The Influence of Return on Equity and Price Earnings Ratio to ward Price to Book Value

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Abstract
This study is to determine the effect of Return On Equity (ROE) and Price Earning Ratio (PER) on Price to Book Value in LQ45 Category Companies Listed on the Indonesia Stock Exchange in 2015-2018. The research method used in this research is descriptive analysis with a survey approach. The analytical method used is Panel Data Regression using eviews 9. Based on the results of data processing it is known that partially Return On Equity (ROE) has a positive and significant effect on Price to Book Value (PBV) and Price Earning Ratio (PER) positive and insignificant effect against Price Book Value (PBV). Then together Return On Equity (ROE) and Price Earning Ratio (PER) significantly influence the Price Book Value (PBV) of LQ 45 Companies Listed on the Indonesia Stock Exchange in 2015-2018.

Keywords: Return On Equity (ROE), Price Earning Ratio (PER), Price to Book Value

1. INTRODUCTION

Globalization triggers increasingly fierce competition, companies are required to carry out various innovations and technologies and more sophisticated management so that companies can compete, and are not defeated by newborn companies. Victory in competition will encourage investors to be able to attract investors to invest in the company.

The stock market is a meeting place for those who have surplus funds and those who need funds. For those who have excess funds, they will invest the funds they have with the aim of obtaining returns. People who have excess funds are called lenders, in other words, investors or investors. Whereas those who need funds are known by borrowers, those who obtain funds from lenders, where the funds obtained will be very useful for increasing company growth, so as to create equality.

Stocks are one of the most popular capital market instruments among investors, because stocks can generate higher profits compared to other capital market instruments, but with a high risk of being accompanied. In choosing stocks, investors will pay attention and choose shares from companies that have good company performance which results in the company having good prospects as well. In line with that, of course the issuer as the party that issues shares must provide guarantees for investors who will buy their shares with good company prospects. Thus, the more investors who are interested in and buy company shares, the capital the company will obtain will increase.

Furthermore, if the company has a good performance, stock prices will tend to increase so vice versa if the company's performance is bad, then the stock price tends to decrease, thus the stock price of a company tends to fluctuate. This is caused by internal conditions that include...
information on financial statements issued by the issuer or external conditions of the company at the request and supply that occur on a stock exchange. Investors purchase stock to earn a return on their investment. This return consists of two parts: (1) gains (or losses) from selling the stock at a price above (or below) purchase price and (2) dividends. The ratios we examine in this section help analysts evaluate stock investments (Frederic S. Mishkin, Stanley G. 2012). Based on the above description, the researcher conducted an Analysis of Return on Equity and Price Earning Ratio to Price Book Value

2. LITERATURE REVIEW

Return on Equity (ROE)

Return On Equity (ROE) is a ratio to measure net profit after tax with own capital (Kasmir, 2015). This ratio shows the power to generate a return on investment based on the book value of the shareholders. The higher this ratio, the better, meaning that the position of the owner of the company is getting stronger. The most important ratio is return on equity, which is net profit for shareholders divided by total shareholder equity divided by total shareholder equity.

Securities analysts and shareholders are generally very concerned about this ratio, the higher the return generated by a company, the higher the price (Andi P Tambunan, 2007) (AgusSartono, 2012) AgusHarjito and Martono (2010). Therefore Return On Equity (ROE) is a ratio used by shareholders to assess a company's performance and to measure the level of capital return from the company. The formula to look for Return On Equity (ROE) can be used as follows:

\[
\text{Return On Equity (ROE)} = \frac{\text{Net Profit Aftertax}}{\text{Equity Capital}} \times 100\%
\]

Frederic S. Mishkin, Stanley G. 2012

Kasmir (2008) states that the Industry Standards Return on Equity (ROE) Profitability Ratio is 40%. So Return On Equity (ROE) which is above the industry standard is a company that is classified as good or healthy while Return On Equity (ROE) which is below the industry average is a company that is classified as not good or unhealthy.

Price Earnings Ratio (PER)

P/E ratios are higher for firms with strong growth prospects and relatively little risk. Allied’s P/E ratio is below the average for other food processors, so this suggests that the company is regarded as being somewhat riskier than most, as having poor growth prospects, or both (Eugene F. Brigham, Joel F. Houston. 2016). The Price Earning Ratio (PER) approach is a more popular approach used among practitioners’ stock analysis. The price/earnings (P/E) ratio shows how much investors are willing to pay per dollar of reported profits. Price earning ratio is formulated as follows:

\[
\text{Price earning ratio} = \frac{\text{Current Market Price Per share}}{\text{Earning Per Share}}
\]

(Robert Libby, Patricia A. Libby, Daniel G. 2011)

Price Earning Ratio (PER) is the ratio or comparison between stock price and company earnings. Investors will count the number of times the value of earnings reflected in the price of a stock (EduardusTandelilin: 2010), on the other hand the company calculates and analyzes how long it takes to return the funds at the level of stock prices and profits earned by the company (Abdul Halim, 2005).

Price Earning Ratio (PER) is the ratio of common stock market prices divided by earnings per share (EPS), the higher this ratio will indicate that the company’s performance is getting better, on the contrary if the PER is too high it can indicate that the offered stock price is very high and irrational (Jogiyanto, 2014).
Investors purchase stock to earn a return on their investment. This return consists of two parts: (1) gains (or losses) from selling the stock at a price above (or below) purchase price and (2) dividends. The ratios we examine in this section help analysts evaluate stock investments (Frederic S. Mishkin, Stanley G. 2012).

The Industry Standard Price Earning Ratio (PER) is 5.21%. So the Price Earning Ratio (PER) which is above the industry standard is a company that is classified as good or healthy while the Price Earning Ratio (PER) that is below the industry average is a company that is classified as not good or unhealthy (Candra Puspita Ningtyas, Suhadak and Nila Firdausi Nuzula, 2016)

**Price to Book Value**

Stock prices depend on a company’s ability to generate cash flows (Michael C. Ehrhardt and Eugene F. Brigham 2011). The ratio of a stock’s market price to its book value gives another indication of how investors regard the company (Eugene F. Brigham, Joel F. Houston. 2016). Price to book value (PBV) is formulated as follows:

\[
\text{Market/Book ratio} = \frac{\text{Market Price Per share}}{\text{Book Value Per Share}}
\]

Eugene F. Brigham, Joel F. Houston. 2016

The ratio of a stock’s market price to its book value gives another indication of how investors regard the company (Eugene F. Brigham, Joel F. Houston. 2016). Book value is considered not important to determine the value of a company, because it only reflects the historical investment made by the company, which is investment that is less relevant to the company’s price or current value. Although the historical value of previous company management did not produce satisfactory rate of profit, but with a healthier management developed in the company, it is likely that the company will achieve a normal return of profits, so that it will also increase the company’s market.

Thus, that Price to Book Value (PBV) is a division of a company’s stock price by the book value per share. Price to Book Value (PBV) can be interpreted with the aim of the company's financial management to maximize the wealth of shareholders, which means increasing the value of the company which is an objective measure of value by the public and an orientation to the company’s survival.

**3. RESEARCH METHOD**

**Object of research**

Research conducted includes Return On Equity (ROE), and Price Earning Ratio (PER) and Company Value in LQ45 listed on the Indonesia Stock Exchange (BEI) in 2015 - 2018, data taken from the official website of the Indonesia Stock Exchange (BEI) or Indonesia Stock Exchange (IDX) with the website address www.idx.co.id.

**Operational Variables**

In this study the variables used as operational variables include:

- **Independent Variable**
  - a. Return On Equity (ROE)
  
  \[
  \text{ReturnOnEquity(ROE)} = \frac{\text{Net Profit Aftertax}}{\text{Equity Capital}} \times 100
  \]

  (Frederic S. Mishkin, Stanley G. 2012)

  b. Price Earning Ratio (PER)

  \[
  \text{Price earning ratio} = \frac{\text{Earning Per Share}}{\text{Price Per share}}
  \]

  (Eugene F. Brigham, Joel F. Houston. 2016)

- **Dependent Variable**

  \[
  \text{Market/Book ratio} = \frac{\text{Market Price Per share}}{\text{Book Value Per Share}}
  \]

  (Eugene F. Brigham, Joel F. Houston. 2016)

**Target Population**

The target population in this study were 37 companies in the LQ45 category. In detail, the companies are described below:
Data Analysis Techniques

1. Classical Assumption Test
In multiple linear regression testing, to obtain accurate research requires testing with the classic assumption test. The classic assumption tests used in this study include: Multicollinearity Test and Heteroscedasticity Test.

2. Estimation of Panel Data Regression
This research data analysis method uses panel data analysis, which is a combination of time series with cross section data. The model equation using cross section data can be written as follows:

\[ Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \epsilon_{it} \]

Where \( i = 1, 2, 3, \ldots, N \) (the number of cross section data)
Where \( t = 1, 2, 3, \ldots, T \) (the amount of time series data)

The amount of pooled data obtained is based on the number of cross section (N) and time series (T) data, that is N x T so the number of observations is a number of N x T.

3. Estimation of the Panel Data Regression Model
The estimate model parameters with panel data, there are three techniques (models) that are often offered, namely: 1). Common Effect Model; 2). Fixed Effect Model; 3). Random Effect Model. Then to test the model that is feasible to use, then test the model 1). Chow Test 2). Hausman Test 3). Lagrange Multiplier Test (LM test).

4. Hypothesis Testing

Partial
- If \( t_{12} > 0 \) So \( H_0 \) rejected and Ha accepted
- If \( t_{12} < 0 \) So \( H_0 \) is accepted and Ha is rejected

Simultaneous
- If \( F_{12} < 0 \) So \( H_0 \) rejected and Ha accepted
- If \( F_{12} > 0 \) So \( H_0 \) is accepted and Ha is rejected.

4. DISCUSSION
Based on data processing using eviews version 9 includes; regression model estimation, model testing, class assumptions, the selected model is the Common effect regression estimation model. Described in the table below:

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<tr>
<td>20</td>
<td>ITMG</td>
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</table>

Source: www.idx.co.id
Common effect
Dependent Variable: PBV
Method: Panel Least Squares
Date: 01/14/20   Time: 07:40
Sample: 2015 2018
Periods included: 4
Cross-sections included: 35
Total panel (balanced) observations: 140

<table>
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<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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<td>7.014705</td>
<td>-0.341427</td>
<td>0.7333</td>
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<td>ROE</td>
<td>0.383858</td>
<td>0.149720</td>
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<td>0.0114</td>
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<td>PER</td>
<td>0.135551</td>
<td>0.339066</td>
<td>0.399778</td>
<td>0.6899</td>
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</table>

R-squared: Mean dependent var = 8.500786
Adjusted R-squared: S.D. dependent var = 42.62605
S.E. of regression: Akaike info criterion = 10.31660
Sum squared resid: Schwarz criterion = 10.37963
Log likelihood: Hannan-Quinn criter. = 10.34222
F-statistic: Durbin-Watson stat = 2.649282
Prob(F-statistic): 0.014408

PBV = -2.395007 + 0.383858*ROE + 0.135551*PER

The effect of ROE on Price to Book Value shows a positive and significant effect of this can be seen from the regression coefficient ROE is positive and significant. prob value. of 0.0114 is smaller than 0.05. This shows that the higher ROE value, the higher the price to book value will be, this is in accordance with the results of Nuryaman's research (2012).

The effect of PER on Price to Book Value shows a positive influence, but this is not significant, it can be seen from the regression coefficient of positive PER and the level of prob. of 0.6899 this is greater than 0.05. This shows that the higher the PER value, the higher the Price to Book Value.

5. CONCLUSIONS

Based on the results of data processing the influence of Return On Equity (ROE) and Price Earning Ratio (PER) on Price to Book Value on LQ45 Companies listed on the Indonesia Stock Exchange in 2015-2018 partially shows that Return On Equity (ROE) has a significant positive effect on Price to Book Value and Price Earning Ratio (PER) have a positive and not significant effect on Price to Book Value. Together Return on Equity (ROE) and Price Earning Ratio (PER) significantly influence the Price to Book Value of LQ45 Companies listed on the Indonesia Stock Exchange in 2015-2018.

This is consistent with the results of the study Muhammad Farhan Malik & Muhammad Usman Qureshi & Muhammad Azeem (2012), Raluca Georgiana Moscu, (2014), Antonio J. Dayag & Fernando Trinidad (2019), Bahaa Sobhi Abde Latif Awwad & Ammar Zakaria Abdallh Salem, (2019).