The Effect of Debt to Asset Ratio and Return on Investment on Stock Price (Empirical Study on Coal Sub-Sector Mining Companies)

Mochamad Kohar Mudzakar[1]
Faculty of Economics and Business Widyatama University Bandung
kohar.mudzakar@widyatama.ac.id

Raden Resa Oktaviani[2]
Faculty of Economics and Business Widyatama University Bandung
raden.resa@widyatama.ac.id

Muhamad Salman Fajari Rumayar[3]
Faculty of Economics and Business Widyatama University Bandung
rumayar.salman@widyatama.ac.id

Nabila Ayu Kresna[4]
Faculty of Economics and Business Widyatama University Bandung
nabila.ayu@widyatama.ac.id

Maulana Yusuf[5]
Faculty of Economics and Business Widyatama University Bandung
maulana.5781@widyatama.ac.id

Yuyu Aliwahyudin[6]
Faculty of Economics and Business Widyatama University Bandung
yuyu.aliwahyudin@widyatama.ac.id

Abstract

The purpose of the study was to determine the effect of debt to asset ratio and return on investment on stock prices. The research method used is explanatory the data used is secondary data. The research population is coal sub-sector mining companies listed on the Indonesia Stock Exchange for the 2017-2019 period. Sampling using purposive sampling, obtained a sample of 18 companies with a total of 54 observations. The data analysis method used panel data analysis and data testing using Eviews 10. The results showed that the debt to asset ratio and return on investment both partially and simultaneously had an effect on stock prices.

Preliminary

Stocks are one of the capital markets instruments that are most attractive to investors because they provide attractive benefits. Shareholders are part owners of the company, if an investor buys shares, then he becomes the owner of the company. Shares are securities issued by a company in the form of a Limited Liability Company. The performance of the issuer is indicated by the stock price which is a very important factor and must be considered by investors in making investments. The greater the profit generated from business operations, the better the performance of the issuer, so that the share price of the issuer in question tends to rise.

Stocks of companies that are worthy of being chosen by investors need to have a number of information related to the dynamics of stock prices. To help investors to invest in high-risk and high-yield investments, accurate stock valuation can minimize risk. Two things need to be considered when investing in the capital market, namely the expected profits and the risks that may occur. An investor needs to know and choose stocks that can provide optimal returns for the funds invested. For investors or shareholders in analyzing and selecting stocks, they need relevant and adequate information through the company's financial statements, so that they make the most profitable investment decisions.

The number of investors switching from the banking sector to the capital market increased. The means to move funds sourced from the public to various sectors that carry out investment is one of the main functions of the capital market. Various information that is useful for predicting the results of their investment in the capital market is needed by investors in investing their funds.

The approach to calculating the intrinsic value of common stock using company financial data is called fundamental analysis. Fundamental analysis predicts stock prices in the future by estimating the value of fundamental factors that affect stock prices in the future. In making a forecasting model, the most important thing is to analyze the company's fundamental factors such as sales, sales growth, costs, dividend policy and others that are expected to affect stock prices. An analytical technique that uses data or records about the market itself to try to access the supply and demand for a particular stock or the market as a whole is called technical analysis. The company's performance, plans to issue rights issues as well as the existence of legal problems that can have implications for the company's business development are internal factors that can affect the decline in stock prices.

Companies that issue shares on the Indonesia Stock Exchange are categorized into 10 composite stock price indexes (CSPI). All sectors driving the JCI weakened, there were 3 sectors that strengthened, namely the consumer sector 0.01%, trading 0.19%, and basic industry 0.41%. The remaining 7 weakened sectors occurred in the infrastructure sector - 0.04%, finance -0.06%, manufacturing -0.14%, property -0.5%, agribusiness -0.85%, and the most weakness occurred in miscellaneous industrial sector -1.22% and mining -2.15%. (kompas.com).

The Center for Energy and Mineral Resources Data and Information Sources (2012: 38) in Fajar Ramadhan's research (2014), the mining industry is an industry that is of interest to both domestic and foreign investors. The mining industry has favorable prospects, because it generates foreign exchange which is a source of funds for economic development in Indonesia. Not only as a source of state income from taxes or royalties, but coal is a primary energy supplier. As an energy resource, coal in Indonesia has strategic value and has the potential to meet most domestic and even foreign needs.

Coal growth in Indonesia in 2017 decreased. The reference price of Indonesian coal and world coal fell. This does not reduce the export volume. This shows that the world still needs Indonesian coal, but due to the oversupply of coal in the world, it has an impact on coal prices in Indonesia (indoanalysis.com). Another fact states that in 2017 when coal prices fell, the value of exports was unstable. This resulted in the weakening of domestic coal prices. This phenomenon will continue to occur if over supply occurs (indoanalysis.com).

The mining industry is an industry that attracts both domestic and foreign investors, who have good prospects, from foreign exchange as a source of funds for economic development in Indonesia (Fajar, 2014). Coal growth has the potential to meet domestic and foreign needs, the available resources in Indonesia are 161.34 billion tons and reserves of 28.17 billion tons spread over the islands of Sumatra, Kalimantan, Java, Sulawesi and Papua. Coal sales which started in 2017 have declined due to benchmark prices of Indonesian coal and world coal, but that has not caused export volumes to fall which has led to oversupply (indoanalisa.com). The development of share

prices in the coal sector shows a relatively higher price compared to other sectors, as shown in table 1 below:

Table 1.
Average Mining Sector Share Prices on IDX in 2017-2019

Mining subsector	YEAR		
	2017 (IDR)	2018 (IDR)	2019 (IDR)
Coal	3988	2162	2324
Oil and gas	497	837	528
Metals and Minerals	1277	613	834
Rock	126	90	70

Source: www.idx.co.id

Table 1 shows that stock prices from 2017-2019 tend to fluctuate, so that buying and selling shares in the stock market is unstable (kontan.co.id). Investors' expectations of the company's future and showing their investment prospects are an indicator of a company's success on stock prices. A decline in financial performance will reduce the value of the company and the prospect of the company in the eyes of investors, resulting in a decrease in stock prices.

The most common method used to measure financial performance is financial ratios, which are analyzed from the company's financial statements. The probability ratio is a ratio related to the assessment of the company's performance in generating profits, including ROE and ROI. According to Munawir (2010), ROI analysis in financial ratio analysis has an important meaning as a comprehensive financial ratio analysis technique. Research conducted by Pinangkaan (2012) says that investment returns and economic value added together have a fairly strong relationship with stock returns, and partially have no significant effect.

Factors that affect stock prices are leverage factors that describe the company's ability to fulfill and maintain its ability to always fulfill its obligations in paying debts well, the leverage indicator is the debt to asset ratio (Fahmi, 2012: 73). Selva Wahnida's research (2016) affects the Current Ratio, DAR, and ROE on stock prices, showing that the Current Ratio and DAR partially have no significant effect on stock prices, and ROE has a positive effect on stock prices.

Although there have been many studies on stock prices, it can be seen that there is a difference between the facts and the results of the research that has been done, so it is interesting to study. Taking into account previous research, the researcher puts it into the title: "The Influence of Debt to Asset Ratio and Return on Investment on Stock Prices (Empirical Study on Coal Sub-Sector Mining Companies listed on the Indonesia Stock Exchange 2017-2019 Period)".

Types Of Research

Research whose purpose is to obtain answers about how and why a phenomenon occurs is called explanatory research

Research Methods

This study uses a quantitative method with a descriptive and verification approach, because of the variables that will be studied in relation to it and the aim is to present an overview of the relationship between the variables studied.

Population And Sample

The population in this study are all coal sub-sector mining companies listed on the Indonesia Stock Exchange in 2017-2019. The total population in this study were 20 companies. Sampling using purposive sampling method, in order to obtain a sample of 18 companies with a total of 54 observations. The data analysis method uses panel data analysis and data testing is carried out using the Eviews 10 program.

Data Analysis Technique

The analytical technique used in this research is regression analysis. Regression analysis aims to measure the strength of the relationship between two or more variables, in addition to measuring the strength of the relationship between the dependent variable and the independent variable. Unbalanced panel data regression is a combination of time series data and cross-sectional data with the number of cross-sectional data units and the number of observations that are not the same, the data processing technique used in this study.

Results And Discussion

Result

Dependent Variable: Share Price
Method: Least Squares Panel
Date: 03/04/21 Time: 17:15
Sample: 2017 2019
Periods included: 3
Cross-sections included: 18
Total panel (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.812	0.168	10.776	0.000
DAR	0.165	0.066	**2.493**	**0.021**
ROI	0.268	0.125	**2.138**	**0.044**
R-squared	**0.905**	Mean dependent var		2.267
Adjusted R-squared	0.848	S.D. dependent var		0.232
S.E. of regression	0.091	Akaike info criterion		-1.681
Sum squared resid	0.180	Schwarz criterion		-1.065
Log likelihood	44.256	Hannan-Quinn criter.		-1.466
F-statistic	16.035	Durbin-Watson stat		1.869
Prob(F-statistic)	**0.000**			

Source: Output Eviews 10

1. Debt to Asset Ratio 0.021 < 0.05. If the DAR value goes up, the stock price goes up, otherwise the DAR goes down, the stock price goes down.
2. Return on Investment 0.044 < 0.05. If the ROI value goes down, the stock price goes up, otherwise the ROI goes up, the stock price goes down.
3. The significant value of the variable Debt to Asset Ratio and Return on Investment 0.000 < 0.05, it can be concluded that DAR and ROI have an influence on stock prices.
4. R-Squared 0.905 which means that the variability of the dependent variable (Y), namely the stock price can be influenced by the independent variable (X).

Discussion

Effect of Debt to Asset Ratio on Stock Prices

Debt to Asset Ratio is one of the most frequently used variables to explain the company's stock price in the company's annual report. The author's research results have a positive effect, meaning that it has an effect in increasing the amount of company assets financed by debt. The results of this study contradict the results of research conducted by Selva Wahnida (2016) which states that the Debt to Asset Ratio has no significant effect on stock prices.

The Effect of Return on Investment on Stock Prices

The high ROI is due to uncollectible receivables and unsold inventory, which of course cannot be used quickly to pay off debt. On the other hand, companies that have high current assets will be more likely to have other assets that can be liquidated at any time without experiencing a decrease in market value (selling securities). Companies with this position are often disrupted by liquidity, so investors prefer to buy shares of companies with high current asset values compared to companies with low asset values. The results of the author's research indicate that Return on Investment has a positive effect on stock prices.

The Effect of Debt to Asset Ratio, and Return on Investment on Stock Prices

The research that the author conducted has a positive effect, meaning that it has an effect on increasing the amount of company assets financed by debt.

Conclusion

Based on the results of the analysis and discussion, the authors draw the following conclusions:

1. Debt to Asset Ratio has an influence on stock prices
2. Return on Investment has an influence on stock prices.
3. Debt to Asset Ratio, and Return on Investment have an influence on stock prices.

Suggestion

The author's suggestions are as follows:

Company

Companies need to pay attention to these factors and can attract investors to invest their capital so that the demand for shares will be high which causes the share price to increase.

Investors

Investors who want to invest should look and analyze first in choosing a company, because in this study it has an influence on stock prices.

Further Research

This research is expected to be an addition to the literature for further research. This research was conducted over a period of only three years.

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