

THE EFFECT OF RETURN ON ASSETS AND DEBT TO EQUITY RATIO TO  
PRICE TO BOOK VALUE  
(STUDY OF PROPERTY AND REAL ESTATE SUB SECTOR COMPANIES  
LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE PERIOD OF 2016-  
2018)

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The Effect Of Return On Assets And Debt To Equity Ratio To Price To Book Value--Palarch's  
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**Keywords:**Return on Assets, Debt to Equity Ratio and Price to Book Value.

## ABSTRACT

The objective of the research is knowing the how to the effect of returning assets and the ratio of debt to capital to price to book value in property and real in Indonesia period 2016-2018 partially or simultaneously. This type of research is research explanatory. Number of reports examined 87. The unit of analysis is a sub company property and real estate sector and using linear regression analysis on panel data at the significance level by 5%, processed using eviews 9. The results showed the variable return on assets did not affect the price to book value but debt to equity ratio affects the price to book value.

**Keywords:** Return on Assets, Debt to Equity Ratio and Price to Book Value.

## INTRODUCTION

The capital market can also function as an intermediary institution. The capital market can encourage the creation of efficient allocation of funds, because with the capital market, the party with excess funds (investors) can choose investment alternatives in the most productive sectors in the market (Tandelilin, 2017: 25&Husnan&Pudjiastuti, 2015: 6).

Company performance can be measured using fundamental analysis. Fundamental analysis states that each investment instrument has a strong foundation of intrinsic value that can be determined through a very careful analysis of current conditions and prospects for the future. The basic idea of this approach is that stock prices are

influenced by company performance (Kodrat&Indonanjaya, 2010: 1 & (Husnan&Pudjiastuti, 2015: 6).

Financial ratios can be said as an activity of comparing the values of a financial statement by dividing one value with another value. Comparison between factors or comparison between components in financial statements (Kasmir, 2012: 104). High profit gives an indication of a good company prospect so that it can trigger investors to participate in increasing share demand. A rising stock demand causes the value of the company to increase (Putri Utami&Welas, 2019). A high level of profitability indicates the company has good performance and has prospects in the future. Investors caught that as a positive signal and responded by buying the company's shares. More and more investors who are interested in buying company shares have an impact on increasing the price of company shares and increasing company value increases.

Debt to Equity Ratio (DER) is a ratio to assess debt with equity. This ratio can be sought by comparing the debt held, including current debt, with all equity. This ratio can be used to find out how much costs are provided by borrowers (creditors) and business owners. In other words, this ratio has the function of knowing how much equity will be used as debt security (Kasmir, 2017: 157). Large leverage indicates a large investment risk, and vice versa. It would be better if the company sought internal funding sources first rather than using external funding sources.

Thus, it can be concluded that a high leverage ratio causes a decline in the value of the company according to Kharisma (2013: 16) in Dinar (2020: 7).

Formulation of the problem

Based on the problem identification and problem limitation above, then can be formulated the problem to be investigated, namely:

Does return on assets affect the price to book value of property and real estate sub-sector companies listed on the Indonesia Stock Exchange in the 2016-2018 period?

Does the debt to equity ratio affect the price to book value in the property and real estate sub-sector companies listed on the Indonesia Stock Exchange in the 2016-2018 period?

## **LITERATURE REVIEW**

The value of the company

The company's value according to Sudana (2011) is the present value of the expected revenue or cash flow received in the future. Meanwhile, according to Sartono (2010) the value of a company is the sale value of a company as a business that is operating.

Based on the above understanding it can be concluded that the value of the company is a value that illustrates the ability of the company in order to prosper the owners of the future which is reflected in the price of its shares.

Price Earning Ratio (PER)

Price Earning Ratio (PER) is the ratio obtained by comparing the price of shares per share (determined in the capital market) with earnings per share or Earnings Per Share (EPS). The higher the PER, the investors expect the company's profit growth to be higher. The PER formula is as follows:

$PER = (\text{Share price per share}) / (\text{Earnings per share})$

Price Book Value (PBV)

Price book value (PBV) is a financial ratio that compares the price of shares per sheet with the book value of equity per share. The higher the PBV value indicates the

assessment of investors who are getting better at a company. The Price Book Value (PBV) formula is as follows:

$$PBV = (\text{Share price per share}) / (\text{Book value of equity per share})$$

In this study the authors chose to use PBV in measuring company value. The reason the authors chose PBV because PBV ratio has an important role for investors is the ratio that is the assessment of investors about a company. The higher PBV value indicates the assessment of investors who are better at a company (Husnan and Pudjiastuti, 2015: 85).

Research using Return On Assets (ROA) to measure profitability ratios. ROA is the ratio regarding the return of assets used by the company. it is a measurement of how management effectively manages investments (Kasmir, 2017: 202). The formula used to calculate Return On Assets (ROA) according to Hery (2018: 193) is:

$$\text{Return On Assets (ROA)} = (\text{Net profit}) / (\text{Total assets})$$

#### Leverage Ratio

Kasmir (2017: 151), solvency or leverage ratio is the ratio used to for measurement of a company

assets with funds obtained from debt. thus it can be seen how much debt burden borne by the company compared to assets owned. so it's the solvency ratio to measure how the company is able to pay its obligations.

Hery (2018: 162), solvency or leverage ratio, is the ratio for the measurement of a company's assets funded by debt. It can be said that the solvency ratio or leverage ratio is used to measure the amount of debt burden that must be borne by the company to fulfill the assets.

#### Measurement of Leverage Ratio

In this study, the level of leverage is measured using Debt to Equity Ratio. Debt to Equity Ratio is a ratio used to measure the amount of debt to capital proportion.

In this ratio can be shown the value of the amount of debt with equity. thus the higher the ratio, the level of leverage of the company also increases. The higher the level of leverage, the higher the risk borne by the company owner (Sukamulja, 2017: 50). If this ratio is high the higher the risk of bankruptcy of the company (Prihadi, 2012: 168). The formula used to calculate Debt to Equity Ratio (DER) according to Hery (2018: 168) is:

$$\text{Debt to Equity Ratio} = (\text{Total debt}) / (\text{Total capital})$$

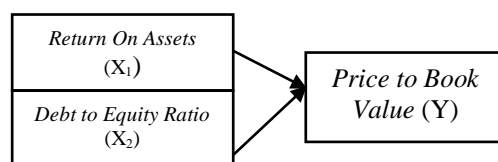


Figure 1: Thinking Framework Model

## RESEARCH METHODS

### Types of research

In this study, the type of research used is explanatory. Explanatory research is research that aims to obtain answers about how and why a phenomenon occurs. The

aim is to explain or prove how the relationship between research variables (Nuryaman& Christina, 2015: 6).

From the above understanding, this study aims to examine the effect of return on assets and debt to equity ratio to price to book value by testing the hypothesis, whether accepted or rejected.

**Research Population**

According to Nuryaman& Christina (2015: 101) population is a human gathering, event or something that attracts a researcher to be investigated. It can also be said that the population is the total set of elements from which the collection will be drawn.

The population of this research is the financial statements of the property and real estate sub-sector companies in the Indonesia Stock Exchange in the period 2016-2018, research population of 64 companies.

**Research Samples**

The sample is part of the population, the sample contains several members selected from the population. In other words, what forms the sample are only a few elements of the population, not all elements (Nuryaman& Christina, 2015: 101).

According to Nuryaman& Christina (2015: 110), purposive sampling is a sampling technique that is taken in accordance with its name, namely with a specific purpose or goal. A person or something is taken as a sample because the researcher assumes that someone or something has information or characteristics that are appropriate to the needs of the research. Some of the criteria established for obtaining the sample are 29 with

**FINDINGS AND DISCUSSION**

**Hypothesis Results**

The number of observations in this study (n) = 87 and k = 3, it will produce df = 87-3 = 84, so the value of the table obtained is equal to 1,98861. This test basically aims to show :

Table 1

**Hypothesis Testing Results**

Dependent Variable: PBV				
Method: Panel EGLS (Cross-section random effects)				
Date: 05/05/20 Time: 13:38				
Sample: 2016 2018				
Periods included: 3				
Cross-sections included: 29				
Total panel (balanced) observations: 87				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROA	1.454630	1.020191	1.425841	0.1576
DER	0.378671	0.139814	2.708383	0.0082
C	-0.315399	0.198873	-1.585930	0.1165

Based on the above table the results of partial hypothesis testing are as follows:

1. Hypothesis Testing Return on Assets (X1)

H01: (H1 = 0) Return on Assets (ROA) has no effect on Price to Book Value (PBV).

Ha1: (H1 ≠ 0) Return On Assets (ROA) affect Price to Book Value (PBV).

Based on the results of the t test in the regression model, the significance value of the Return On Assets variable was obtained by 0.1576 > 0.05 (the significance level of the research significance). In addition, it can also be seen the comparison of results

between tcount and ttable which shows tcount of 1.425841 and ttable of 1.98861. Based on these results it can be seen that  $tcount < ttable$  is  $1.425841 < 1.98861$ , it can be concluded that  $H_0$  is accepted and  $H_1$  is rejected, meaning that partially the variable return on assets has no effect on price to book value.

#### 1. Debt to Equity Ratio (X2) Hypothesis Testing

$H_0$ : ( $H_2 = 0$ ) Debt to Equity Ratio (DER) does not affect the Company Value (PBV).

$H_a$ : ( $H_2 \neq 0$ ) Debt to Equity Ratio (DER) affects the Company Value (PBV).

#### Uji KoefisienDeterminasi (R2)

Table 2

KoefisienDeterminasi (R2)

R-squared	0.079762	Mean dependent var	0.006474
Adjusted R-squared	0.057852	S.D. dependent var	0.357768
S.E. of regression	0.347265	Sum squared resid	10.12979
F-statistic	3.640375	Durbin-Watson stat	1.944679
Prob(F-statistic)	0.030465		

Shows the R-Squared value of 0.079762 which means that in this study, the variability of the dependent variable (Y) ie the Company Value proxied in Price To Book Value can be explained by the independent variable X (Return On Assets and Debt to Equity Ratio) in this study was 7.98% while the remaining 92.02% was explained by other variables outside the research model.

#### Discussion of Research Results

##### The Effect of Return On Assets on Price to Book Value

Based on the results of statistical tests on the t test on the variable return on assets (ROA) shows that ROA has no effect on PBV. Based on the results of the t test in the regression model, the significance value of the Return On Assets variable was obtained by  $0.1576 > 0.05$  (the significance level of the research significance). In addition, it can also be seen the comparison of results between tcount and ttable which shows tcount of 1.425841 and ttable of 1.98861.

According to Harmono (2016: 110), said profitability as measured by return on assets in financial theory is often used as an indicator of the company's fundamental performance representing management performance. Generally the profitability dimension has causality towards firm value. While the concept of the company can be explained by the value determined by the price of shares traded on the capital market. This causal relationship shows that if the company's management performance is measured using profitability dimensions in good condition, it will have a positive impact on investors' decisions in the capital market to invest their capital.

But the theory contradicts the results of this study, where in this study the variable return on assets does not affect the price to book value. One reason why ROA has no effect on PBV is because investors are not too focused on the ROA ratio to see the PBV of a company. This is because profits in companies tend to decrease or experience volatile fluctuations every year as the company has exemplified, so the rise and fall of ROA does not attract investors to invest their capital.

### The Effect of Debt to Equity Ratio on Price to Book Value

Based on the results of the t test in the regression model, the significance value of the Debt to Equity Ratio variable was obtained at  $0.0082 < 0.05$  (significant level of research significance). In addition, it can also be seen the comparison of results between tcount and ttable which shows the tcount value of 2.708383 and ttable of 1.98861. The results showed the value of the t test hypothesis was 2.708383 while the t table was 1.98861. this shows that the hypothesis is accepted. it means that debt to equity has a positive effect on the price of the book value of real estate and property sub-sector companies listed on the Indonesia Stock Exchange in the 2016-2018 period. thus if the ratio of debt to capital increases, it will be followed by an increase in price to book value.

Furthermore, research results that the ratio of debt to equity shows an influence on prices to book value. In other words, if the ratio of debt to capital increases, the price to book value will also increase, and vice versa.

Research conducted by Putri Yuliana Tauke, Sri Murni, and Joy E. Tulung (2017) where DER has an influence on PBV. However, the results of this study contradict the research conducted by Putu MikhyNovari and Putu Vivi Lestari (2016) concluded that DER does not affect the value of the company (PBV).

## 5.CONCLUSION

Based on the results of the analysis and discussion in the previous chapter, the conclusions are as follows:

1. Return On Asset has no effect on Price to Book Value
2. Debt to Equity Ratio affects Price to Book Value Send input

### *Suggestion*

After analyzing the results of the study, the author sees several things that can be used as input, among others:

1. For further researchers
  - a. For further researchers who will examine further by using the same theme are expected to add additional variables in addition to the variables that already exist in this study.
  - b. Adding a longer research time span and getting more samples, so it is expected to get better analysis results.
2. For investors

For investors and potential investors should be more careful and wise in deciding which companies will be chosen to invest. Investors should not only focus on researched factors such as return on assets and debt to equity ratio because there are many other factors that must be considered in investing such as company size, dividend policy and so on. Investors are

expected to be able to do the right analysis in order to minimize the risks that will be obtained by investors in making investment decisions in a company.

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