Analysis of the Effect of Earning per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on the Return On Asset (ROA) of Companies Listed on the LQ45 Index at PT. Indonesia Stock Exchange (BEI) 2014-2018

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ABSTRACT: This study aims to analyze the effect of EPS, NPM, DER on ROA of companies listed on the LQ45 index on the IDX in 2014-2018. The research methodology used is quantitative methods. Types and sources of data used are panel data and secondary data obtained from the IDX website. The sampling technique used was purposive sampling. The data analysis technique used is multiple linear regression. The results of this study indicate that partially the EPS and NPM variables have a positive and significant effect on ROA. Meanwhile, DER has a negative and insignificant effect on ROA. Simultaneously, the independent variables, namely EPS, NPM, and DER together have a significant relationship to ROA. Determination coefficient indicates that variations in the independent variables of EPS, NPM, and DER can explain variations in the fluctuation of dependent variable ROA by 99.34% while the rest of 0.66% is influenced by other variables

KEYWORDS-DER, EPS, LQ45, NPM, ROA

I. INTRODUCTION

The capital market is a part of the financial market which can formally be defined as a forum for various long-term financial instruments that can be traded, both in the form of debt and equity, whether issued by the government, public authorities, or private companies (Husnan, 2015).

Every investor who expects profits through investing in the capital market, needs to understand and know the financial performance of the companies that will be invested. One way that can be used to measure company performance is to analyze the company's financial performance ratios.

One indicator that can be used to measure the company's performance and potential in the future is by looking at the company's profitability growth rate. Profitability ratio is the ratio used to measure the company's ability to generate profits. As for other ratios that might affect the measurement of the company's profitability growth rate, namely, EPS, NPM, and DER.

Based on the above background, the authors are interested in compiling a thesis entitled "Analysis of the Effect of Earning Per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on the Return On Assets (ROA) of Companies Listed in LQ45 Index at PT. Indonesia Stock Exchange (BEI) 2014-2018 ".

2.1 Management

II. LITERATURE REVIEW

The main goal of a company is to maximize profits or wealth, especially for its shareholders. This objective is broad, because in practice this goal is always influenced by decisions in the financial sector. Management is the art and science of planning, organizing, directing, motivating, and controlling people and work mechanisms to achieve goals (Siswanto, 2015: 28).

2.2 Financial management

Financial management is a management activity based on its function which essentially seeks to ensure that the business activities carried out are able to achieve its objectives economically, namely measured by profit. (Sarinah and Mardalena, 2017: 9)

2.3 Capital market

According to Law No. 8 of 1995 concerning Capital Markets Article 1 paragraph 13. Capital markets are activities concerned with public offering of securities trading, public companies related to securities that have been issued, and institutions and professions related to securities.

2.4 Stock

According to Darmadji and Fakhruddin (2015: 6), shares can be defined as a sign of the participation or ownership of a person or entity in a company or limited liability company.

2.5 Investation

Investment is essentially an activity to place a number of funds currently owned in the hope that it will get benefits in the future.

2.6 Financial Statement Analysis

Financial statement analysis is a process that is thoughtful in order to help evaluate the current and past financial position and results of the company's activities, with the aim of predicting the condition of the company in the future (Kariyoto, 2017: 21).

2.7 Types of Financial Ratios

According to Hamidah (2019: 48) Financial ratio analysis is a way to analyze the relationship of various posts in a financial report. The results of this analysis are the basis for interpreting the company's financial condition.

In analyzing the financial performance of a company can use financial ratios. Broadly speaking, there are 5 (five) types of financial ratios that are often used to assess company performance. The five types of financial ratios are (Hery 2015: 166-169): (1) Liquidity Ratios; (2) Solvency Ratio; (3) Activity Ratio; (4) Profitability Ratio; and (5) Rating Ratio.

2.8 Return On Asset (ROA)

Return On Assets (ROA) looks at the extent to which the investment has been able to provide returns as expected. The investment is actually the same as the invested or placed company assets. Return on Asset measure the company's ability to use its assets for profit. This ratio measures the rate of return on investment that the company has made using all the funds (assets) it has (Kariyoto 2017: 43).

2.9 *Earning Per Share* (EPS)

According to Salamun and Isworo (2013: 26) Earning Per Share (EPS) or earnings per share is a measure of a company's ability to generate profits per share of the owner. The profit used as a measure is profit for the owner or profit after tax.

$$EPS = \frac{EAT}{J_{sb}}$$

Information:

EPS = Earning Per Share EAT = Earning After Tax Jsb = Shares outstanding

2.10 Net Profit Margin (NPM)

Net Profit Margin, is the ratio used to measure the percentage of net profit on sales (Hery 2015, p.168). According to Sugiono and Untung (2016: 67). This Net Profit Margin ratio shows how much net profit the company gets.

2.11 Debt to Equity Ratio (DER)

According to Hery (2015: 198). The ratio of debt to equity (Debt to Equity Ratio) is a ratio used to measure the proportion of debt to equity.

2.12 Hypothesis

- The hypothesis in this study is as follows:
- H1: There is an effect of Earning Per Share (EPS) on the Return on Assets (ROA) of Companies Listed on the LQ45 Index at PT. Indonesia Stock Exchange (BEI) 2014-2018;
- H2: There is an effect of Net Profit Margin (NPM) on the Return on Assets (ROA) of Companies Listed on the LQ45 Index at PT. Indonesia Stock Exchange (BEI) 2014-2018;

- H3: There is an effect of Debt to Equity Ratio (DER) on the Return on Assets (ROA) of Companies Listed on the LQ45 Index at PT. Indonesia Stock Exchange (BEI) 2014-2018;
- H4: There is an effect of Earning Per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) together on the Return on Asset (ROA) of Companies Listed on the LQ45 Index at PT. Indonesia Stock Exchange (BEI) 2014-2018;

2.13 Research Methods

The research method used in this research uses quantitative methods. This method is also called the discovery method because with this method various new science and technology can be discovered and developed. This method is called a quantitative method because the research data is in the form of numbers and the analysis uses statistics (Sugiyono 2016: 7). Based on the characteristics of the problem that discusses the effect of Earning Per Share (EPS), Net Profit Margin (NPM), Debt to Equity Ratio (DER) on the Return on Asset (ROA) of Companies Listed on the 2014-2018 LQ45 Index. Where the type of research used in this study is a type of quantitative research (quantitative research).

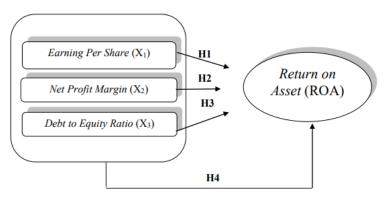


Figure 3.1 Research Model

The population used by the author in compiling this study is limited, namely the population that can provide information to the author so that it can provide an overview of the conclusions in this study. The population in this study are companies listed on the LQ45 Index in Indonesia which are listed on the Indonesia Stock Exchange from 2014 to 2018 and factors that can affect Return on Assets (ROA), which is reflected in the variables: Earning Per Share (EPS), Net Profit Margin (NPM) and Debt to Equity Ratio (DER). The sampling technique used purposive sampling method with annual data and the research period from 2014-2018.

The data analysis technique used is multiple linear regression by performing normality test, classical assumption test (multicollinearity test, autocorrelation test, heteroscedasticity test) and hypothesis testing t-statistic and f-statistic to test the significance of the effect together with a significance level of 5%.

The sample which are used in this study is companies listed on the LQ45 index which are listed on the Indonesia Stock Exchange with a time period of 2014 to 2018, through the following variables: Earning Per Share (EPS), Net Profit Margin (NPM), Debt to Equity Ratio (DER)

Kode	Nama Emiten	IPO	Kapitalisasi
BBCA	Bank Central Asia Tbk.	31-Mei-00	634.619 T
	Bank Rakyat Indonesia		
BBRI	(Persero) Tbk.	10-Nov-03	446.931 T
	Telekomunikasi Indonesia		
TLKM	(Persero) Tbk.	14-Nov-95	371.483 T
UNVR	Unilever Indonesia Tbk.	11-Jan-82	346.402 T
BMRI	Bank Mandiri (Persero) Tbk.	14-Jul-03	340.724 T
ASII	Astra International Tbk.	04-Apr-90	332.977 T
	Bank Negara Indonesia		
BBNI	(Persero) Tbk.	25-Nov-96	162.467 T
GGRM	Gudang Garam Tbk.	27-Agu-90	160.901 T
	Indofood CBP Sukses		
ICBP	Makmur Tbk.	07-Okt-10	121.866 T
UNTR	United Tractors Tbk.	19-Sept-89	102.019 T

Figure 3.2 Sampling

Furthermore, the data becomes the variables used in this study, first processed in the form of data tables statistics using the Microsoft Office Excel 2016 program and later The statistical data table is processed

using the Eviews software program 9.0 to analyze the influence between independent variables on the dependent variable through the multiple linear regression analysis method approach.

III. Discussion & Result

3.1 Descriptive Statistics of Research Variables

Where the descriptive statistics below will provide an overview of the research object sampled research.

ROA	EPS	NPM	DER
0.835948	1006.831	18.99380	2.883200
0.923865	734.1800	18.11500	1.310000
1.669317	4049.600	44.78000	7.210000
0.149219	145.2200	8.050000	0.500000
0.402737	952.5845	8.778819	2.431719
0.213854	1.834953	0.637515	0.394308
2.155468	5.524671	2.867406	1.377336
1.867019	41.33785	3.423508	6.781152
0.393172	0.000000	0.180549	0.033689
41.79740	50341.54	949.6900	144.1600
7.947676	44463446	3776.316	289.7497
50	50	50	50
	0.835948 0.923865 1.669317 0.149219 0.402737 0.213854 2.155468 1.867019 0.393172 41.79740 7.947676	0.835948 1006.831 0.923865 734.1800 1.669317 4049.600 0.149219 145.2200 0.402737 952.5845 0.213854 1.834953 2.155468 5.524671 1.867019 41.33785 0.393172 0.000000 41.79740 50341.54 7.947676 44463446	0.835948 1006.831 18.99380 0.923865 734.1800 18.11500 1.669317 4049.600 44.78000 0.149219 145.2200 8.050000 0.402737 952.5845 8.778819 0.213854 1.834953 0.637515 2.155468 5.524671 2.867406 1.867019 41.33785 3.423508 0.393172 0.000000 0.180549 41.79740 50341.54 949.6900 7.947676 44463446 3776.316

Table 3.1 Descriptive Statics

Based on Table 5.1 above, it can be concluded that it is average the value of Return on Asset of Companies Listed on the LQ45 Index at Indonesia Stock Exchange during the observation period from 2014 to by 2018 is 0.835948. Return on Asset of the listed company on the LQ45 Index at the Indonesia Stock Exchange the highest, namely amounting to 1.669317 and the Return on Asset of the companies listed on The lowest LQ45 index on the Indonesia Stock Exchange is 0.149219. Where is the standard deviation value of the company's Return on Assets variable listed on the LQ45 index is 0.402737.listed on the LQ45 index is 0.402737.

3.2 T test

The results of the analysis between the independent variables consist of Earning Per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on the dependent variable, namely the Return on Assets (ROA) of companies listed on the LQ45 index. By using the Eviews 9 program, the calculation results are obtained in table IV.13.

Dependent Variable: ROA Method: Panel Least Squares Sample: 2014 2018 Periods included: 5 Cross-sections included: 10 Total panel (balanced) observations: 50

t-Statistic Prob.		Coefficient Std. Error		Variable	
.0000		9,632231	0.054042	0.520544	С
.0408		2.119347	1.82E-05	3.87E-05	EPS
.0000		9.386081	0.001554	0.014586	NPM
.9895		-0.013191	0.015004	-0.000198	DER
.9			0.015004		DER

Table 4.1 T Test

3.3 F test

This F-test is used to determine the effect of independent variables in this case, namely Earning Per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) together on the dependent variable, namely Return on Assets (ROA). By using the Eviews 9 program, the calculation results are obtained in table 4.2.

Regression Results (TEST F)			
F-statistic	470.6634		
Prob (F-statistic)	0.000000		
Table 4.2			

3.4 Coefficient of Determination

The coefficient of determination (R2) is basically to see how well the regression line explains the data (Widarjono, 2017: 24). The results of the calculation of the coefficient of determination (R2) from this study can be seen in table 4.3 using the Eviews 9 program.

Regression Results (R2)			
R-squared Adjusted R-squared	0.993492 0.991381		

Table 4.3

IV. CONCLUSION

5.1 Analysis of the Effect of Earning Per Share (EPS) on Return on Assets (ROA)

The variable Earning Per Share (EPS) partially has a positive and significant correlation coefficient value on the Return on Assets (ROA) of companies listed on the LQ45 Index at PT. Indonesia Stock Exchange 2014-2018. This illustrates that the up and down movement of the value of Earning Per Share (EPS) during 2014 to 2018 has an effect on the ups and downs of the Return on Asset (ROA) of companies listed on the LQ45 Index at PT. Indonesia Stock Exchange 2014-2018. This can be seen in the calculation of the t test where t count (2.119347)> t table (2.01290).

5.3 Analysis of the Effect of Net Profit Margin (NPM) on Return on Assets (ROA)

The variable Net Profit Margin (NPM) partially has a positive and significant correlation coefficient value on the Return on Assets (ROA) of companies listed on the LQ45 Index at PT. Indonesia Stock Exchange 2014-2018. This illustrates that the up and down movement of the value of Net Profit Margin (NPM) during 2014 to 2018 has an effect on the ups and downs of the Return on Assets (ROA) of companies listed on the LQ45 Index at PT. Indonesia Stock Exchange 2014-2018. This can be seen in the calculation of the t test where t count (9.386081)> t table (2.01290).

5.4 Analysis of the Effect of Debt to Equity Ratio (DER) on Return on Assets (ROA)

The variable Debt to Equity Ratio (DER) partially has a negative and insignificant correlation coefficient value to the Return on Assets (ROA) of companies listed on the LQ45 Index at PT. Indonesia Stock Exchange 2014-2018. This illustrates that the up and down movement of the Debt to Equity Ratio (DER) does not affect the up and down movement of Return on Assets (ROA). This can be seen in the calculation of the t test where t count (-0.013191) <t table (2.01290).

5.5 Simultaneous Analysis of the Effect of EPS, NPM, and DER on ROA

Earning Per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) variables together have a significant influence on the Return on Assets (ROA) of companies listed on the LQ45 Index at PT. Indonesia Stock Exchange 2014-2018. This is indicated by the value of Fcount (470.6634)> Ftable (2.81).

5.6 Determination Coefficient Test Results

From the determination coefficient test, it appears that Earning Per Share (EPS), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) are able to explain the variations in the increase / decrease in Return on Assets (ROA) of companies listed on the LQ45 Index at PT. The Indonesia Stock Exchange 2014-2018 amounted to 0.993492 or 99.34% while the remaining 0.66% was explained by other factors that were not included in this regression model.

5.7 Suggestion

For companies, the results of this research can be used as material considerations and input for companies in conducting analysis the company's financial performance and keep the company value attractive

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interest of the public and investors in investing their funds in Indonesian Capital Market and For the investors or public, it is hoped that the results of this research can be used as a consideration and decision making in investing in a company, as well as helping investors in calculating rate of return on investment and investment risk.

For future researchers, the results of this study can be a reference for did similar research on influencing factors Return on Asset (ROA) by adding hypotheses and other variables to the Research.

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 p. 24

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