The effect of return on assets (ROA) and debt to equity ratio (DER) on stock prices on insurance sub sector companies listed on the Indonesia stock exchange (IDX) period 2014-2018

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Abstract
Stock price is one of the factors that motivates investors to invest and is also a reward for the courage of investors to take risks for their investments. This study aims to determine the significant effect of Return On Assets and Debt to Equity on stock returns. The research sample used is the insurance sub-sector company on the Indonesia Stock Exchange for the 2014-2018 period, which amounted to 6 companies. Determination of the number of samples using a purposive sampling method, namely using the criteria in sampling. The data analysis technique used is multiple linear regression of panel data using Eviews 10 as data processing. Based on the results of the analysis, it was found that partially Return On had a positive and significant effect on stock prices, while the Debt to Equity Ratio had a negative and significant effect on stock prices. Simultaneously the results of the Return On Assets and Debt to Equity Ratio variables have an influence on stock prices.

Keywords: Return On Assets; Debt To Equity Ratio; Harga Saham

Introduction
The capital market has a very important role in economic activity, it is seen as one of the barometers of a country's economic condition. The capital market is a means for parties who have excess funds to make medium-term or long-term investments in the form of securities such as bonds and stocks. Funds obtained from the capital market can be used for business development, expansion, additional working capital and others, both capital market capital is a means for the public to invest. Capital market investment is one that can be taken by companies to increasing profits. The capital market can be defined as a meeting place between supply and demand for securities (Sunariyah, 2011:5).

Based on the data above, it can be seen that in companies with the ASBI stock code from 2014 to 2018 their share prices continued to decline every year, this decline was caused by a lack of investor confidence in seeing the company's performance was considered less good. Companies with the code ABDA in 2015 and 2017 their share prices were at the highest prices among other companies, this high price was due to the good performance of the company so that it brought in investors and caused the demand for the company's shares to increase and lead to a high share price of the company. I can conclude from the chart of the company's stock prices that I studied fluctuation from 2014 to 2018.
Return on Assets (ROA) is one of the ratios that can be used to determine the level of profitability of a company. ROA is a ratio that shows how much net income is obtained by the company when measured by asset value, in other words ROA is a comparison between net income and total assets. The greater the ROA, the better the company's performance, because the greater the return. In obtaining maximum profit, the company requires not small funds, the funds needed by the company can be obtained in several ways, one of which comes from loans to outside parties (debt). The loan must be returned in accordance with the loan term. To find out how much the company pays its debts, it can be done by analyzing the leverage ratio. Leverage is one of the most important financial aspects to analyze. Leverage can be used to measure to what extent a company’s assets are financed with debt (Kasmir, 2013). The following is a graph of ROA (Return on Assets) of insurance sub-sector companies.

![Figure 2. Return On Assets](image)

Based on the data above, it can be seen that the growth of return on assets (ROA) fluctuates every year. In companies with the AMAG code, there was a decrease from 2014-2018 where in 2014 the ROA growth was 0.084735, in 2015 it was 0.073731, in 2016 it was 0.037919, in 2017 it was 0.033512814, in 2018 it was 0.006472. From the description above, there is an interesting thing, namely the value of ROA in insurance sub-sector companies has decreased continuously during 2014-2018. We can conclude that the performance of Return on Assets in insurance sub-sector companies during 2014 to 2018 tends to be low due to more Return on Assets data which is below average compared to Return on Assets data which is above average. By using more debt means increasing the risk borne by the company. Vice versa, using more debt also increases the expected rate of return. The leverage ratio that is commonly used to measure a company’s ability to pay its debts is the debt to equity ratio (DER). The following is a graph of the DER of the insurance sub-sector companies.

![Figure 3. Debt to Equity Ratio](image)

Based on the graph above, the value of the Debt To Equity Ratio (DER) has decreased in ASRM and ASDM companies. While the AMAG Company in 2015 experienced a very significant decline, since 2015-2018 it has increased. For ABDA and ASBI companies, the fluctuation was not too significant. On the exchange rate variable there is a research gap from previous research where research conducted by Putu Fenta Pramudya Cahya, I Wayan Suwendra, Fridayana Yudiantama (2015) and also research conducted by Sugeng Raharjo (2010) which in his research showed that the exchange rate had a positive effect on prices. share. Meanwhile, in the research conducted by Mohsen Bahmani-Oskooee, Sujata Saha (2015) which in his research showed that the exchange rate had a negative effect on stock prices. From previous studies there is...
a research gap on the trading volume variable where research conducted by Hassan Shahzad, Huu Nhan Duong, Petko S. Kalev, Harminder Singh (2014) shows that trading volume shows a positive influence on stock prices. Meanwhile, research conducted by Eric Girard, Mohammed Omran (2010) shows that trading volume has a negative effect on stock prices.

There is a research gap from the Return On Assets (ROA) variable where previous research conducted by Panagiotis E. Dimitropoulos, Dimitrios Asteriou (2009) which shows that ROA has a positive effect on stock prices. Meanwhile, research conducted by Vasta Biquil Khoir, Siti Ragil Handayani, and Zahroh Z.A (2013) found that ROA had a negative effect on stock prices. There is a research gap on the Debt to Equity Ratio (DER) variable where research conducted by Eka Purwanda and Kristin Yuniarti (2014) shows that DER has a positive effect on stock prices. Meanwhile, research conducted by Jie Cai, Zhe Zhang (2010) shows that DER has a negative effect on stock prices. There is a research gap where the Size variable in the research conducted by Jitka Hilliard, Haoran Zhang (2015) and Tamara Ova Viandita, Suhandak, Achmad Husaini (2012) which shows that size has a positive effect on stock prices. Meanwhile, research conducted by Ni Wayan Nurani Wijayanti and I.B Panji Sedana (2013) shows that size has a negative effect on stock prices.

The author uses previous research intended to be used as material for consideration of the similarities and differences in the research. The equation of this research is the independent variable (free) is Return On Assets (ROA) and Debt To Equity Ratio (DER) while the dependent variable (bound) is stock price. The difference between this study and previous studies is in the company under study where the author conducted research on the service sector company in the insurance sub-sector. The time of the study, the year and the data studied also have differences. Based on the background described above, the authors are interested in conducting a study entitled "The Effect of Return On Assets and Debt To Equity Ratio on Stock Prices in Insurance Sub-Sector Companies Listed on the Indonesia Stock Exchange for the 2014-2018 Period".

Literature Review

Signaling Theory

Signal theory studies that every action/deed contains information (Judge, 2013). Brigham and Houston (2006) explain that signal theory is an action taken by management by providing information to investors related to management's perspective on the company's prospects/expectations in the future. Profit announcements are an example of conveying information through signaling. Hakim (2013) stated that earnings announcements contain information used by investors to make decisions on investment activities and to project or estimate the company's prospects/expectations in the future. If management announces increased profits, investors will receive information that the company's financial condition is relatively good in the future. However, if management announces lower/lower earnings, investors will receive information that the company's financial condition is relatively unfavorable in the future.

Stock

Stock are defined as securities as evidence of participation or ownership of individuals or institutions in a company (Anoraga and P’akarti, 2008:58). Instruments or securities traded on the stock exchange are in the form of equity participation (share ownership). Equity participation or shares is a form of investment in a business entity which is carried out by depositing a certain amount of funds with the aim of controlling part of the ownership or company rights. Shareholders usually get results through dividends or capital gains and the company issuing shares is usually in the form of a Limited Liability Company (Nafik, 2009:244).

Return On Assets

Return On Assets (ROA) is included in the profitability ratio. In the analysis of financial statements this ratio is most often highlighted, the article is able to show the company's success in generating profits, Return on Assets (ROA) is able to measure the company's ability to generate profits in the past and then projected in the future. Based on some understanding of Return On Assets (ROA), the authors can conclude that Return On Assets (ROA) is a profitability ratio used to measure the effectiveness of the company in generating profits by utilizing the assets of the company.

Debt To Equity Ratio

Definition of Debt to Equity Ratio according to Darsono and Ashari (2010:54-55) Debt to Equity Ratio (DER) is one of the ratios of leverage or solvency. The solvency ratio is a ratio to determine the company's ability to pay its obligations if the company is liquidated. This ratio is also known as the leverage ratio, which is to assess the company's limits on borrowing money.

Research Method

Method of collecting data

According to Sugiyono (2018: 80) population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions. The population in this study are Insurance Sub-Sector Companies listed on the Indonesia Stock Exchange (IDX) for the period 2014 to 2018. The sample according to Sugiyono (2018) is part of the number and characteristics possessed by the population. If the population is large, it is impossible for the researcher to study everything in the population, for example, due to limited funds, manpower, and time, the researcher can use samples taken from this population. The sample in this study is the Insurance Sub-Sector Companies listed on the IDX for the period 2014 to 2019 with as many as 10 companies. The sampling technique used in this study was the purposive sampling method. Sugiyono (2018) revealed that the purposive sampling technique is a sampling technique with certain considerations. In this study, the companies studied were companies in the large
trade and investment sub-sector.

Data Analysis Method
The data obtained in this study is quantitative data. Quantitative data analysis was conducted to determine the financial situation, especially to assess the financial performance of insurance sub sector companies listed on the Indonesia Stock Exchange. The analytical indicators used are return on assets, debt to equity ratio and stock prices. Quantitative analysis is presented in the form of data tabulation which groups and classifies data to facilitate data analysis. Then in conducting data analysis, data processing was carried out with the help of a calculator and computer program Eviews 10.

Results and Discussion
Effect of Return On Assets, Debt to Equity Ratio, on Stock Prices
The F test basically shows whether all the independent variables included in the model have a joint or simultaneous effect on the dependent variable.

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R-squared: 0.195331, Mean dependent var: 0.018840, Adjusted R-squared: 0.198005, S.D. dependent var: 0.353491, S.E. of regression: 0.330886, Akaike info criterion: 0.720554, Schwarz criterion: 0.911757, Log likelihood: -13.01386, Hannan-Quinn criter.: 0.793365, F-statistic: 3.578504, Durbin-Watson stat: 2.147795, Prob(F-statistic): 0.018840.

The Effect of Return On Assets on Stock Prices
The F-test results show that the independent variables Return On Assets, Debt to Equity Ratio, are significantly influencing the dependent variable Stock Price simultaneously (together). These results are supported by Faizin's research (2016) with the title The Effect of Profitability Ratios and Market Ratios on Stock Prices (Empirical Study on Manufacturing Companies in the Food and Beverage Sector Period 2003-2012) which states that simultaneously or together the variables EPS, ROA, ROE, NPM, DER and PBV simultaneously (together) affect the stock price. The results of Hidayat Nasution's research (2018) with the title The Effect of Manufacturing Company Performance on Stock Returns on the Jakarta Stock Exchange in 2000-2004 states that simultaneously the variables Return On Equity, Debt To Equity, Price Book Value, Return On Assets and Debt to Equity Ratio have an effect significant to the Share Price. But different from previous research, the results from Susiani's research (2017) with the title Analysis of the Effect of Earning Per-Share, Debt to Equity Ratio, Debt To Equity Ratio and Price To Book Value on Stock Prices in Basic and Chemical Industry Sub-Sector Companies in Indonesia. The period 2013-2015 states that simultaneously or partially the Earning Per-Share, Debt to Equity Ratio, Debt To Equity Ratio and Price To Book Value variables have no effect on stock prices.

The Effect of Return On Assets on Stock Prices
The partial hypothesis testing aims to determine the effect and significance of each independent variable on the dependent variable.

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Source: Output Eviews 10.
It can be concluded that partially the ROA variable has a significant positive effect on Stock Return. Return On Assets (ROA) is used by investors to assess how much the company is able to generate profits with all the assets owned by the company. The greater the ROA value, the greater the stock price acquisition will be because investors will generally look for companies with high ROA values. These results are in line with research by Ratna Handayati and Noer Rafkah Zulyanti (2018) with the title The Effect of Earning Per Share (EPS), Debt To Equity Ratio (DER), and Return On Assets (ROA) on Stock Prices in Manufacturing Companies Listed on the IDX. Return On Assets has a partial effect on Stock Return, Debt to Equity Ratio has a partial effect on Stock Return, Return On Assets has a partial effect on Stock Return.

The results of Eli Sabet Silalahi’s research (2019) with the title “The Effect of Return On Assets, Debt to Equity Ratio, Firm Size (Firm Size), Systematic Risk (BETA) on Stock Returns (Study on Real Estate & Property Companies Listed on the Indonesia Stock Exchange) which states that partially Return On Assets has a significant positive effect on stock prices. However, in the research of I Nyoman Febri Mahardika, Luh Gede Sri Artini (2017) with the title The Effect of Market Ratios and Profitability Ratios on Company Stock Returns on the Indonesia Stock Exchange, it states that partially Debt to Equity Ratio and return on equity have a positive and significant influence on stock returns, while Return on Assets has a negative but not significant effect on stock returns and net profit margins have a positive but not significant effect on stock returns.

The Effect of Debt to Equity Ratio on Stock Prices
The partial hypothesis testing aims to determine the effect and significance of each independent variable on the dependent variable.

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Source: Output Eviews 10

It can be concluded that partially the DER variable has a significant negative effect on stock prices. Through the results of this study, investors are expected to pay attention to DER as a part of making investment decisions. Debt to Equity Ratio (PER) can be used to describe the ratio of debt and equity in corporate funding and shows the ability of the company’s own model to meet all of its obligations. The bigger the DER on a company’s stock, the cheaper the stock price will be. This condition will have an impact on the response of investors to stocks because with the increase in market response, this proves that investor interest in these shares increases with increasing demand for shares, resulting in an increase in stock prices. The increase in DER will have an impact on decreasing stock prices as well (Mutia & Martaseli, 2018). The results of the research by Putri Ayu Kusumaningrum, Bambang Widarno and Rispantyo (2016) with the title The Effect of Earning Per Share, Price Book Value, Debt to Equity Ratio, and Return On Assets Against Stock Returns of Food And Beverage Companies Listed on the Indonesia Stock Exchange stated that in a patriarchal Debt to Equity Ratio variable has a negative and significant effect on stock returns, Price Book Value has a positive and significant effect on stock returns, Debt to Equity Ratio has a positive and significant effect on stock returns and Return On Assets has a negative and insignificant effect on stock returns. The results of the research are not in line, namely Paryanto and Dicky Sumarsono (2018) with the title The Effect of Company Financial Performance on Stock Prices in Manufacturing Companies Listed on the Indonesia Stock Exchange in 2014-2016 stating that partially the Debt to Equity Ratio variable has no significant effect on the Stock Return variable, the remaining variables Price Book Value, Return On Assets and Dividend Pay Out Ratio effect on Stock Return.

Coefficient of Determination Comparison (R²)
The coefficient of determination basically measures how far the model’s ability to explain variations in the dependent variable is. The value of the coefficient of determination is between zero and one. A small value of R² means that the ability of the independent variables in explaining the variation of the dependent variable is very limited.

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The value of $R^2$ is 0.198005, which means that the behavior of the independent variables, namely Return On Assets (ROA) and Debt to Equity Ratio (DER) is able to explain the behavior of the stock prices of companies in the insurance sub-sector by 19.80% while the rest is 80.20%. is the variation of other independent variables that affect the share price of the insurance sub-sector company but is not included in the model.

**Conclusion**

1. In the Return On Assets variable, the Debt to Equity Ratio has a standard deviation value that is smaller than the average value (mean). This reflects the relatively low deviation and low fluctuation during the study period. Meanwhile, the Stock Price variable has a standard deviation value that is greater than the average value (mean). This reflects the relatively high deviation and high fluctuation during the study period.
2. Partially, the Return On Equity (ROA) variable has an effect on stock prices. Return On Assets (ROA) is used by investors to assess how much the company is able to generate profits with all the assets owned by the company. The greater the ROA value, the greater the stock price acquisition will be because investors will generally look for companies with high ROA values.
3. Partially, the Debt to Equity Ratio (DER) variable has an effect on stock prices. Through the results of this study, investors are expected to pay attention to DER as a part of making investment decisions. Debt to Equity Ratio (PER) can be used to describe the ratio of debt and equity in corporate funding and shows the ability of the company’s own model to meet all of its obligations.
4. In this study ROA and DER, affect the stock price. The contribution of all independent variables resulted in an influence on the stock price. Partially, ROA and DER variables have an effect on stock prices. The model of the coefficient of determination $R^2$ in this study is not good. In this study, the model of the coefficient of determination $R^2$ is thought to be poor. This is due to the financial variables of the company's performance that were not examined in this study, thus affecting the results of the coefficient of determination $R^2$. Through the findings of previous research which variables that can affect the level of stock prices are the financial variables of the company's performance.

**Recommendations**

1. For investors in deciding to invest in a company, it is necessary to consider various factors that can affect stock returns and not only focus on earning profits but also on financial ratios such as Return On Assets (ROA) and Debt to Equity Ratio (PER) which can affect stock price movements also in a number of companies (issuers).
2. Investors and potential investors are expected to know information related to the company’s financial performance and fundamental factors as an assessment material used to consider investment decisions in the capital market, so that they can obtain the right and accurate decisions. The limitations of this study should be further refined in further research by adding an independent variable in this study that is not significant, namely using the company’s financial performance variable so that it can produce a better adjusted $R$ value and it is expected that more use of the company’s financial performance variable is expected. In addition, further research is expected to include companies other than insurance and increase research time in order to get better results.

**References**

