of annual reports of property and real estate sub-sector companies obtained from the Indonesia Stock Exchange through the official website. [www.idx.co.id](http://www.idx.co.id). The population used in the study were all property and real estate sub-sector companies on the Indonesia Stock Exchange (IDX). The sample in this study was determined using a purposive sampling technique, namely a sampling technique using certain considerations, conditions or criteria. As for the criteria that used were companies that went IPO before 2014. The author analyzed the data and tested the data using the help of Statistical Product And Service Solutions (SPSS) version 22 software. [15]

## **4. RESULTS AND DISCUSSION**

### **4.1. Descriptive statistics**

Statistics descriptive provides a description of a research data, where N is the amount of data that becomes the research sample and the results will be seen from the average (mean), standard deviation, minimum (lowest value) and maximum (highest value) values of one dependent variable (the company) and two independent variables (company size and profitability). Table 1 is the result of descriptive statistical testing on the variables in this study as follows:

Table 1. Descriptive statistics

	N (Amount of data)	Min Value	Maximum Value	Mean Value	Std. Value Deviation
PBV	183	,0915	7.5342	1.600304	1.3871343
Ln_TotalAsset	183	23.6047	31.4510	28.806757	1.5188539
Profitability (ROA)	183	-,7741	6.1314	,088544	,4554255
Valid N (listwise)	183				

Based on Table 1, the company value in this study is proxied by PBV, having the lowest value of 0.0915, the highest value of 7.5342, the average value of 1.600304 and the standard deviation value of 1.3871343. Firm size has the lowest value of 23.6047, the highest value of 31.4510, the average value of 28.806757 and the standard deviation value of 1.5188539. Profitability in this study is measured by ROA which has the lowest value -0.7741, the highest value is 6.1314, the average value is 0.088544 and the standard deviation is 0.4554255.

#### 4.2. Classical Assumption Testing

This test includes residual normality testing, multicollinearity testing, heteroscedasticity testing and autocorrelation testing. Residual normality testing has the goal of knowing whether in the regression model which is a confounding variable or residual whether it has a normal distribution or not. In this study, the residual normality test used the Kolmogorov Smirnov one sample.

The multicollinearity test aims to find out whether in the regression model a large or perfect correlation or relationship is found between the independent variables. In this study, multicollinearity testing can be determined from the tolerance value and the variance inflation factor value.

Heteroscedasticity testing has the objective of seeing whether there is an inequality of variance from the residuals for all observations in the linear regression model or not. The conditions that must be met in this regression model are the absence of variance differences or the absence of symptoms of heteroscedasticity, which means that homoscedasticity must be fulfilled.

Autocorrelation testing has a purpose in testing whether in a linear regression model there is a correlation or relationship between the residuals in the current period (t) with errors in the previous period (t-1).

#### 4.3. Multiple Linear Regression Analysis

Multiple linear regression analysis was carried out in this study to determine how much influence or linear relationship was between the two independent variables (independent variables) on the dependent variable (dependent variable). This analysis is also carried out with the aim of estimating the value of the dependent variable if the value of the independent variable increases or decreases and also to see the direction of influence (positive or negative) between the independent variable and the dependent variable. The results of testing the effect of company size and profitability on firm value can be seen in Table 2 below:

Table 2. Multiple linear regression

Research Model	Unstandardized Coefficients value		Standardized Coefficients value Betas	t	Significance
	B	std. Error			
(Constant)	,309	1,141		,271	,787
Ln_TotalAsset	.049	,037		,0901317	,190
Ln_ROA	,489	.055		,5598,911	,000

a. Dependent Variable: Ln\_PBV

The multiple linear regression model in this study based on Table 2 can be formed as follows:

$$Y = 0.309 + 0.049X_1 + 0.489X_2 + e$$

- A constant of 0.309 means that if the natural logarithm of total assets and return on assets is zero, then the value of the company proxied by price to book value is 0.309.
- The regression coefficient of the variable natural logarithm of total assets is positive by 0.049, meaning that if the natural logarithm of total assets increases by one unit, then the company value proxied by price to book value will increase by 0.049 assuming the variable return on assets is fixed or does not

change. Thus the greater the value of the natural logarithm of total assets, the value of the company proxied by price to book value will increase.

- c. The regression coefficient of the variable return on assets is worth a positive value of 0.489 means that if the return on assets increases by one percent, then the value of the company proxied by price to book value will increase by 0.489 assuming the natural logarithm of total assets is fixed or does not change. Thus, the higher the value of return on assets, the higher the value of the company proxied by price to book value.

#### 4.4. Analysis of Multiple Correlation Coefficients and Coefficients of Determination

Analysis of multiple correlation coefficients is used to determine the strength of the relationship between the independent variables and the dependent variable. If the value of the correlation coefficient is positive then the relationship between the independent variables and the dependent variable is directly proportional. The closer to the value of one, the stronger the relationship between variables. If the value of the correlation coefficient is negative then the relationship between the independent variables and the dependent variable is inversely proportional.

If the value gets closer to negative one, then the relationship between the independent variables and the dependent variable which is inversely proportional becomes stronger. If the value of the correlation coefficient obtained is one or negative one then the relationship between the independent variables and the dependent variable is directly proportional or perfectly inversely proportional. The following is presented in Table 3 which is an interpretation of the multiple correlation coefficients as follows:

Table 3. Interpretation of Multiple Correlation Coefficients

Coefficient Interval Value	Relationship Category
0.000 - 0.199	Very low
0.200 - 0.399	Low
0.400 - 0.599	Currently
0.600 - 0.799	Strong
0.800 - 1.000	Very strong

While the coefficient determination (Adjusted R Square) is used to determine how much the percentage of contribution of the independent variable to the dependent variable. The multiple linear regression equation is getting better if the value of the coefficient of determination is getting bigger (closer to one). This number will be converted into a percentage, which means the percentage of the effect of the independent variable on the dependent variable. Following are the output results of testing the multiple correlation coefficient and the coefficient of determination with the SPSS Statistics 22 software in Table 4:

Table 4. Testing Correlation and Coefficient of Determination

Summary model b					
Research Model	coefficientn Correlation	R Square (Coefficient of Determination)	AR Square	Std. Value Error of the Estimate	Durbin-Watson values
1	,675a	,455	,444	,56808	2,183

a. Predictors: (Constant), Ln\_ROA, Ln\_TotalAset

a. dependent Variables: Ln\_PBV

Based on Table 4 it is known that the magnitude of the correlation coefficient (R) is positive at 0.675, this indicates that there is a strong relationship and a positive direction between the independent and dependent variables in this study based on the interpretation in Table 3. Meanwhile the coefficient of determination is seen from the value of Adjusted R Square which is equal to 0.444 means that company size and profitability have an influence on company value which is proxied by price to book value of 44.4 percent and the remaining 55.6 percent is influenced by other factors outside this research model. In Table 4 it can also be seen that the Standard Error of the Estimate value, which is a measure of prediction error in this study, is 0.56808, which means that the error that can occur in predicting firm value is 0.

#### 4.5. F test

The F statistical test aims to determine the feasibility of the model, whether the model that has been built can provide a good explanation of the dependent variable. In this study the F test was conducted to

*The Impact Of Firm Size And Profitability (Roa) In Indonesia Real Estate Sector Companies (IDX), Franco Benony Limba et al*

determine the feasibility of the research model that was built to test the effect of firm size and profitability on firm value. The model test is carried out by comparing the significance value of the model with the error rate set by the author ( $\alpha$ ), which is 0.05. The decision-making criterion for significance is if the significance value is less than 0.05, then the regression model is declared feasible to use.

The F significance level in this study was 0.000, less than 0.05 ( $0.000 < 0.05$ ). That is, based on the test results it can be concluded that this research model is feasible to be tested and continued at a later stage.

#### 4.6. t test

Testing the t statistic or partial regression coefficient test is used to test whether there is a significant effect of each independent variable on the dependent variable. In this study, the t test was conducted to determine the effect of firm size and profitability on firm value. The test criterion is that if the significance value is less than 0.05, the independent variable (independent variable) has an influence on the dependent variable (dependent variable), but if the significance level is  $> 0.05$ , it can be concluded that the independent variable (independent variable) has no influence on the dependent variable (dependent variable)[16].

Based on Table 2 of the hypothesis testing, it can be seen that the results of the t test for the variable firm size which are proxied by the natural logarithm of total assets have a significance value of 0.190 which is greater than the value of 0.05, so firm size does not affect firm value. ) which is proxied by price to book value (PBV). Thus the first hypothesis in this study was rejected. Large companies do not necessarily have easy access to the capital market because large companies will be more careful in making every policy, because any information conveyed will affect the market response if the information conveyed contains erroneous information which causes the size of the company to be inaccurate. will affect the interest of investors in investing their capital[17].

Based on Table 2, the results of testing the hypothesis can be seen that the results of the t test for the profitability variable as measured by return on assets have a significance value of 0.000, where the value is smaller than the value of 0.05 with a positive direction regression coefficient value of 0.489, so it can be concluded that profitability (ROA) influence in a positive direction on firm value. So that the second hypothesis in the research conducted can be accepted. If the return on assets is high, the greater the profit obtained from the funds embedded in these assets. Vice versa, the smaller the return on assets, the smaller the profit obtained from the funds embedded in these assets. The high returns will affect the value of a company, because how much profit the company gets will affect investors in investing their capital. A large return on assets gives an indication that the company's growth prospects are very good so that it can influence potential investors and investors to participate in increasing demand for shares. Increased demand for shares will certainly affect the increase in firm value. This research is supported by previous research conducted by [14], Nangoy and Untu (2015) profitability has a positive effect on firm value. Increased demand for shares will certainly affect the increase in firm value. This research is supported by previous research conducted by [14], Nangoy and Untu (2015) profitability has a positive effect on firm value. Increased demand for shares will certainly affect the increase in firm value. This research is supported by previous research conducted [14], Nangoy and Untu (2015) profitability has a positive effect on firm value.

## 5. CONCLUSION

Based on Table 2, the results of hypothesis testing can be seen from the results of the t test, the variable firm size proxied by the natural logarithm of total assets has a significance value of 0.190 which is greater than the value of 0.05, so it can be concluded that firm size has no effect on firm value proxied by price to book value (PBV).

Table 2 shows the hypothesis testing with the results of the t test variable profitability as measured by return on assets has a significance value of 0.000 which is smaller than the value of 0.05 in the positive direction regression coefficient of 0.489, it is concluded that profitability (ROA) has a positive effect on firm value.

## REFERENCES

- [1] M. I. Dacholfany, A. M. Khataybeh, N. C. Lewaherilla, M. Yusuf, H. B. M. Sihombing, and M. L. Chang, "APPLICATION OF THE BALANCED SCORE CARD CONCEPT AS A HUMAN RESOURCE PERFORMANCE MEASUREMENT TOOL AT THE MINISTRY OF HIGHER EDUCATION IN INDONESIA," *Multicult. Educ.*, vol. 8, no. 04, pp. 1–13, 2022.

- [2] S. A. S. Wowling, M. Yusuf, S. Gampu, and J. Sahala, "PRODUCT QUALITY AND PRICING INFLUENCE ON THE BRAND REPUTATION OF LOCO COFFEE FAST FOOD PRODUCTS," *J. Darma Agung*, vol. 30, no. 2, pp. 541–548, 2022.
- [3] N. I. Pratiwi and L. Farida, "Pengaruh Ukuran Perusahaan, Kebijakan Hutang, dan Kebijakan Dividen Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur yang Listing di Bursa Efek Indonesia," *J. Online Mhs. Bid. Ilmu Sos. dan Ilmu Polit.*, vol. 4, no. 2, pp. 1–10, 2017.
- [4] H. Hery and M. Si, "Kajian Riset Akuntansi," *Jakarta PT. Grasindo*, 2017.
- [5] D. Yani, M. Yusuf, E. Rosmawati, and Z. Apriani, "Branding Brand Image Strategy Study Through Digital Marketing Overview on MSMEs: Sanggabuana Coffee (KoSa) in Mekarbuana Village, Karawang," *Int. J. Econ. Manag. Res.*, vol. 1, no. 3, pp. 183–193, 2022.
- [6] V. W. Sujarweni and P. Endrayanto, "Statistika untuk penelitian," *Yogyakarta Graha Ilmu*, vol. 14, p. 17, 2012.
- [7] R. Haribowo, H. Tannady, M. Yusuf, and G. W. Wardhana, "Analisis Peran Social Media Marketing , Kualitas Produk Dan Brand Awareness Terhadap Keputusan Pembelian Pelanggan Rumah Makan Di Jawa Barat," vol. 3, no. October, pp. 4024–4032, 2022.
- [8] Muhammad Yusuf, Sutrisno, P. A. N. Putri, M. Asir, and P. A. Cakranegara, "PROSPEK PENGGUNAAN E-COMMERCE TERHADAP PROFITABILITAS DAN KEMUDAHAN PELAYANAN KONSUMEN: LITERATURE REVIEW," *Suparyanto dan Rosad (2015)*, vol. 5, no. 3, pp. 248–253, 2020.
- [9] S. Setia Mulyawan, "Manajemen keuangan." Pustaka Setia, 2015.
- [10] M. Nurhayati, "Profitabilitas, likuiditas dan ukuran perusahaan pengaruhnya terhadap kebijakan dividen dan nilai perusahaan sektor non jasa," *J. Keuang. Bisnis Progr. Stud. Magister Manaj. Sekol. Tinggi Ilmu Ekon. Harapan*, vol. 5, no. 2, pp. 144–153, 2013.
- [11] R. Hanis and M. Yusuf, "Applying A Swot Analysis Approach To A Sharia Marketing Perspective At Alunicorn Shops In Bandung," in *Proceeding of The International Conference on Economics and Business*, 2022, vol. 1, no. 2, pp. 653–670.
- [12] B. Kasmir and L. K. Lainnya, "Analisis Laporan Keuangan." Raja Grafindo Persada, Jakarta, 2002.
- [13] S. Siregar, "Statistika terapan untuk perguruan tinggi," *Jakarta Prenadamedia Gr.*, 2015.
- [14] P. G. Frederik and S. C. Nangoy, "Analisis Profitabilitas, Kebijakan Hutang Dan Price Earning Ratio Terhadap Nilai Perusahaan Pada Perusahaan Retail Trade Yang Terdaftar Di Bursa Eek Indonesia," *J. EMBA J. Ris. Ekon. Manajemen, Bisnis dan Akunt.*, vol. 3, no. 1, 2015.
- [15] Sugiyono, "METODE PENELITIAN KUANTITATIF, KUALITATIF, DAN R&D," *Bandung Alf.*
- [16] M. Yusuf, H. Betty, and M. Sihombing, "The Effect of Product and Service Quality on Consumer Loyalty at Palopo Minimarkets," no. December, 2022, doi: 10.24042/febi.v7i2.14430.
- [17] Saut Maruli Tua Pandiangan, C. S. Octiva, M. Yusuf, Suryani, and R. Sesario, "THE ROLE OF DIGITAL MARKETING IN INCREASING SALES TURNOVER FOR MICRO, SMALL, AND MEDIUM ENTERPRISES," *J. Pengabd. Mandir*, vol. 1, no. 8.5.2017, pp. 2003–2005, 2022.