

The Effect of Inflation and Corporate Social Responsibility (CSR) on Return Stocks with Profitability as an Intervening Variable in the Sector Mining Listed on the Indonesia Stock Exchange

Sri Puspa Nurhayati¹, Yusuf Imam Suja'i², Agus Salim³

^{1,2,3} Universitas Islam Malang, Indonesia

puspanurhayati19@gmail.com

Abstract

The mining sector (Mining index) is an index composed of various shares of mining sector issuers listed on the Indonesia Stock Exchange. Indonesia's dependence on the mining sector as a supporter of the economy is reflected in the large contribution of the mining sector to state revenues. Factors that affect stock returns are macroeconomic factors and fundamental factors. Macroeconomic factors stem from broad economic problems, one of which is inflation. This fundamental factor can be seen from the financial statements, and the issuer's financial statements can be seen from the level of financial performance both in terms of the ability to generate profits (profitability). This study aims to prove the effect of inflation and corporate social responsibility on stock returns with profitability as an intervening variable in the mining sector listed on the Indonesia Stock Exchange. The population of this study is 47 mining sector companies listed on the Indonesia Stock Exchange. The sampling technique uses a purposive sampling method that has certain criteria in taking samples that have the 2019-2021 annual financial statements, in order to obtain 141 company. This research method uses Structural Equation Modeling (SEM) analysis based on variance, namely Partial Least Square (PLS). SEM with PLS is based on variance so that it can handle two conditions, namely conditions with undetermined factors and conditions where the solution cannot be accepted. The analysis used includes descriptive analysis, convergent validity, discriminant validity, construct reliability, R-square, and hypothesis testing. Based on the results of research that has been done, the variables that have a significant effect on stock returns are profitability variable and corporate social responsibility (CSR) variable.

Keywords

Inflation; Corporate Social Responsibility (CSR); Stock Return; Profitability.



I. Introduction

The capital market has an important role in the progress of the country's economy, because companies get funds to support their operational activities. The Composite Stock Price Index (IHSG) is an illustration of general capital market activities. Each capital market investor really needs information that is in accordance with the progress of transactions on the stock exchange, this really needs to be used as reference material when making considerations in making investment decisions in the capital market. The sectoral index in this study is the mining sector index. The mining sector (Mining index) is an index composed of various issuer stocks. In 2011, state revenues from the mineral and coal sector reached up to 79.2 trillion rupiah and non-tax state revenue (PNBP) was 30% from

the mining sector or worth 24.24 trillion (Firmanto, 2012). Indonesia's dependence on the mining sector as a supporter of the economy is reflected in the large contribution of the mining sector to state revenues. Indonesia's mining sector occupies the sixth position as the richest country in the field of mining resources in the world. (Indonesia Mining Association, 2014). The higher the company's leverage, the company tends to generate less cash, this is likely to affect the occurrence of earning management. Companies with high debt or leverage ratios tend to hold their profits and prioritize the fulfillment of debt obligations first. According to Brigham and Ehrhardt (2013), the greater the leverage of the company, it tends to pay lower dividends in order to reduce dependence on external funding. So that the greater the proportion of debt used for the capital structure of a company, the greater the number of liabilities that are likely to affect shareholder wealth because it affects the size of the dividends to be distributed. (Yanizzar, et al. 2020)

Factors that affect stock returns are macroeconomic factors and fundamental factors. Macroeconomic factors stem from broad economic problems, one of which is inflation. Inflation is a process of increasing prices in general and continuously, an increase in the price of one or two goods alone cannot be called inflation unless the increase extends (or causes price increases) to other goods. In this regard, mining companies must have a program and allocate a social responsibility budget to reduce the impact of pollution and provide compensation for losses suffered by the surrounding community. CSR reports are used for investors to assess the development of the company mining. The development of CSR can be measured through an analysis of the data and ratio analysis contained in the annual financial statements. In this case, CSR can be used for investors to find out the value of the ROA and ROE indicators.

Research conducted by Priyanka (2013) reveals that CSR disclosure does not have a positive effect on return on equity or ROE and on return on assets or ROA. However, CSR disclosure has a positive effect on earnings per share or EPS and net profit margin (NPM). Research conducted by Khairudin & Dewi (2015) suggests that CSR has a positive effect on profitability as proxied by gross profit margin (GPM), return on assets (ROA), and return on equity (ROE).

M. Wardani's research (2015) states that CSR has no effect on return on equity (ROE), CSR has no positive effect on return on assets (ROA), and CSR has no positive effect on earnings per share (EPS). Research conducted by Hardaningtyas & Siswoyo (2016) revealed that CSR has a positive effect on stock returns of companies listed on LQ 45 in 2015.

This study aims to analyze the effect of inflation and corporate social responsibility (CSR) on stock returns directly or indirectly through profitability by measuring return on assets (ROA) in more depth in mining companies listed on the Indonesia Stock Exchange (IDX) in 2019- 2021, because the mining sector is one of the largest sources of income for Indonesia. Economic conditions in the mining sector can have both positive and negative impacts on economic stability in Indonesia. So, this study aims to examine and analyze the effect of inflation and corporate social responsibility (CSR) on stock returns with profitability as an intervening variable in the mining sector listed on the Indonesia Stock Exchange.

II. Review of Literature

2.1 Return Stock

One of the goals of investors investing is to get a return. Without the level of profit enjoyed from an investment, of course, investors will not invest. So, all investments have the main goal of getting a return. According to Brigham and Houston (2014: 215), return or rate of return is the difference between the amount received and the amount invested divided by the amount invested.

2.2 Inflation

Economists define inflation differently but have the same core, namely that prices tend to rise. Inflation is a tendency to increase the price level in general and continuously. An increase in the price of one or two goods alone cannot be called inflation, unless the increase extends (resulting in an increase) most of the prices of other goods. The increase in prices caused by seasonal factors (for example before the commemoration of major holidays), or which occurs only once (and has no further effect) is not called inflation (Kalalo, et al 2016).

2.3 Corporate Social Responsibility (CSR)

Corporate Social Responsibility is an action or concept taken by the company (according to the ability of the company) as a form of their responsibility to the social or the surrounding environment where the company is located. Examples of the forms of responsibility vary, ranging from carrying out activities that can improve community welfare and environmental improvement, providing scholarships for underprivileged children, providing funds for the maintenance of public facilities, donations to villages or community facilities that are social and useful for the community at large, especially the community around the company. According to Said (2018: 23) Corporate Social Responsibility is "As an effort from the company to raise its image in the eyes of the public by making charity programs both external and internal. External program by running a partnership (Partnership) by involving all stakeholders to show the company's concern for the community and the surrounding environment.

2.4 Profitability

Profitability in the company's operational activities is an important element to ensure the survival of the company in the future. Company success it can be seen from the company's ability to be able to compete in the market. Every company expects maximum profit. Profit is the main measure of the success of a company. Profitability according to Hery (2017:7) is "It is one of the bases for assessing the condition of the company. Measures of profitability can be divided into various indicators, such as operating profit, net income, rate of return on investment or assets, and rate of return on owner's equity.

III. Research Method

The type of data in this study uses quantitative data, namely data obtained indirectly or through intermediary media which are generally in the form of evidence, records or historical company reports. The method used in this study is a descriptive method, which is a method that

collect, formulate and classify as well as interpret the data obtained by analyzing quantitative data presented in the form of numbers, so as to produce an overview clear information about the actual condition of the company.

In this study, the sample was 47 companies during 2019-2021 in the mining sector listed on the Indonesia Stock Exchange. The data used in this study is secondary data, namely data that is not directly given to data collectors, namely the company's financial statements that meet the criteria of the research sample. Data analysis was carried out using the Partial Least Square (PLS) method using Smart PLS software version 3. PLS is a method of solving Structural Equation Modeling (SEM) which in this case is more than other SEM techniques.

IV. Result and Discussion

4.1 Descriptive Analysis

Descriptive statistical analysis provides an overview of the data in the form of mean, standard deviation, the lowest value and the highest value. The results of the descriptive analysis are as follows:

Table 1. Descriptive Analysis

Indikacor	Average	Median	Minimun	Maximum	Deviation Standart
CSR	0.751	0.791	0.440	0.945	0.126
INFLASI	2.200	1.870	1.320	3.490	0.741
ROA	1.700	0.180	-61.500	19.000	7.936
ROE	3.549	0.260	-48.500	80.700	15.385
NPM	2.906	0.280	-85.100	77.400	19.116
EPS	147.775	10.700	-224.500	3700.700	472.995
RIT	1.252	1.098	0.046	7.293	0.797

Source: processed data (2022)

4.2 Convergent Validity

The loading factor value shows the large correlation between the indicator and its latent construct. In the PLS model, if the loading factor value shows a value > 0.7 then it is declared valid and if it shows a value > 0.4 to < 0.7 if it does not change the next calculation it can be maintained. Convergent validity results can be seen in the figures and tables.

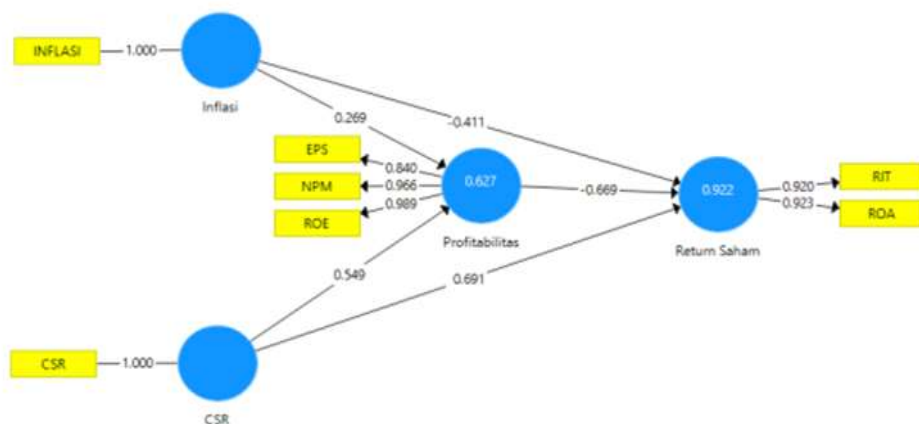


Figure 1. Outer Convergent Validity Value

Table 2. Convergent Validity

	CSR	Inflasi	Profitabilitas	Return Saham
CSR	1,000			
EPS			0,840	
INFLASI		1,000		
NPM			0,966	
RIT				0,920
ROA				0,923
ROE			0,989	

Source: processed data (2022)

Based on table 2 shows that CSR, inflation, profitability and stock returns have convergent validity values above 0.7 so it can be concluded that all items are valid.

4.3 Discriminant Validity

Discriminant validity is seen from the cross loading value used to test the indicators of a construct having a higher cross loading value with indicators than other constructs. The results of discriminant validity can be seen in the following table:

Table 3. Discriminant Validity

	CSR	Inflation	Profitability	Stock returns
CSR	1,000	0,857	0,780	-0,861
EPS	0,461	0,534	0,840	-0,634
INFLASI	0,857	1,000	0,740	-0,676
NPM	0,848	0,748	0,966	-0,939
RIT	-0,827	-0,635	-0,795	0,920
ROA	-0,760	-0,612	-0,871	0,923
ROE	0,801	0,754	0,989	-0,909

Source: processed data (2022)

Based on table 3, it can be seen that the cross-loading value for each indicator already has a greater value than the other construct variable indicators. So, it can be said that all constructs already have good discriminant validity.

4.4 Reliability Test

a. Construct reliability

The next test is the construct reliability test which is used to measure consistency variables, are presented in the following table:

Table 4. Construct reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CSR	1,000	1,000	1,000	1,000
Inflation	1,000	1,000	1,000	1,000
Profitability	0,927	0,974	0,953	0,872
Stock Return	0,823	0,823	0,919	0,850

Source: processed data (2022)

Table 4 shows the value of construct reliability that has met the requirements, which is more than 0.7. It can be interpreted that each variable is reliable.

b. R-square

Structural model can be measured using R-Square to see the level of variation of changes in the independent variable to the dependent variable. R-Square values of 0.75, 0.50, 0.25 indicate or conclude that the model is strong, moderate, and weak. The value of R Square can be presented in the table:

Table 5. R-square

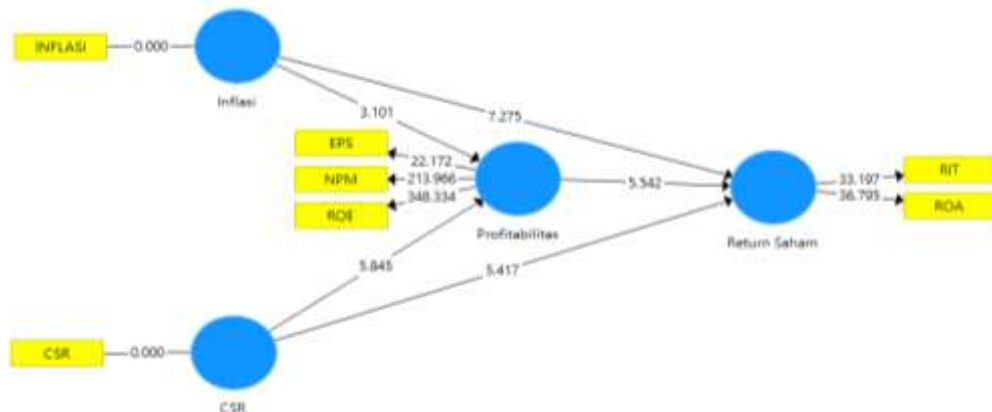
	R Square	R Square Adjusted
Profitability	0,627	0,622
Stock Return	0,922	0,920

Source: processed data (2022)

Table 5 above shows that the profitability variable gets a value of 0.622, meaning that 62.7% is influenced by research variables and the rest is influenced by other variables, while stock returns get a value of 0.920. This value indicates that 92.2% is influenced by research variables and the rest is influenced by other variables outside the study.

c. Hypothesis testing

Hypothesis testing was carried out to determine whether or not there was a direct effect of the independent variable on the dependent variable with the criterion of t-statistical value > 1.96 (significance level = 5%).



d. Path Coefficient

Table 6. Hypothesis test results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic (O/STDEV)	P Values
CSR Profitability ->	0,549	0,539	0,094	5,845	0,000
CSR -> Stock Return	-0,691	-0,749	0,128	5,417	0,000
Inflation Profitability ->	0,269	0,286	0,087	3,101	0,002
Inflation Stock Return ->	-0,411	-0,402	0,056	7,275	0,000
Profitability -> Stock Return	0,669	0,610	0,121	5,542	0,000

Source: processed data (2022)

e. Indirect Effect

Table 7. Hypothesis test results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic (O/STDEV)	P Values
CSR -> Profitability -> Stock Return	0,367	0,328	0,081	4,541	0,000
Inflation -> Profitability -> Stock Return	0,180	0,173	0,057	3,136	0,002

Source: processed data (2022)

Based on tables 6 and 7 above, it can be obtained the results of testing the significance hypothesis with a value of <0.05 , and the t-statistic criteria > 1.96 .

1. H1: Inflation has a significant positive effect on company profitability mines listed on the IDX.

The statistical t value of the inflation variable is 3.101 with a p-value of 0.002, so H_0 is rejected and it is concluded that the inflation variable has a significant effect on the effectiveness of profitability. This influence is positive, which means that the better the role of inflation, the more effective it is profitability. This supports hypothesis 1 in this study, which means that hypothesis 1 is accepted.

According to Tandelilin (2010) explains that inflation increases the company's revenue and costs. If the increase in production costs is higher than the price increase made by the company, the company's profitability will decrease. However, the negative impact of inflation on profitability does not appear to be significant at the 5% level. This can be caused by the increase in the company's production and operational costs offset by the increase in the selling price of the products produced by the company so that the decrease in profits experienced by the company is not too high. This study is in line with research conducted by Alim (2014), which states that inflation has a positive effect on profitability. This shows that the greater the value of inflation, the value of profitability will increase, but it is not in line with previous research, namely Wibowo (2013) and Desi (2012) which stated that inflation had a negative and insignificant effect on profitability.

2. H2: Corporate social responsibility (CSR) has a significant positive effect on profitability in mining companies listed on the IDX

The statistical t value of the Corporate Social Responsibility variable is 5.845 with a p-value of 0.000, so H_0 is rejected and it is concluded that the Corporate Social Responsibility variable has a significant effect on profitability. The influence is positive which means the better the system, the more effective the profitability. This supports hypothesis 2 in this study, which means hypothesis 2 is accepted.

CSR attributes, namely the costs of environmental development and partnership costs, burden the company by reducing profits, but simultaneously with the variable employee welfare costs, it has a positive and significant impact on its implementation. This is because the implementation of CSR produces a good corporate image that will provide many benefits for the company (Dewi, 2007). Just like Tsoutsoura (2004), who said that the implementation of CSR in the company will improve the company's image in the

eyes of the community around the company's external environment and also employees, as part of the company's internal environment.

3. H3: Inflation has a significant negative effect on stock returns in companies mines listed on the IDX.

The statistical t value of the inflation variable is 7.275 with a p-value of 0.000, so H_0 is rejected and it is concluded that the inflation variable has a significant effect on stock returns. This influence is negative, which means that the higher the inflation rate, the lower the stock return. This supports hypothesis 3 in this study, which means hypothesis 3 is accepted.

Inflation is a tendency to increase the price of goods in general that occurs continuously. This will affect the increase in the cost of production of a company. High production costs will of course make the selling price of goods rise, so that it will reduce the number of sales which will have a negative impact on the company's performance. This will reduce investor interest in the stock which will lead to a decrease in the company's stock return. The results of the study indicate that inflation has a negative and significant effect on stock returns. The results of this study support the results of previous studies, namely Lifang (2010) and Zainudin (2012) which state that inflation has a negative and significant effect on stock returns.

4. H4: Corporate social responsibility (CSR) has a significant negative effect on stock returns in mining companies listed on the IDX.

The t-statistical value of the Corporate social responsibility variable is 5.417 with a p-value of 0.000 then H_0 is rejected and it is concluded that the Corporate social responsibility variable significant effect on stock returns. The influence leads to negative. This supports hypothesis 4 in this study, which means hypothesis 4 is accepted.

This is because investors and shareholders do not give priority to indicators of the company's financial condition and CSR as an assessment in their investment decisions, which prioritizes the company being able to generate economic profits and increase its share price. It is suspected that CSR is only considered to comply with government regulations and investors do not understand the essence of what can be obtained from CSR. This research is not in line with the research of Putra (2015) and Raissa (2014) which found that CSR results have a positive and significant effect on stock returns because increasing CSR disclosure will also increase stock returns, because the more CSR is disclosed, the more attractive it is. investors, especially investors who pay attention to non-financial aspects of the company in investing

5. H5: Profitability has a significant positive effect on stock returns at mining companies listed on the IDX.

The statistical t value of the profitability variable is 5.542 with a p-value of 0.000, so H_0 is rejected and it is concluded that the Profitability variable has a significant effect on stock returns. The influence is positive, which means the better the role of profitability, the more effective the stock return. This supports hypothesis 5 in this study, which means hypothesis 5 is accepted.

The results show that profitability has a positive and significant effect on stock returns. Increasing profitability shows the company's ability to generate higher profits, this can be categorized as a good signal because it indicates a good company condition. High profitability shows the company is effective in managing its assets and has good prospects, so that investors will respond positively to the signal and the value of the company will increase. This is in accordance with the Signaling Theory which states

that one type of information issued by the company can be a signal for parties outside the company, especially for investors.

The results of this study support previous research, namely Lina (2016) and Zainudin (2012) which state that Profitability has a positive and significant effect on Stock Return

6. H6: Inflation has a significant positive effect on stock returns through profitability in mining companies listed on the IDX.

The statistical t value of the inflation variable is 4.541 with a p-value of 0.000, so H_0 is rejected and it is concluded that the inflation variable has a significant effect on stock returns mediated by profitability. This supports hypothesis 6 in this study, which means hypothesis 6 is accepted.

High inflation will result in a decrease in stock prices because it causes an increase in stock prices general goods prices. This condition affects production costs and the selling price of goods will become higher. High inflation will cause a decrease in purchasing power, this will affect the company's profits and ultimately affect the declining stock price. This decrease in the number of requests will ultimately reduce the company's revenue and profitability so that it will affect the return received by the company. In this case, profitability acts as a mediator of the effect of inflation on stock returns. The results of research conducted by Febrina (2009) regarding the relationship between inflation and profitability stated that inflation had a negative effect on profitability. In contrast to the research conducted by Lina (2016) and Zainudin (2012), they obtained significant positive results regarding the effect of profitability on stock returns.

7. H7: Corporate Social Responsibility has a significant positive effect on stock returns through profitability in mining companies listed on the IDX.

The statistical t value of the Corporate Social Responsibility variable is 3.136 with a p-value of 0.002, then H_0 is rejected and it is concluded that the Corporate Social Responsibility variable has a significant effect on stock returns mediated by profitability. This supports hypothesis 7 in this study, which means that hypothesis 7 is accepted.

The higher the level of disclosure of a company, the smaller the level of dependence investors on the company's earnings information (Cheng and Christiawan, 2011), however, if examined from the results of research showing a very low level of disclosure, it can be concluded that investors still depend on profitability as a benchmark for decision making. The results of the study also stated that the proposed hypothesis was rejected. The results of the same study were also stated by Pratiwi and Suryanawa (2014), that CSR disclosure was not able to encourage an increase in stock returns. This is due to differences in standards used in disclosure by each company. One researcher with another researcher will of course interpret and use different standards in research.

V. Conclusion

Based on the results of data research on Inflation and Corporate Social Responsibility (CSR) on Stock Return with Profitability as an intervening variable in mining companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period, this study can draw the following conclusions. Based on the results of the model estimation, it can be seen that:

1. Inflation has a significant positive effect on profitability in mining companies that listed on the IDX.

2. Corporate social responsibility (CSR) has a significant positive effect on profitability in mining companies listed on the IDX
3. Inflation has a significant negative effect on stock returns in mining companies that listed on the IDX.
4. Corporate social responsibility (CSR) has a significant negative effect on stock returns in mining companies listed on the IDX.
5. Profitability has a significant positive effect on stock returns in the company mines listed on the IDX.
6. Inflation has a significant positive effect on stock returns through profitability.
7. Corporate Social Responsibility has a significant positive effect on stock returns through profitability

The following are some suggestions from the author for researchers who want to continue research related to this research

1. This research can be developed using the latest CSR factors, namely using other CSR items that can reflect or represent CSR disclosures made by companies in Indonesia.
2. For potential investors who invest in stocks and have the desired return, they should be able to consider the EPS, NPM, ROA and ROE factors because these factors have an influence in the long and short term on stock returns of mining companies listed on the Indonesia Stock Exchange (IDX).
3. For further researchers, it is better to extend the research period and increase the number of companies and or replace them with other sectors listed on the Indonesia Stock Exchange (IDX). Because the more samples and populations taken will improve the quality of research and its results.

References

- Brigham, EF & Houston, JF (2014). *Fundamentals of Financial Management*. Jakarta: Four Salemba.
- Cheng, Megawati and Yulius Jogi Christiawan, (2011), "The Effect of Corporate Social Responsibility Disclosures on Abnormal Returns", *Journal of Accounting and Finance* (13) 1: 4-36.
- Goddess, Kinorika. (2007). *Corporate Social Responsibility and Its Influence on Good Corporate Image*. Janavisi Economic Journal (10) 3b : 369-383
- Harry. (2017). *Financial Statement Analysis (Integrated and Comprehensive Edition)*. Jakarta : Grasindo.
- Indonesia Mining Association, (2014)
- Kalalo. (2016). *Analysis of Factors Affecting Inflation in Indonesia*.
- Khairudin, K., & Dewi, E. (2015). Effect of Disclosure Corporate social responsibility (CSR) to Profitability in Textile and Garment Industry Listed in Indonesia Stock Exchange in 2011-2013. *Journal of Accounting and Finance*, 6(2).
- Li, Lifang. (2010). An analysis of inflation and stock returns for the UK. *Int. Fin. Markets, Inst. and Money* 20 519–532
- Lina. (2016). *Financial Management*. Jakarta. Erlangga.
- Pratiwi and Suryanawa. (2014). The Influence of Ownership Structure and Independent Commissioners on Agency Costs for Companies Included in Indonesia's Most Trusted Companies. *Management Analysis Journal* 5 (3), 215-228.
- Said Ahmad. (2018). *Lamo, Corporate Sosial Responsibility*, Deepublish Publisher Yogyakarta.
- Tandelilin, E. (2010). *Fundamentals of investment management*. Alim (2014)

Tsoutsoura, Margarita. 2004. Corporate Social Responsibility and Financial Performance. Haas School of Business University of California at Berkeley.

Wibowo & Desi. (2012). Analysis of Factors Affecting Stock Returns, Journal of Applied Management and Accounting (3) 1.

www.bi.go.id

www.idx.co.id

www.yahoo.finance

Yannizar, et al. (2020). Analysis of Good Corporate Governance, Free Cash Flow, Leverage towards Earning Management, and Shareholder Wealth in Service Sector Companies Listed on the Indonesia Stock Exchange. Budapest International Research and Critics Institute-Journal (BIRCI-Journal).P. 2567j-2567v.