Analysis of Fundamental Factors on Stock Price

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Abstract
The purpose of this research is as follows: 1) to assess ROA’s influence on the stock price; 2) to assess the effect of CR on the stock price; 3) to review DER’s influence on the stock price; 4) to review the PER’s influence on the stock price; and 5) to assess the influence of PBV on the stock price. The type of research used in this research is casual associative research (casual associative research). The population in this research is a Banking company which is included in the Kompas 100 index listed on the Indonesia Stock Exchange (IDX) during the year of 2012-2016. Selection of samples by purposive sampling method. The analysis method used to test the hypothesis is multiple regression tests. The results show that: 1) Return On Assets has a positive effect on the stock price; 2) Current Ratio has a positive effect on the stock price; 3) Debt to Equity Ratio negatively affects the stock price; 4) Price Earning Ratio is positively influential but not significant to the stock price; and 5) Price to Book Value has no effect on the stock price.

Key words
Return On Asset, Current Ratio, Debt to Equity Ratio, Price Earning Ratio, Price to Book Value, Stock Price

1. Introduction
Stock price valuation is a very important and fundamental thing for investors before investing because stocks are one type of investment that promises investors. The stock price is very determined from the supply and demand for the stock itself. A tangible piece of paper that explains that the owner of the paper is the owner of the company that issued the securities. Fahmi (2012) what is meant by shares is: "Proof of ownership of capital/fund ownership in a company, a paper clearly stated nominal value, company name and followed by rights and obligations explained to each holder, and supplies ready for sale".

The more people who buy shares, the stock price tends to move up and vice versa, the more people who sell their shares, the stock price tends to go down. If the stock price increases, shareholder wealth will also increase, and vice versa if the stock price decreases, shareholder wealth will also decline.

In investing in the capital market, analysts and investors can approach investment, which can be broadly divided into two approaches, namely technical analysis and fundamental analysis. Technical analysis is an analysis of instruments that use historical trading data on stock prices, volume and several other market indicators to predict stock price expenditures and determine investment decision recommendations (Widyani, 2010). While fundamental analysis tries to estimate stock prices in the future by estimating the value of fundamental factors that influence stock prices in the future and apply the relationship of these variables so that the estimated stock price is obtained.
The object of this research was conducted on companies listing on the Indonesia Stock Exchange by using a sample of banking companies incorporated in the Kompas 100 Index. The compass index 100 was chosen as a research object, because it is a collection of 100 active companies on the Indonesia Stock Exchange. Because one of the criteria for selecting companies that enter the Kompas 100 Index is a company that has strong fundamentals, which are seen from the high market capacity and the greatest value and frequency of transactions. Besides that, in the compass index 100 consists of various kinds of industrial sectors that have long-term prospects so that investors can see the trend of the direction of stock movements by observing the movement of the compass index 100. Therefore, based on the company's fundamental factors can provide an overview of the strength of a company to survive, especially when hit by the economic crisis.

Various studies by Fillya (2012) show that stock prices are influenced by several factors, namely return on assets (ROA), current ratio (CR), debt to equity ratio (DER), and price to book value (PBV). Whereas in Dicky's study (2018), it was shown that only Earning Per Share (EPS) and Price Earning Ratio (PER) had a significant effect on stock prices. Based on the description above, the authors are interested in conducting a study entitled "Analysis of Fundamental Factors on Stock Price (Empirical Study on the Banking Sector that Goes Public in the Kompas Index 100 Year 2012-2016)".

2. Literature review

2.1. Legitimacy theory

According to Ahmad et al. (2004), legitimacy theory is based on the notion of social contracts that are implied between social institutions and society. Shocker and Sethi (1973) provide an explanation of the concept of social contracts as follows: All social institutions are no exception for companies operating in society through either explicit or implicit social contracts where survival and growth are based on: 1) Final results (output) which can be socially provided to the wider community; 2) Distribution of economic, social or political benefits to groups in accordance with the power they have.

Legitimacy theory also explains that the practice of disclosing corporate responsibility must be carried out in such a way that the activities and performance of the company can be accepted by the community. Ghozali and Chariri (2007) explain that in order to legitimize company activities in the eyes of the public, companies tend to use environment-based performance and disclosure of environmental information.

Legitimacy theory is the theory most often used especially when it is related to social territory and environmental accounting. Although there is still a strong pessimism put forward by many researchers, this theory has been able to offer a real perspective on the recognition of a company voluntarily by the community.

2.2. Stakeholders theory

According to Clarkson (1995), stakeholders are divided into two groups namely primary and secondary. Primary stakeholders are groups of stakeholders who do not take part or participate in the operations of a company. Secondary stakeholders are groups of stakeholders that influence and are influenced by the company, but are not involved and are not so important for the survival of the company.

Stakeholder theory is a theory that states that a company is an entity that not only operates for its own sake, but must provide benefits to all its stakeholders, because the survival of a company is supported by stakeholders (Ghazali and Chariri, 2007). Shareholders, creditors, consumers, suppliers, governments, communities, analysts, and other parties are stakeholder groups that are considered by companies to disclose or not information that is in the company’s financial statements. All stakeholders have the right to obtain information about company activities.

2.3. Fundamental analysis

According to Ramlawati (2011), fundamental analysis is an attempt to estimate the health and profit prospects of a company, namely the ability of a company to grow and generate profits in the future. One important aspect of fundamental analysis is the analysis of financial statements, because from there it can be estimated the circumstances or position and direction of the company. To conduct analysis and stock
selection there are two basic approaches, namely fundamental analysis and technical analysis. Fundamental analysis seeks to estimate stock prices in the future through estimation of fundamental factors such as sales, growth, costs, and dividend policies that affect stock prices, as well as applying the relationship of these variables to obtain stock price estimates. While technical analysis seeks to estimate stock prices based on changes in stock prices in the past.

Every stock investment has a strong reason called intrinsic value (real value) which can be determined through a very careful analysis of the current condition of the company and its future prospects. Intrinsic value is a function of company factors combined to produce an expected return with a risk inherent in the stock. This value is estimated by investors or analysts, and the results of these estimates are compared with the current market price, so that stocks can be known that are overprice or those that underprice. In other circumstances, where the intrinsic value of shares is equal to the current stock market price, it is said that shares have a corrected value and tend to have no transactions. Fundamental analysis is basically doing a historical analysis of the financial strength of a company so that this process is also called Company Analysis. In company analysis, investors will study the company’s financial statements with the aim of knowing the strengths and weaknesses of the company, identifying trends or growth that may exist, evaluating operational efficiency and understanding the nature and operational characteristics of the company. According to Robert Ang (1997), analysis of fundamental factors based on financial analysis is reflected in financial ratios consisting of five ratios, namely: a) Leverage Ratio; b) Market Ratio; c) Profitability Ratio (Rentability); d) Liquidity Ratio; e) Activity Ratio.

In this study, fundamental analysis will be reflected by financial ratios proxied by:

a. **Return On Asset (ROA)**

ROA is one ratio that measures the level of profitability of a company. ROA is used to determine the amount of net income that can be obtained from the company's operations by using all of its wealth. The high and low ROA depends on the management of company assets by management that describes the efficiency of the company's operations. The higher the ROA the more efficient the operational of the company and vice versa, the low ROA can be caused by the number of idle company assets, too much investment in inventory, excess paper money, fixed assets operating below normal and others happening on the stock exchange (Bintara and Tanjung, 2019). ROA is obtained from the comparison of net income with the total assets of the company.

Based on Bank Indonesia Circular Letter No.13/24/DPNP dated October 25, 2011 (Hafidz and Safira, 2018). Return on assets can be calculated using the formula:

\[
ROA = \frac{\text{Profit before tax}}{\text{Total Assets}}
\]  

b. **Current Ratio (CR)**

The most common ratio used to analyze the position of a company's working capital is the current ratio, which is a comparison between the amount of current assets and current debt (Munawir, 2005). A high CR gives an indication of good guarantees for short-term creditors in the sense that every time the company has the ability to pay off its short-term financial obligations. However, a high CR also indicates that some working capital is not spinning or experiencing unemployment and will negatively affect the ability to obtain profit/profitability (Nesa, 2015). The reduction in the company's ability to earn profits will also cause a decline in the returns that investors will get.

Research conducted by Ulupui (2005) and Tyas (2010) shows that CR has a positive and significant influence on stock price in the future. This indicates that investors will get a higher return if the company's ability to meet its short-term obligations is higher, because after the economic crisis investors begin to pay attention to cash management, accounts receivable, and inventory of the company before making a decision to invest in the capital market.

Unlike the research obtained by Farkhan and Ika (2012), Thrisye and Simu (2013), and Antara et al (2014) which showed that CR did not have a significant effect on stock price.

The formula for calculating CR according to Gitman and Zutter (2012) is:
c. Debt to Equity Ratio (DER)

DER is a ratio that describes the ratio of debt and equity in corporate funding and shows the ability of the company’s own capital to fulfill all its obligations (Sawir, 2000). According to Susilowati and Turyanto (2011) the increasing use of debt, which is reflected by the greater debt ratio (ratio of debt to total assets), the same earnings before interest and tax (EBIT) will generate profits divided by larger shares. If the profit divided by shares increases, then the interest of investors will increase. This will have an impact on increasing stock prices and causing an increase in stock price.

This theory is supported by research conducted by Susilowati and Turyanto (2011) and Tyas (2010) which shows that DER has a positive and significant influence on stock price. But this is contrary to what was stated by Ang (1997) which states that the higher the DER reflects the higher risk of the company, as a result investors tend to avoid stocks that have a high DER. So that investors' interest in investing their funds will have an impact on the decline in the company's stock price, so that stock price also decline. Arista and Astohar (2012) and Thrisye and Simu (2013) prove that DER has a negative and significant influence on stock price. Different results were obtained by Ulupui (2005) and Farkhan and Ika (2012) which showed that DER did not have a significant effect on stock price.

The formula for Debt to Equity Ratio (DER) according to Husnan (2015) is:

\[
DER = \frac{Total\ Obligations}{Owner's\ equity}
\]  

(3)

d. Price Earning Ratio (PER)

PER is a ratio that compares the stock price obtained from the capital market and earnings per share obtained by the company owner presented in the financial statements (Wahyudiono, 2014). According to Sugiono (2009) the higher the PER ratio will indicate that the company's performance is also getting better. However, on the contrary, if the PER is too high, it can also indicate that the stock price offered is very high or irrational. Care is needed in analyzing PER because the analysis can be misleading.

Farkhan and Ika (2012) prove that PER has a positive and significant effect on stock price which means that the higher the PER of a company's stock, the price of a share will tend to increase. So if the price of a share and the rate of profit growth of a company increases, then PER also increases and stock price will also increase. Conversely, if the price of a share and the rate of profit growth of a company decreases, then PER will also decrease and stock price will also decline.

Different results were obtained by Mathilda (2012) which showed that PER had a negative and significant effect on stock price while Lestari (2012) found that PER does not have a significant effect on stock price.

The formula used to calculate the amount of PER according to Husnan (2015) is:

\[
PER = \frac{Stock\ Price\ per\ Share}{Earning\ per\ Share}
\]  

(4)

e. Price to Book Value (PBV)

According to Darmadji and Fakhruddin (2001) PBV describes how much the market values the book value of a company's stock. If the PBV is high, the market confidence in the future prospects of the company is also high. PBV ratio is usually used for investors in making investment decisions. The higher the PBV, the higher the stock price. The higher the stock price, the higher the stock returns.

Research on this subject was carried out by Arista and Astohar (2012) which shows that PBV has a positive and significant influence on stock price. Companies that can operate well, generally have PBV ratios above 1, which shows the stock market value is higher than the book value. The higher the PBV ratio, the higher the company is valued by investors. If a company is valued more highly by investors, then the stock price will increase further in the market, which in turn will increase stock price.

These results are different from the research conducted by Mathilda (2012) which shows that PBV does not significantly influence stock price.
This ratio is calculated by the following formula (Robert, 1997):

\[
PBV = \frac{Stock\ Price\ per\ Share}{Book\ Value\ per\ Share}
\]

(5)

2.4. Stock price

Stock price is the selling value of shares formed on demand and bidding on a stock in IDX and as already known shares gives two kinds of income i.e. dividend and capital gain. According to Widiatmojo (1996, in Dicky, 2018) stock prices can be differentiated into 3 (three): 1) Nominal price; 2) Prime Price; 3) Market price. High low stock prices are fluctuating movements, sometimes rising and falling irregularly because the stock price is influenced by many factors, including the performance of the company. The occurrence of stock trading transactions is based on the results of investors’ observations of the Company's operational achievements. The main goal of most major companies is how to maximize market value over the stock price of the company.

2.5. Previous research

The results of this study proved that the variables of EPS, ROA, ROE, ROI, AG and CAR simultaneously significantly affect the stock price of the banking company, but partially only the EPS and ROA variables that have a significant share of the stock price Banking company at the Compass Index 100 (Teguh (2014)).

The results showed that the dividend payment ratio and its impact on the share price have been proven influential for the 2003-2008 period. This indicates that the dividend payment ratio has a significant impact on the stock price. In addition, among the control variables; Volatility and revenue growth were also found to be significant in some regression models (Hidayat et al. (2015)).

The results showed that the free variables of Earning Per Share and Price Earning Ratio were partially significant to the share price, with Earning Per Share being the most dominant and influential variable that had positive influences and Price Earning Ratio (has negative influence) (Dicky, 2018)). Other independent variables such as Current Ratio, Return On Equity, Debt to Equity Ratio have no significant influence on the stock price. The results show that partial PER impact is positive and significant towards the price of the stock, it shows that the investor pays attention to the PER in the reinstallation to reinvest. The higher PER will be the higher the interest of investors in investing in the company, so that the share price will increase. Partial EPS, CR, and ROE negatively affect stock prices this suggests that investors do not consider EPS, CR, and ROE as a decision to buy stocks (Rahmadewi, 2018).

The results of this study prove that 1) Return On Assets has a positive effect on Stock Return; 2) Current Ratio has a positive effect on Stock Returns; 3) Debt to Equity Ratio has a negative effect on Stock Return; 4) Price Earning Ratio has a positive effect on Stock Return; and 5) Price To Book Value has no effect on Stock Returns (Bintara and Tanjung, 2019)

2.6. Framework

Based on the theoretical foundation and previous studies, the researchers developed a research framework that was tested as shown in the figure 1.

Hypothesis

The research hypothesis proposed is as follows:

Ha1: Return On Asset affects The Stock Price
Ha2: Current Ratio affects The Stock Price
Ha3: Debt to Equity Ratio affects The Stock Price
Ha4: Price Earning Ratio affects The Stock Price
Ha5: Price To Book Value affects The Stock Price
3. Methodology of research

3.1. Types of research

The research used in this research is casual associative research. According to Sanusi (2011), associative-causal research is the search for the relationship between two or more variables. The purpose of associative research is to find relationships between one variable and another variable.

3.2. Operational Definition of Variables

The variables used in this study consisted of dependent variables and independent variables. Operational variable research Analysis of Fundamental Factors against Stock price can be summarized in Table 1.

Table 1. Variable Operationalization

<table>
<thead>
<tr>
<th>Type of Variable</th>
<th>Operational Definition</th>
<th>Formula</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock Price</td>
<td>The selling value of shares formed on the demand and supply of a stock in IDX and as already known shares gives two kinds of income, namely dividend and capital gain</td>
<td>Market price recorded at closing Price in the year-end period</td>
<td>Ratio</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return On Assets</td>
<td>The ratio used to measure the effectiveness of management in generating profits with available assets (Gitman and Zutter, 2012)</td>
<td>( \frac{Profit \ before \ Tax}{Total \ Assets} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>The ratio that measures the extent to which the company's current assets are used to fulfill its current obligations.</td>
<td>( \frac{Current \ Assets}{Current \ Liabilities} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Debt to Equity ratio</td>
<td>Comparison between all company debt both long-term debt and short-term debt with the company's own capital</td>
<td>( \frac{Total \ Obligations}{Owner's \ Equity} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Price Earning Ratio</td>
<td>The ratio of the price of the stock to the income of each share, and is an indicator of the development or growth of the company in the future (prospects of the firm).</td>
<td>( \frac{Stock \ Price \ per \ Share}{Earnings \ per \ Share} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Price to Book Value</td>
<td>Market ratio (market ratio) used to measure the performance of stock market prices on the value of the book.</td>
<td>( \frac{Stock \ Price \ per \ Share}{Book \ Value \ per \ Share} )</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

3.3. Types and Data Sources

The data used in conducting this research is secondary data, namely data obtained through intermediaries from both parties and certain media that support this research. The data used in this study are secondary data in the form of financial statements of banking companies included in the Kompas 100 index listing on the Indonesian Stock Exchange during 2012-2016 which are obtained from the Indonesia Stock Exchange website (www.idx.co.id) and their respective official sites -one of the commercial banks.
3.4. Research Population
The population in this study are Banking companies included in the Kompas 100 index listed on the Indonesia Stock Exchange (IDX) during the period 2012-2016.

3.5. Research Samples
Samples are part of the population used to estimate population characteristics. The sampling technique is using purposive sampling techniques. According to Widyani (2010) the purposive sampling method is the selection of samples based on the suitability of the characteristics of the sample with the predetermined sample selection criteria. The sample criteria used in this study are:
1. Banking company included in the Kompas 100 index and listed on the Indonesia Stock Exchange (IDX) during the period 2012-2016.
2. Issue audited financial statements for the period 2012-2016
3. The company did not experience losses during the study year.
4. Data owned by the company is complete and in accordance with the variables under study.

According to the above criteria, the number of samples used was 8 banks for 5 periods, namely 2012, 2013, 2014, 2015 and 2016. Then the number of samples obtained was 8 bank x 5 periods = 40 data to be used in this study.

3.6. Data collection technique
The method of data collection in this study is the literature study method and documentation method. Library study method by conducting literature review and reviewing various literature literature such as various journals, articles and other literature books that support this research process. While the documentation method is the process of collecting data by recording documents related to this research.

3.7. Analysis Method
Descriptive statistics
Descriptive statistics in this study are used to provide a description of the character of the research variable by using a frequency distribution table that shows the mode number, range of scores and standard divisions.

Classic assumption test
This research was conducted with a simple regression analysis. The use of simple regression analysis must be free from testing classical assumptions. For this reason, before a simple regression analysis is carried out, classical assumptions must be tested first. Classical assumption testing is done using normality test, multicollinearity test, heterocedasticity test and autocorrelation test.

Hypothesis testing
In this study the authors used five independent variables and one dependent variable. The analytical method used to test hypotheses is multiple regression methods, namely regression which is used to determine how much influence the independent variables have on the dependent variable, with simple linear regression analysis that aims to meet the expectations of researchers regarding Analysis of Fundamental Factors on Stock Price (Regression analysis using SPSS version 22 software). The regression equation is as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon \]

**Dimana:**
- \( Y \) = Stock Price
- \( \alpha \) = constant or price \( Y \) if \( X = 0 \)
- \( \beta \) = number or direction of the regression coefficient, which shows the number of increases or decreases in the dependent variable based on the independent variable
- \( X_1 = \text{ROA} \), \( X_2 = \text{CR} \), \( X_3 = \text{DER} \), \( X_4 = \text{PER} \), \( X_5 = \text{PBV} \), \( \varepsilon \) = level of error

In this study used a significance level (\( \alpha \)) of 0.05 or 5%. To test whether the proposed hypothesis is accepted or rejected, then testing the research variables by testing simultaneously through a simultaneous significance test (F test statistic), which intends to be able to explain the effect of independent variables on the dependent variable. Whereas to test each variable partially, it is done by testing the significance of
individual parameters (statistical t test) which aims to determine whether the independent variable has an effect on the dependent variable, and which variables predominantly affect the dependent variable.

4. Research results and discussions

4.1. Description of research data

The following are presented the results of descriptive statistics about the research variables in table 2:

<table>
<thead>
<tr>
<th>Table 2. Results of Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Return On Assets</td>
</tr>
<tr>
<td>Current Ratio</td>
</tr>
<tr>
<td>Debt to Equity Ratio</td>
</tr>
<tr>
<td>Price Earning Ratio</td>
</tr>
<tr>
<td>Price to Book Value</td>
</tr>
<tr>
<td>Stock Price</td>
</tr>
</tbody>
</table>

Source: Primary data processed (2019)

According to the table 2 above can be presented descriptive statistical results about the research variables as follows: The Return On Assets variable has an average of 2.03% with a standard deviation value of 0.748, indicating that the Return On Assets data used greatly fluctuated from 2012 to 2016. Return On Assets ranges from the lowest value of 0.8% which is the state savings Bank (Persero) year 2014 TBK to the highest value of 3.4% namely Bank Rakyat Indonesia (Persero) Tbk year 2013.

The Current Ratio variable has an average of 2.59% with a standard deviation value of 2.077, it indicates that the Current Ratio data was used greatly fluctuated from 2012 to 2016. Current Ratio ranges from the lowest value of 0.4%, which is the West Java development Bank & Banten TBK Year 2013 up to the highest value of 8.4%, namely Bank Mandiri (Persero) Tbk year 2015.

The variable DEBT to Equity Ratio has an average of 7.16% with a standard deviation value of 2.068, suggesting that the Debt to Equity Ratio data used greatly fluctuated from 2012 to 2016. Debt to Equity Ratio ranges from the lowest value of 3.8%, which is Bank Danamon TBK year 2015 up to the highest value of 11.4%, which is the state savings Bank (Persero) TBK year 2016.

The Price Earning Ratio variable has an average of 11.33% with a standard deviation value of 4.751, indicating that the Price Earning Ratio data used greatly fluctuated from 2012 to 2016. Price Earning Ratio ranges from the lowest value of 5.2% which is the West Java development Bank & Banten TBK year 2015 up to the highest value of 28.2%, namely the development Bank of West Java & Banten TBK year 2016.

The Price to Book Value variable has an average of 1.81% with a standard deviation value of 1.010, indicating that the Price to Book Value data used greatly fluctuated from 2012 to 2016. Price to Book Value ranges from the lowest value of 0.5% namely Bank Pan Indonesia TBK Year 2016 up to the highest value of 4.3%, namely Bank Central Asia Tbk 2012.

From a descriptive statistical analysis known to the average value of the stock price of 3,918.13 with a standard deviation value of 3,671.428, which means the data used greatly fluctuated from the year 2012 to 2016. The stock price ranges from the lowest value of 630 which is Bank Pan Indonesia Tbk up to the highest value of 15,500 which is Bank Central Asia Tbk.

4.2. Classic assumption test

Normality test

Normality testing using the Lilliefors test. The provision in the error test is if the statistic L count <L table (α = 0.05), then the error data is normally distributed. But if L count> L table (α = 0.05), then the data is not normally distributed.

Thus the overall results of the calculation of the normality test using the Lilliefors test can be seen in the summary in table 3.
Table 3. Summary of the Normality Test

<table>
<thead>
<tr>
<th>No</th>
<th>Estimation</th>
<th>n</th>
<th>L_Count</th>
<th>L_Table α = 0.05</th>
<th>α = 0.01</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Y atas X1</td>
<td>40</td>
<td>-0,0803</td>
<td>0,1401</td>
<td>0,1630</td>
<td>Normal</td>
</tr>
<tr>
<td>2</td>
<td>Y atas X2</td>
<td>40</td>
<td>-0,1197</td>
<td>0,1401</td>
<td>0,1630</td>
<td>Normal</td>
</tr>
<tr>
<td>3</td>
<td>Y atas X3</td>
<td>40</td>
<td>-0,0963</td>
<td>0,1401</td>
<td>0,1630</td>
<td>Normal</td>
</tr>
<tr>
<td>4</td>
<td>Y atas X4</td>
<td>40</td>
<td>0,0260</td>
<td>0,1401</td>
<td>0,1630</td>
<td>Normal</td>
</tr>
<tr>
<td>5</td>
<td>Y atas X5</td>
<td>40</td>
<td>-0,0310</td>
<td>0,1401</td>
<td>0,1630</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Source: Primary data processed (2019)

4.3. Multicollinearity Test

Calculation results of tolerance according to table 4. Indicates there is no free variable that has a value of tolerance less than 10%; All Tolerance value more than 10%; Which means there is no correlation between variables. The result of the calculation of variance inflation factor (VIF) also shows the same thing, there are no free variables that have a VIF value of more than 10; Variance inflation factor (VIF) values are all less than 10. The conclusion is that there is no multicollinearity between the free variables in a regression model based on the tolerance value test.

Table 4. Summary of Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Return On Assets</td>
<td>0,670</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>0,953</td>
</tr>
<tr>
<td>Debt to Equity Ratio</td>
<td>0,862</td>
</tr>
<tr>
<td>Price Earning Ratio</td>
<td>0,692</td>
</tr>
<tr>
<td>Price to Book Value</td>
<td>0,912</td>
</tr>
</tbody>
</table>

Source: Primary data processed (2019)

4.4. Autocorrelation Test

The autocorrelation test was used to determine whether there was a correlation between intruder errors in a certain period and the previous period's disturbing errors. A good regression model is a regression that is free from autocorrelation. Autocorrelation test can be done by testing Durbin-Watson (DW). The autocorrelation test results can be seen in table 5:

Table 5. Autocorrelation test results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0,666*</td>
<td>0,443</td>
<td>0,361</td>
<td>2934.870</td>
<td>2,015</td>
</tr>
</tbody>
</table>

Source: Primary data processed (2019)

Based on the SPSS output, the Durbin Watson statistical value is 2,015. Whereas from the Durbin Watson table with n = 4 and k = 5, d table is obtained, dl (outer limit) = 1,231 and du (inner limit) = 1,786 with a significance level of 5%, 4-du = 2,214; and 4-dl = 2,770; then from the calculation concluded that the DW-test is located in the test area. Referring to Ghozali (2010), the regression model in this study is free from the problem of autocorrelation because the value of Durbin Watson is between du and 4-du.

4.5. Heteroscedasticity Test

Heterocedasticity test is used to determine the presence or absence of classic assumptions heteroscedasticity, namely the existence of variance inequalities from residuals for all observations in the regression model (Priyatno, 2009). Detection of the presence of heteroscedasticity is: 1) Probability value>
0.05 means free from heterocedasticity. 2) Probability value <0.05 means that it is exposed to heterocedasticity. The test results using the Spearman rank test can be seen in table 6:

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Absres</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0,108</td>
<td>0,424**</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-0,285</td>
<td>0,157</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,132</td>
<td>0,334</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0,418</td>
<td>40</td>
</tr>
</tbody>
</table>

**Source:** Primary data processed (2019)

The results of the Spearman rank test in the table above shows the significance probability value for the Return On Assets, Current Ratio, Debt to Equity Ratio, Price Earning Ratio, and Price to Book Value of 0.505, 0.076, 0.074, 0.334 and 0.418. Because the significance probability value for Return On Assets, Current Ratio, Debt to Equity Ratio, Price Earning Ratio, and Price to Book Value is greater than 0.05, it can be concluded that the data is free from heterocedasticity.

### 4.6. Hypothesis testing

#### Multiple regression analysis

Multiple regression analysis is used to obtain a regression coefficient that will determine whether the hypothesis made will be accepted or rejected. By using multiple linear regression methods the results are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>T_count</th>
<th>Sig</th>
<th>T_table</th>
<th>adj R²</th>
<th>F_count</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-1082,698</td>
<td>2,405</td>
<td>0,022</td>
<td>1,688</td>
<td>0,361</td>
<td>5,406</td>
<td>0,001</td>
</tr>
<tr>
<td>X1</td>
<td>1846,984</td>
<td>2,624</td>
<td>0,013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>608,437</td>
<td>2,125</td>
<td>0,041</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3</td>
<td>-520,023</td>
<td>1,738</td>
<td>0,091</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4</td>
<td>206,702</td>
<td>1,202</td>
<td>0,238</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X5</td>
<td>585,533</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Primary data processed (2019)

Based on the results of the regression test above an equation can be formed as follows: \( Y = -1082,698 + 1846,984X_1 + 608,437X_2 - 520,023X_3 + 206,702X_4 + 585,533X_5 + \varepsilon \)

#### Determination Coefficient Test (R²)

The adjusted R-Square value of the regression model is used to find out how much the ability of the independent variable (independent) to explain the dependent variable (dependent). From table 4.6 it is known that the adjusted R square value is 0.361. This means that 36.1% of the Stock Price can be explained by variations in the independent variables, namely Return On Assets, Current Ratio, Debt to Equity Ratio, Price Earning Ratio, and Price to Book Value, the remaining 63.9% (100% - 36.1%) explained by other reasons outside the model.

#### Simultaneous Significance Test (Test Statistic F)

From the ANOVA test or F test, the calculated F value is 5.406 with a significance probability indicating 0.001. The test probability value is much smaller than \( \alpha = 0.05 \). This shows that together (simultaneous) Stock Prices can be influenced by Return On Assets, Current Ratio, Debt to Equity Ratio, Price Earning Ratio, and Price to Book Value.

#### Individual Parameter Significance Test (t Test)

**Effect of Return On Assets on Stock price**

Based on the calculation results shows that the Return On Assets variable has a positive effect on Stock Prices, which can be seen from the ratio between table and t count, namely t table is greater than t count, with t table 1.688 and t count 2.405 and the significance level is smaller than 0.05. Thus \( H_a \) is accepted.
Effect of Current Ratio on Stock Price
Based on the calculation results shows that the Current Ratio variable has a positive effect on Stock Prices, which can be seen from the ratio between t table and t count, namely t table is greater than tcount, with t table 1.688 and t count 2.624 and the significance level below 0.05. Thus Ha2 is accepted.

Effect of Debt to Equity Ratio on Stock price
Based on the calculation results, it shows that the Debt to Equity Ratio variable has a negative effect on the Stock Price, which can be seen from the comparison between t table and tcount, namely t table smaller than t count, with t table 1.688 and t count -2.125 and significance level below 0.05. Thus Ha3 is accepted.

Effect of Price Earning Ratio on Stock price
Based on the calculation results, it shows that the Price Earning Ratio variable has an effect but not significant on the Stock Price, which can be seen from the comparison between t table and tcount, namely t tabel smaller than t count, with t table 1.688 and t count 1.738 and significance level above 0.05. Thus Ha4 is rejected.

Effect of Price to Book Value on Stock price
Based on the calculation results, it shows that the Price to Book Value variable does not affect the Stock Price, which can be seen from the comparison between t table and t count, namely t table greater than t count, with t table 1.688 and t count 1.202 and the significance level above 0.05. Thus Ha5 is rejected.

4.7. Discussions
Effect of Return On Assets on Stock Price
From the results of the study it is known that Return On Assets has a positive effect on Stock Prices. This is directly proportional to the existing theory, where the higher the profitability ratio of a company will increase the attractiveness of investors, in increasing the attractiveness of investors to the company and to make the company become a company of interest to many investors because the rate of return will be even greater. So that ROA can be considered as a consideration for investors in investing their funds. Big interest from investors has an impact on the increase in stock prices.

These results support the research conducted by Zuliarni (2012), Fillya (2012), Raghilia et al. (2014), and Teguh (2014) which states that the Return On Assets variable has a positive effect on the company's stock price.

Effect of Current Ratio on Stock Price
From the results of the study it is known that the Current Ratio has a positive effect on Stock Prices. The results of this study indicate that if the better current ratio reflects the more liquid the company, so that the ability to meet its short-term capability is higher, this will be able to increase the company's credibility in the eyes of investors so that it will be able to increase the company's stock price.

Current Ratio describes the level of ability of the company's current assets in meeting its current debt. The higher the level of Current Ratio shows the better short-term financial performance. The high current ratio can be influenced by several things, namely the amount of cash flow, as well as the level of credibility of the company in relation to creditors. If parties interested in using this ratio in establishing cooperation with the company, then the next turn will affect the value of the company based on the closing share price.

The results of this study support the findings of Wicaksono (2013), Raghilia et al. (2014) and Rahmadewi (2018) which states that the Current Ratio affects the Stock Price.

Effect of Debt to Equity Ratio on Stock Price
From the results of the study it is known that the Debt to Equity Ratio has a negative effect on Stock Prices. This indicates that if the company's burden is getting heavier then the company's performance will deteriorate and this will result in a decrease in stock prices in the capital market.

Debt to equity ratio (DER) can give an idea of the capital structure owned by the company so that it can be seen the level of risk of unpaid debt. The greater the debt to equity ratio, shows the greater the company's burden on external parties, both in the form of principal and loan interest. This statement is supported by a tradeoff theory where the capital structure states that the company exchanges the benefits of taxes from debt financing with problems arising from potential bankruptcy.
The results of this study support the findings of Christine (2012), Dewi (2013) and Ratih et al. (2014), which state that DER has a negative and significant effect on stock price.

**Effect of Price Earning Ratio on Stock Price**

From the results of the study it is known that the Price Earning Ratio variable has a positive but not significant effect on the Stock Price. This result is not in line with Rahmadewi’s research (2018) which states that if the stock price gets higher then the difference in stock prices for the current period with the previous period is greater, so that capital gains also increase, then a high PER will cause stock prices to rise.

Price Earning Ratio (PER) is used by investors to predict a company's ability to generate profits in the future. The higher the PER, the higher the price of the stock by investors to the income per share, so that the higher PER also shows the more expensive the share of income. This assumption is supported by signal theory where companies with very bright prospects do not make funding through new shares, while companies with poor prospects do like funding with outside equity which causes stock prices to increase.

**Effect of Price to Book Value on Stock Price**

From the results of the study it is known that Price to Book Value does not affect the Stock Price. These results support the research conducted by Stella (2009), and Thio (2015), this is because investors no longer assume that PBV can be used as a benchmark for buying shares but rather consider other matters. But these results are not in line with the research conducted by Permana (2009) which states that PBV has a positive and significant influence on stock price.

5. **Conclusions**

Based on the results of the analysis and discussion that has been carried out, then conclusions can be given as follows: 1) Return On Assets has a positive effect on Stock Price; 2) Current Ratio has a positive effect on Stock Price; 3) Debt to Equity Ratio has a negative effect on Stock Price; 4) Price Earning Ratio has a positive but not significant effect on Stock Price; and 5) Price to Book Value does not affect Stock Price.

6. **Limitations**

This research is inseparable from shortcomings and limitations. Limitations in this study are as follows: 1) Research is limited to using independent variables, namely the variable Return On Assets, Current Ratio, Debt to Equity Ratio, Price Earning Ratio and Price to Book Value; 2) The researcher limits the object of research of Banking companies included in the Kompas 100 index and is listed on the Indonesia Stock Exchange (IDX).

7. **Suggestions**

As previously explained, this study contains limitations. But the results of this study can at least motivate the next study. Taking into account existing limitations, it is expected that future research will improve the following factors: 1) In the next study, it is better to add several companies from various sectors to be studied in order to better describe the condition of each company, researchers also need to add a period longer research so that the results can be more generalized and add one or more variables that more influence stock returns; 2) For investors and management, the company should optimize return on assets, debt equity ratio, current ratio and price earnings ratio, because these three variables have a positive and significant relationship to stock prices. In addition, especially for investors and investment managers in stock purchase decisions in the capital market, not only consider the ratio analysis approach in assessing the return of a stock, but consider factors outside the company's policies such as market conditions that occur and other external factors because of things this will indirectly affect the profits earned in making an investment.

8. **References**