

e-ISSN: 2721-303X, p-ISSN: 2721-3021  
Received: 02 Desember 2021, Revised: 13 Desember 2021, Publish: 15 January 2022  
DOI: <https://doi.org/10.38035/dijefa.v2i6>  
<https://creativecommons.org/licenses/by/4.0/>



## The Influence of Macroeconomic Factors and Financial Performance on Dividend Policy During Pandemic (Manufacturing Company Listed on the IDX)

**Yessi Rinanda**

Academy Accountancy Indonesian of Padang, Email: [yessi.rinanda17@gmail.com](mailto:yessi.rinanda17@gmail.com)

Corresponding Author: Yessi Rinanda

**Abstract:** This study aims to analyze the influence of macroeconomic factors and financial performance on dividend policy during the pandemic in manufacturing companies listed on the IDX. Shareholders have an interest in obtaining periodic returns on their investments in the form of dividends distributed by the company. The variables used in this macroeconomic factor are inflation, interest rates, and the rupiah exchange rate h. In order to be able to distribute dividends, companies must also have healthy financial performance. The influence of financial performance as reflected in financial ratios in terms of profitability, capital and liquidity which in this case is reflected in the ratio of Return on Assets (ROA), Return On Equity (ROE), Debt to Equity Ratio (DER), Earning Per Share (EPS). The population in this study are all manufacturing sector companies listed on the Indonesia Stock Exchange. This research uses multiple regression analysis processed with EVIEWS. The results of this study indicate that the macroeconomic factors in the form of the inflation rate and the interest rate have no significant effect on the dividend policy of manufacturing companies on the Indonesia Stock Exchange. Financial performance factors show that ROA, ROE, and EPS have a significant effect on dividend policy for manufacturing companies on the Indonesia Stock Exchange.

**Keywords:** Macroeconomic Economic Factors, Financial Performance, Dividend Policy

### INTRODUCTION

The emergence of the COVID-19 outbreak has various impacts on life in Indonesia and even in the world. The rapid spread of the COVID-19 outbreak has also had an impact on the Indonesian economy. One of the consequences of this slowdown in economic activity caused panic in the Indonesian financial market, causing the JCI to weaken and plummet to 5%. And also has an impact on stock prices in several sectors.

In assessing the condition of a company during COVID-19, in general, fundamental analysis and technical analysis are used as considerations in investors' investment decisions

in the capital market. Changes in dividend policy are caused by several factors. One of them is macroeconomic factor. One of the driving forces for the development of the capital market is a stable macroeconomic condition. The macro economy plays an important role in determining dividend policy.

Investors are individuals (or groups) who have more funds and invest their funds in the capital market. In the capital market, investors play an important role because the capital market cannot run without investors. Every investor who invests, of course, expects a return from the company in the form of capital gains or dividends.

Shareholders are one of the users of financial statements. Shareholders use the information contained in the financial statements to make investment decisions in the company. According to the IDX, shares are capital market instruments in the form of securities as proof of ownership or a sign of capital participation in a company (going public). Dividend policy is a decision whether the profits earned by the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings, to finance investment in the future. The company in determining the dividend policy must pay attention to the factors that influence the dividend policy, both micro and macro factors .

One of the macroeconomic actors that influence dividend policy is inflation. Inflation is a phenomenon when there is a continuous increase in product prices in a country (Chandra et al., 2018 p. 170). Rising inflation is a negative signal for shareholders, especially companies with high debt, because if the price of raw materials rises, the company's incoming profits will be used to cover the increase in raw material prices first, so the distribution dividends are reduced (Ardiyanti, 2016 p. 222). According to research conducted by Ade Chandra, Yulia Efni, and Emrinaldi (2018), it is stated that inflation and dividend policy have a partially significant effect. It's different according to Ardiyanti (206 ) stated that there is no partial effect between inflation and dividend policy.

The BI interest rate is the policy interest rate that describes the monetary policy stance set by Bank Indonesia and announced to the public (Bank Indonesia Financial Report 2008). High interest rates indicate that the investment risk is high, causing investors to expect high returns. High interest rates also give a signal to stock investors to switch to investments that provide a fixed rate of return such as bonds and deposits. Tandelilin (2010) states that an interest rate that is too high will affect the present value of the company's cash flow, so that existing investment opportunities will no longer be attractive. Research conducted by Rismawati and Dana (2013) states that the SBI interest rate has a significant positive impact on dividend policy. Taking into account interest rates is important because the average investor wants a higher investment return. Meanwhile, research conducted by Sugiharti (2015) states that interest rates have no effect on dividend policy.

The level of company dividend payments to investors is known by analyzing the company's financial performance. Financial performance is the achievements and results that have been achieved by the company's management in managing and managing company assets effectively in a certain period of time (Rudianto, 2013: 189). Companies that have good financial performance, can provide high dividends to investors. To measure the company's financial performance can be seen from financial ratios. Financial ratios are measuring tools used to identify some of the company's weaknesses and strengths.

The dividend policy of a company is reflected in its Dividend Payout Ratio. Investors have an interest in information about Return on Equity (ROE) and Return on Assets (ROA) in predicting the distribution of dividends to be received. ROA and ROE describe the company's ability to generate net profit after tax by using its own capital and all assets/assets owned. The higher the ROA and ROE, the higher the profit level of the company owner. In addition, research conducted by Devie Hoei Sunarya using ROA as a profitability measurement tool shows that profitability has a significant positive effect on dividend policy, meaning that the higher the profitability, the higher the dividend policy. namely Return on Equity (ROE). Because dividends are distributed from the net profit earned company, then the amount of profit will affect the amount of dividends to be distributed. Meanwhile, research conducted by Rizky Pebriani Utami using ROE as a profitability measure shows that ROE has no significant effect on policy. dividend. Kartika Nuringsih's research using the ROA variable shows a negative effect on dividend policy.

The high level of profit of the owner of the company will increase the company's EPS and can increase the company's ability to pay dividends. Debt to Equity Ratio (DER) is a ratio that measures how far the company is financed by debt, where the higher this ratio describes the symptoms that are not good for the company (Sartono, 2017). Therefore, the lower the DER, the higher the company's ability to pay all its obligations. The use of debt that is too high will endanger the company because the company will fall into the category of extreme leverage (extreme debt), namely the company is trapped in high debt levels and it is difficult to release the debt burden. If the Debt To Equity Ratio (DER) decreases, the profit generated will increase and the dividends to be paid will be higher.

According to Marcellyna (2012), earnings per share is a comparison between the income generated (net income) and the number of shares outstanding. Earning per share is a ratio that reflects the company's ability to generate profits for each share outstanding (Darmadji, 2012: 139). Earning per share describes the company's profitability which is reflected in each share. Earning per share according to Gitman (2006: 68) states that earnings per share is generally of interest to present or prospective stockholders and management. Research conducted by Deitiana (2009) which shows that Earning Per Share has a positive effect on the Dividend Payout Ratio. According to Yudhanto's research (2012) that there is a significant effect of earning per share on the dividend payout ratio. According to the research results of Sunarto and Kartika (2003) showed that there is a significant effect between earnings per share on the dividend payout ratio. According to research conducted by Malik (2013) shows that earnings per share have a significant effect on the dividend payout ratio. Meanwhile, according to research by Nugroho (2013) shows that earnings per share has no significant effect on the dividend payout ratio.

## **LITERATURE REVIEW**

### **Dividend Policy**

Samrotun (2015) argues that the company's dividend policy is reflected in the company's dividend payout ratio, in determining the amount of dividends distributed involves two conflicting parties, namely the interests of investors and the interests of the company (Sutrisno, 2012). High dividend distribution is less preferred by management because it has an impact on decreasing management utility caused by the smaller amount of funds that are

within the scope of management control (Lestari and Chababib, 2016) . While Pamungkas, et al (2017) stated in dividend signaling theory that an increase in dividend payments by companies to investors is considered good news, because it indicates the condition and prospects of the company are in good condition, resulting in a positive reaction by investors (Jogiyanto, 2000).

Dividend policy is a decision on how much current profit will be paid as a replacement dividend from the investment invested and maintained for reinvestment in the company (Brigham and Houston, 2003).

Dividend policy determines the distribution of profits or investment reinvestment from investors, is closely related to the company's ability to pay dividends. The dividend paid by the company is high, then the stock price will also be high which has an impact on the high value of the company. This policy is to determine the amount of dividend payments that must be distributed to shareholders without reducing the company's internal funding sources.

## **Macroeconomic Factors**

### **a. Inflation**

Bank Indonesia defines inflation as generally rising prices. Meanwhile, M. Natsir (2014: 253) states that the notion of inflation is the tendency to increase the prices of goods and services in general and continuously . If only one or two goods are experiencing an increase, then this cannot be called inflation unless the increase is widespread or has an impact on the prices of other goods. The increase in inflation causes capital gains to decrease so that the profits obtained by investors are reduced. The occurrence of inflation can not be charged to consumers, thereby reducing the company's income. Thus, the increase in inflation makes investors sell their shares and will cause the share price to decrease. High inflation indicates an increase in the nominal amount of company income and thus leads to higher dividend payments.

### **b. Interest Rate**

The interest rate according to Boediono (2014:76) is the price of the use of investment funds (loanable funds). The interest rate is one indicator in determining whether a person will invest or save. High interest rates will encourage investors to invest their funds in banks rather than investing in the production sector or industry which has a greater level of risk. Meanwhile, according to Rismawati and Dana (2014) the SBI interest rate has a positive and significant impact on dividend policy. Thus, the inflation rate can be controlled through interest rate policies.

### **c. Return On Assets (ROA)**

According to Ryan (2016:112), Return on Assets (ROA) is a measure of income when compared to total assets. ROA is the ability of a business unit to earn a return on a number of assets owned by the business unit.

This ratio measures the rate of return on investment that has been made by the company using an asset it owns: Return on assets can be calculated using the formula:  $ROA = \text{Net Profit} / \text{Total Assets}$ , ROA also has an influence on dividend policy.

The higher the ROA, the higher the company's ability to generate profits. The higher the profit received by the company, the higher the availability of funds at the company allocated for dividends (Hanif and Bustaman, 2017).

#### **d. Return On Equity (ROE)**

According to Hery (2015: 230) ROE is the ratio used to measure the company's success in generating profits for shareholders. ROE is considered as a representation of shareholder wealth or company value.

The level of ROE has a positive relationship with stock prices so that the greater the ROE, the greater the market price, because the large ROE indicates that the return that investors will receive will be high so that investors will be interested in buying the shares, and this causes the market price to rise. stocks tend to rise. Return on equity can be calculated using the formula:  $ROE = \text{Net Profit} / \text{Share capital}$

A company with a high ROE means that the company is more optimal in using its own capital. However, in reality, investors in Indonesia rarely hold shares until the end of the year, investors are more concerned with conducting short-term transactions to pursue a high turnover rate from these transactions. This is done to get a high capital gain.

#### **e. Debt to Equity Ratio (DER)**

DER (debt to equity ratio) is a ratio that measures the level of the company's ability to pay off its obligations using its own capital. Debt to Equity Ratio (DER) is included in the leverage or solvency ratio. Solvency ratio is a ratio to determine the company's ability to pay its obligations if the company is liquidated. According to Hanif (2017), this ratio is also called the leverage ratio, which is to assess the company's limits on borrowing money. According to Sadikin (2018), DER or debt-to-equity ratio or debt-to-equity ratio is a financial ratio that shows the relative proportion between debt and equity used for funding company assets. Therefore, the lower the DER, the higher the company's ability to pay all its obligations. The greater the use of debt, it can have an impact on *financial distress* and bankruptcy. If the debt burden is high, the company's ability to distribute dividends will be lower. The lower the DER ratio means that there is less funding through debt used by the company and the higher the opportunity for the company to distribute dividends (Simbolon and Sampurno, 2017).

#### **f. Earnings Per Share (EPS)**

Brigham and Houston (2006) stated that Earning Per Share (EPS) is the net income available divided by the number of shares outstanding. Earnings Per Share (EPS) provides useful information for investors because it can provide an overview of the company's earning prospects in the future. The amount of EPS of a company can be known from the company's financial statement information. EPS is a market valuation ratio that shows the level of the company's ability to generate profits per share for its owners. This analysis is intended to measure how much profit per share is which is the right of the shareholder, so that if the profit per share is high, investors will be interested in investing by buying shares (Ardiyanti, 2015 ) so that the demand for shares will increase and ultimately increase stock returns.

## RESEARCH METHODS

The sample used in this study is a food and beverage manufacturing company listed on the Indonesia Stock Exchange, which publishes a complete annual report, both annual report and financial statements for 2012-2016, has a positive asset growth value and has never experienced a loss during the 2012 research period. -2016.

The data used is secondary data which is financial statement data, and the stock prices that are sampled are available on the Indonesian Stock Exchange and Yahoo Finance website pages. In this study, the independent variables are inflation, interest rates, ROA, ROE, DER, and EPS while the dependent variable is dividend policy.

The data analysis method in this study is multiple linear regression which includes descriptive statistical tests, classical assumption tests consisting of normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, multiple regression test, hypothesis test (partial test or t test), accuracy test model (simultaneous test/F test) and coefficient of determination test (R<sup>2</sup>).

### **The Effect of Inflation on Dividend Policy**

First hypothesis states that inflation has no effect on dividend policy in manufacturing companies listed on the BEI. To prove this hypothesis, it can refer to the results of testing the inflation value on the t-test of 0.669, which means that the inflation variable has no effect on dividend policy in manufacturing companies listed on the Indonesia Stock Exchange in 2012-2016, this result is evidenced by a significance value greater than 5% ( $0.669 > 0.05$ ).

### **The Effect of Interest Rates on Dividend Policy**

Second hypothesis states that interest rates have no effect on dividend policy in food and beverages companies listed on the IDX. To prove this hypothesis, it can refer to the results of testing the interest rate value on the t-test of -0.368 which means that the interest rate variable has no effect on dividend policy in food and beverages sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2012-2016, these results evidenced by a significance value greater than 5% ( $-0.368 > 0.05$ ).

### **Effect of Exchange Rate on Dividend Policy**

Third hypothesis states that the exchange rate has an effect on dividend policy in food and beverages companies listed on the IDX. To prove this hypothesis, it can refer to the results of the exchange rate test on the t-test of 0.673, which means that the exchange rate variable has no effect on dividend policy in food and beverages sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2012-2016, this result is evidenced by significance value is greater than 5% ( $0.673 > 0.05$ ).

### **The Effect of ROA on Dividend Policy**

Fourth hypothesis is ROA positive and insignificant effect on the dividend payout ratio. R. The ROA value on the t test is 0.000 , which means that the ROA variable has an effect on dividend policy in manufacturing companies.

### **Effect of RO E on Dividend Policy**

The fifth hypothesis is that ROE has a positive effect and has a significance level of 0.003 (less than 0.05).

### **Effect of DER on Dividend Policy**

The sixth hypothesis is that DER has a negative effect and has a significance level of 0.551 (greater than 0.05) which shows no effect which is significant between debt to equity ratio to dividend payout ratio.

### **Effect of EPS on Dividend Policy**

The EPS variable has a significance level of 0.000 (less than 0.05), so EPS has a positive and significant effect on the dividend payout ratio.

## **RESULTS AND DISCUSSION**

Descriptive analysis here can provide a subjective or descriptive picture of a data seen from the average, maximum, minimum, and standard deviation values. Descriptive analysis is used to obtain a general description of the observed variables, namely inflation, interest rates, ROA, ROE, DER, and EPS.

The inflation variable has a significance level of 0.501 (greater than 0.05), so inflation has a negative and insignificant effect on the dividend payout ratio. Expectations for future inflation are closely, but imperfectly correlated with levels experienced in the past. Therefore, if the reported inflation rate for the past month increases, investors often raise their expectations for future inflation, and this change in expectations will lead to an increase in dividend payments (Brigham & Daves, 2010). The results of this study are also related to previous research conducted by Mirbagherijam (2015) which states that inflation has a significant positive effect on the company's dividend policy. This is different from the previous research conducted by Ardiyanti (2015) which stated that inflation had an insignificant negative effect on the company's dividend policy.

Interest rate variable has a significance level of 0.788 (greater than 0.05), so the interest rate has a negative and insignificant effect on the dividend payout ratio. This shows that when the SBI interest rate increases, the amount of dividend payments to shareholders also increases. This could be because when the SBI interest rate increases, investors will switch to deposits or savings. To avoid this, management pays more dividends to shareholders as a stimulus so they do not switch to other sectors, especially banking. Thus, the rate of return or profit obtained by investors from investing in stocks will remain higher, exceeding the profits obtained from investing in deposits or savings. In addition, the increase in SBI interest rates is not too high so that increasing dividend payments, it is hoped that investors or shareholders will not switch to the banking sector. Jeong (2011) also concludes that interest rate movements have a positive and significant impact on dividend policy when it is still regulated by the government.

The ROA variable has a significance level of 0.000 (smaller than 0.05), so ROA has a positive and insignificant effect on the dividend payout ratio. Return on Assets has no effect on dividend distribution to shareholders because managers will consider the level of costs in the future can increased due to the growth of the company that occurred. This result is in

accordance with the Tax Differential Theory which suggests that companies should be more determine a low Dividend Payout Ratio or even not distribute dividends at all to minimize the cost of capital or maximize firm value.

ROE variable has a significance level of 0.002 (smaller than 0.05), so Return on Equity (ROE) has a significant effect on dividend policy. Return On Equity is a ratio to measure the company's ability to generate net income associated with dividend payments. With research results showing significant positive results, it means that the higher the ROE value, the higher the DPR value will be. Because the greater the ROE ratio indicates an increase in the net profit of the company concerned, it will attract investors and the company itself tends to distribute dividends. Companies that can record high profits are considered successful in running their business. Companies that can create large profits or profits mean companies can create internal funding for their own companies. Once there are these funds, the company will use to be retained as retained earnings and distributed to owners as dividends. Thus, profitability is absolutely necessary for the company if it wants to pay dividends. A company that can record profits, the company can choose to hold profits or distribute as dividends. If the company distributes dividends, the company's internal funding will decrease. According to the "Bird In the Hand" dividend policy theory, investors prefer to pay dividends rather than wait for the return of capital gains. So it can be concluded that the higher the profitability, the higher the dividends distributed.

DER variable has a significance level of 0.551 (greater than 0.05), then the DER has a negative effect which indicates there is no effect which is significant between debt to equity ratio to dividend payout ratio. This is due to the use of debt in corporate funding will be more impact on company management. Shareholders will prioritize funding company through debt. Company owner will strive to get dividends of the profits earned by the company instead of using it to finance debt.

The EPS variable has a significance level of 0.000 (less than 0.05), so EPS has a positive and significant effect on the dividend payout ratio. This is due to the company's tendency to withhold profits and allocate the profits earned to meet the company's funding needs and maintain company liquidity. The company's need for funds is used by the company to run its business and expand.

## **CONCLUSION AND SUGGESTION**

### **Conclusion**

Based on the results of data analysis that has been carried out, it can be concluded as follows: The inflation variable has a negative and insignificant effect on the dividend payout ratio, the interest rate variable has a negative and insignificant effect on the dividend payout ratio, the ROA variable has a positive and insignificant effect on the dividend. payout ratio, the variable RO E has a positive and insignificant effect on the dividend payout ratio, The DER variable has a negative and insignificant effect on the dividend payout ratio, and the EPS variable has a positive and significant effect on the dividend payout ratio.

### **Suggestion**

Suggestions For potential investors and investors, it is expected that before investing in a company, they should pay attention to the ROA, ROE, and EPS variables because these



three variables have a significant effect on the dividend payout ratio. For other researchers, it is hoped that they can add variables and periods under study in order to obtain more accurate and varied results.

## **BIBLIOGRAPHY**

- Andika Dwi Putra Pamungkas Etc. 2017, Effect of Education and Work Experience on Work Ability and Employee Performance, (Study on Employees of PT. INKA (Persero), Journal of Business Administration (JAB)|Vol. 43 No.1
- Ardiyanti, NRSA (2016). Effect of Fundamental and Technical Factors on Dividend Payout Ratio, Journal of Accounting and Taxation Research (JRAP), 2(2), p. 218-229.
- Boediono. (2014). Synopsis Series Introduction to Economics. Yogyakarta: BPFE.
- Brigham, Eugene and Joel F. Houston. 2010. Fundamentals of Financial Management. Book One, Tenth Edition, Jakarta. PT Salemba Empat.
- Chandra, A., Efni, Y., and Emrinaldi. (2018) Analysis of the Effect of Fundamental and Macroeconomics on Dividend Policy with Return on Assets as an Intervening Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange in 2012-2015, Journal of Business Management Tepak, 10(2), p. 188-209.
- Darmadji, Tjiptono. 2012. Capital Markets in Indonesia Question and Answer Approach, Edition 3. Jakarta: Salemba Empat.
- Deitiana, Tita. 2009. Factors influencing cash dividend payment policy. Journal of Business and Accounting. pp. 57-64.
- Gitman, Lawrence J. 2006. Principles of managerial finance, seventeenth edition. Massachusetts: Addison – Wesley Publishing Company.
- Hanif, M., & Bustamam. (2017). The Effect of Debt To Equity Ratio, Return On Assets, Firm Size, and Earning Per Share on Dividend Payout Ratio. Scientific Journal of Accounting Economics Students (JIMEKA) Vol 2, No. 1.
- Harry. 2015. Analysis of Financial Statements. Yogyakarta: CAPS (Center for Academic Publishing Service)
- Jeong, Jinho. 2011. An Investigation Of Dynamic Dividend Behavior In Korea. The International Business & Economics Research Journal, 10(6): pp: 21- 31
- Jogiyanto. 2000. "Portfolio Theory and Investment Analysis". Yogyakarta: BPFE UGM.
- Malik, Fakhra., Sajid Gul and Muhammad Tauseef Khan. 2013. Factors Influencing Corporate Dividend Payout Decisions of Financial and Non-Financial Firm. Research Journal of Finance and Accounting. Vol 4 No 1.
- Mirbagherijam, M. 2014. Asymmetric Effect of Inflation on Dividend Policy of Iran's Stocks Market. International Journal of Academic Research in Business and Social Sciences, 4(2). <https://doi.org/10.6007/ijarbss/v4-i2/652>
- Nanik Lestari 2016. "Factors Influencing Audit Delay: Empirical Study on Companies in the JSE." Journal of Business Accounting. Yogyakarta, Vol 2 No 1 Page 63-75
- Natsir, Muhammad, Monetary Economics and Central Bank, Jakarta: Mitra Wacana Media, 2014.
- Nugroho, Adi. 2013. Effect of Cash Ratio, Debt to Equity Ratio, Return on Assets, Earning Per Share, and Total Assets Turnover on Dividend Payout Ratio. Accounting journal. Faculty of Economics, University of Semarang (unpublished).
- Nuriawan. 2018. "The Effect of Financial Performance on Company Value Moderated by Corporate Social Responsibility (CSR) and Good Corporate Governance (GCG)". Journal of Accounting and Financial Research. Vol. 6, No. 1 (pp. 11-24).

- Rimbani, Ryan. P. (2016). Analysis of the effect of ROE, EPS, PBV, DER, and NPM on stock prices in real estate and property companies on the Indonesian Stock Exchange (BEI) for the period 2011-2013. *Journal of business and management*, 53(12).
- Rismawati, Ni Made and I Made Dana. (2014). The Effect of Asset Growth and Interest Rates for Bank Indonesia Certificates (SBI) on Dividend Policy and Firm Values in Manufacturing Companies on the Indonesia Stock Exchange (IDX). *Udayana University Management E-Journal*, 3 (4), 988-1004.
- Rudianto. 2013. *Information Management Accounting for Strategic Decision Making*. Jakarta: Erlangga.
- Samrotun, Yuli Chomsatu. 2015. "Dividend Policy and Factors Affecting It". *Journal of Paradigms* Vol. 13 No. 01.
- Sartono, Agus, 2017 , *Financial Management: Theory and Application*, third edition, Yogyakarta: BPFE.
- Simbolon, K., & Sampurno, D. (2017). Analysis of the Effect of Firm Size, DER, Asset Growth, ROE, EPS, Quick Ratio and Past Dividend on Dividend Payout Ratio. *Diponegoro Journal of Management*, 6(3), 1–13.
- Sunarto and Kartika, Andi. 2003. Analysis of factors influencing cash dividends on the Jakarta Stock Exchange. *Journal of Business and Economics*, Vol. 10 No. 1, pp. 52-66.
- Sutrisno, 2012, *Financial Management: Theory, Concepts, and Applications*, Yogyakarta: Ekonsia
- Tandelilin, Eduardus. 2010. "Portfolios and Investments: Theory and Applications". First Edition. Yogyakarta: Kanisius
- Yudhanto, Stefan. 2012. Effect of Net Profit Margin, Return On Assets, Return On Equity, Earning Per Share on Dividend Policy. *Journal of Economics and Business*. Faculty of Economics and Business Universitas Brawijaya Vol.1 No.2.