An Affect of Current Ratio and Debt-to-Equity Ratio to the Return on Assets: Case of Corporation Registered in Indonesian Stock Exchange Period of 2014–2020

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Abstract. The competition is very tight, causing competitive advantage to develop and involve the company's financial performance. Therefore, it is very important to further study the company's financial performance. This study intended to find out the current ratio and debt-to-equity (DER) ratio to the Return on Assets. The source data consist of secondary data from financial reports of the one of corporation's manufacturing industry that registered at the Indonesian Stock Exchange for the 2014-2020 period. The data analysis used in this investigation is multiple linear regression. The results showed that each of the Current Ratio and Debt-to-Equity Ratio does not affect the Return on Assets significantly and were also simultaneously tested from 2014 through 2020 with no-proved significantly.

Key words: current ratio, DER ratio, return on assets.

Introduction

Background

Every company always needs funds in order to meet the needs of daily operations and to develop the company. The need for these funds is in the form of working capital and for the purchase of fixed assets. To meet these funding needs, companies must be able to find sources of funds with a composition that produces the lowest costs. Both of these things must be pursued by financial managers (FAO of the United Nations). What is clear is that financial statements are able to provide information to parties inside and outside the company who have an interest in the company (Kasmir, 2016: 10).

In the industrial world, the competition is very tight, causing competitive advantage to develop and involve the company's financial performance. Therefore, it is very important to further study the company's financial performance. ROA is not perfect measure, but it is the most effective, sufficiently compliant financial quantify to appraises a corporation performance (Hagel III et al., 2013). Return on Assets (ROA) is an indicator to measure the company's financial performance and is a profitability ratio used to measure the company's effectiveness in generating profits by utilizing its total assets. Return on Assets is the ratio between profits after tax to total assets. The greater the Return on Assets, the better the company's performance because the greater the rate of return (Fahmi, 2017: 80).

Astra itself is a giant automotive company in Indonesia for four-wheeled, two-wheeled and commercial vehicles. The company's shares are 50.11 percent held by Jardine Cycle & Carriage Ltd. Meanwhile, 49.84 percent is allocated to the public. The average value of ROA from 2015 to 2017 for companies that show an increase in profitability every year, where in 2015 the amount of ROA was 0.06%, then in 2016 it was 0.07% and in 2017 it was 0.08%. This indicates the firm's ability to yield profits, while based on empirical data the magnitude of the Current Ratio, has the same phenomenon as ROA. Meanwhile, the average Debt to Equity Ratio fluctuated, which was seen in 2018 at 0.98%, then in 2019 at 0.88%, while in 2020 it decreased to 0.73%. Indonesia's auto industry association almost halved its 2020 vehicle sales forecast, dimming the outlook for Astra, which sells cars and trucks from Toyota Motor Corp. to Isuzu Motors Ltd. With Indonesia's economic growth set to cool to the slowest in almost two decades this year, Astra's other businesses including heavy machinery and palm oil are also feeling the hardship (Zhao, 2020). The current Ratio and Debt to Equity Ratio becomes a vital ratio for the performance of business corporation.

Several previous research includes (1) Md. Abdur Rouf's (2015: 25-32) study aims to the business performance of principal structure in Dhaka Stock Exchange (DSE) manufacturing companies, utilizing the Return On Assets (ROA) and Return On Sales (ROS) proxy. Observation period during 2008-2011 with 106 companies. Data analysis throughout Pearson correlations and multiple regression analysis. The study infers that one of the ratios i.e. Debt Equity Ratio is a negative and significant relationship with ROA and ROS. (2) Imamul Haque and Mohd Atif Afzal (2017: 61-66) study purposes to appraise the monetary performance of sales on liquidity, solvency, and profitability in the Fast Moving Consumer Goods (FMCG) Industry in India, utilizing the Return On Assets (ROA). Research subjects have been selected i.e. Indian Tobacco Company (ITC) Limited and Hindustan Unilever (HUL) limited. The period covered by the study is from the financial year 2011-2012 to 2015-2016. Data analysis throughout correlations and simple regression analysis. The study utters current ratios and quick ratios can further be increased by increasing current assets & fast assets or by reducing current liabilities and companies should try to maintain liquidity ratios close to standard levels. The company does not use a lot of debt in the capital structure. (3) Sasikanta Tripathy and Abdul Rahman Shaik's (2020: 1233-1240) study purposes to investigate the association between financial performance and leverage. Observation period during 2000-2018 with 56 companies listed on Bombay Stock Exchange (BSE) as final sample. Data analysis throughout the pooled OLS fixed effects, and random effects model with robust across the estimation methods. The study utters firm performance no implied from liquidity and leverage with positive relation as significantly.

This is a consideration for researchers to examine further how the influence of the Current Ratio and Debt to Equity Ratio on Return On Assets at PT. Astra International, Tbk for the period 2014-2020 which is one registered on the Indonesia Stock Exchange (IDX).

Research Purposes

1. To find out the current ratio in affecting the return on assets
2. To find out the debt-to equity ratio in affecting the return on assets
3. To find out the current ratio and debt-to equity ratio in affecting the return on assets

Theoretical Review

Shares

A share (stock) is one of the instruments of the most popular financial markets. Shares are a sign of participation or ownership of a person or entity in a business or limited liability company. Shares are in the materialize of a sheet of paper which states that the owner of the paper is the owner of the company that issued the securities (Indonesia Foreign Direct Investment, 2007). Shares are securities that are ownership. This means that the owner of the shares is the owner of the company, the bigger the shares he owns, the greater his power in the company. Profits obtained from shares are known as dividends and the distribution is determined in the General Meeting of Shareholders (Fahmi, 2017)

Earnings per Shares

Earnings per share are also one important indicator of the company ratio. EPS exhibited the sum compensation by the investor compliant with ever currency of reported (Brigham & Houston, 2016: 150). In prevalent mutual management, common shareholders and prospective shareholders are keen to earning per share, because it describes the amounts of money that was obtained for each share of common stock. Prospective holders of common stock. Suppose shareholders EPS great benefit, as this is any conductor of the corporation's fruitfulness (Enekwe et al., 2015). According to Irham Fahmi (2017: 77), net EPS per stock is part of the profit given to the shareholders of ever has held.

Financial Statements and Ratio

The financial statements is information that describes the condition of a company where the next it will be an information describing the performance of the company (Fahmi, 2017: 2). Munawir (2014) added the the financial report is a very important tool to obtain information relating to the financial position and the results that have been achieved by the company concerned." With such financial statements are expected to be helpful for users (users) to make economic decisions that are financial. A comparison of the ratio, of the amount by the number of others that see the comparison with the expectation will be found next answer was used as study materials to be analyzed and decided upon. The use of this ratio is very flexible word placement, which was heavily influenced by what and where the ratio used is adapted to the scientific area (Fahmi, 2017: 107). The main liquidity ratio is the ratio of (current ratio) is calculated by separating current assets from current debts. This ratio denotes to what breadth current debts encompass by assets hoped to be converted into cash in the short time (Brigham & Houston, 2016: 134). Debt to equity ratio (DER) is a ratio used to measure the use of debt to total shareholders' equity of the company. Heightened DER showed a high dependence on the capital acquired company from the outside so the burden on companies, is heavy. High DER will further affect investors' interest in a particular company's stock (Subramanyam, 2014). Return on Asset is a measure of a company's power to deliver profits with all assets owned by the company. Increasing Return on Assets (ROA), can be interpreted that the company has been efficient in creating profit by processing and managing its assets (Shahnia & Endri, 2020: 193-211).

Framework

The determined framework is that occurred to manage and critically review existent research under ever sub-domain (Pateli & Giaglis, 2004: 302-304), so it needs a parameter, i.e., a model. Forming a model is bounded by the form of structure, a form of content, and certain meanings (Husain, 2019: 1-9). Then, a statement is created on the research model which is a transient response to the study formulation has been stated in the shape of a question independent clause (Sugiyono, 2018: 64). The research framework proposed can be viewed in Fig. 1 below:

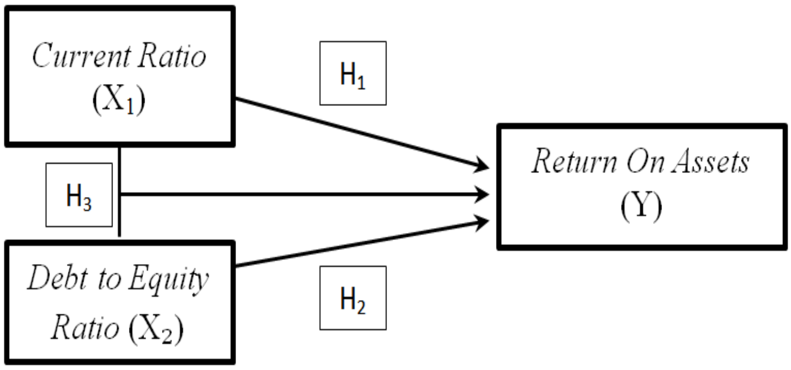

Fig. 1. Research Framework Proposed

H_1 : Current Ratio (CR) has a positive and significant affect on Return on Assets
H_2 : Debt-to Equity Ratio (DR) has a positive and significant affect on Return on Assets
H_3 : Current Ratio and Debt-to Equity Ratio have a positive and significant affect on Return on Assets simultaneously.

Research Methods

This research employs the type of causality by quantitative analysis approach. This study emphasizes propose data in the build of amounts and analysis using statistics (Sugiyono, 2018: 07). The operationalization of the research variables, i.e. Financial Ratio's (Liquidity and Profitability dimensions), Audit Committee, and the Dividend Policy deployed using the following tabulation (Table 1).

Table 1. Operationalization of Variables, and Measures

Variables	Abbreviation	Measures
Current Ratio's	CR	$\frac{Current\ Assets}{Current\ Liabilites}$
Debt-to Equity Ratio's	DER	$\frac{Total\ Liabilities}{Total\ Shareholders'Equity}$
Return On Assets	ROA	$\frac{Net\ Income}{Average\ Total\ Assets}$
Source: Research Proposed (2022)		

This study designates to the 'Ratio' scale type, which, represents all the characteristics of the nominal, ordinal, and interval scales. The population is the one of corporation's manufacturing industries registered at the Indonesian Stock Exchange from 2014 to 2020 i.e, the Published Financial Statements of PT. Astra International, Tbk. The samples requisite were consistently had their shares listed on the stock exchange within the period of observation and had complete data and information on the object under study in the financial statements. The data analysis method uses multiple linear regression. The proposed equation model is: $\mathrm{Y} = \alpha + \beta X_1 + \beta X_2 + \mathrm{e}$

Results and Discussion

Yielding of Descriptive Statistics

The descriptive statistics outcomes from seven data observations view as follows:

Table 2. Descriptive Statistics Test Results

	Minimum	Maximum	Mean	Std. Deviation
Current Ratio	1.13	1.54	1.3029	0.13009
Debt-to-Equity Ratio	0.73	0.98	0.8929	0.08321
Return On Assets	0.05	0.09	0.0729	0.01380
Source: Output from Programs (2022)				

According to the table for the Current Ratio (CR) minimum value is 1.13 and maximum value is 1.54, standard deviation is 0.13009 and average value is 1.3029. A positive Current Ratio indicates that of the current debt used by the company to operate, it is able to provide current assets for the company. Debt to Equity Ratio (DER) minimum value is 0.73 and maximum value is 0.98. Standard deviation of 0.8321 and the average value of 0.8929. A positive Debt to Equity Ratio indicates that of the total equity used by the company to operate, it is able to provide total debt for the company. Return on Assets (ROA) minimum value is 0.05 and a maximum value of 0.09, a standard deviation of 0.01380 and an average value of 0.0729, which means that the average company gains a profit of 7.29% from each total asset. A positive Return On Assets indicates that of the total assets used by the company to operate, it is able to provide profits for the company

Outcome: Multiple Regressions

Upon the proceeds of the output program, the multiple linear regression equations produced in this study are:

$$Y = 0.088 – 0.051\ X_1 + 0.058\ X_2$$

The constant value of 0.088 has a very large scale, where the Current Ratio and DER Ratio (X_1; X_2) if it has a score equal to zero, the ROA score is 8.8 percent. These constants are constructs whose data worths are permanent and cannot be altered. Current Ratio (X_1) has a coefficient value of minus 0.051, this means that if the other independent variables have a fixed value and the current ratio score increases, then the Return On Assets will decrease by 5.1 percent. The Debt-to Equity Ratio (X_2) has a coefficient value of 0.058, this means that if the other independent variables have a fixed value and the DER ratio increase, then the Return On Assets will increase by 5.8 percent.

Hypothesis Testing

Table 3. Hypothesis Tests

Variable	Regression Coefficients	t-Stats	Sig
Current Ratio	-0.051	-1.037	0.358
Debt-to Equity Ratio	0.058	0.746	0.497
R	0.775		
R^2	0.601		
F Stats.	3.014		0.159
Source: Data Processing (2022)			

The t-table value for (n) = 7-3 = 4 is 2.77645 with α = 5 percent.

Discussion

The score of R^2 is 0.601, indicating that the magnitude of the coefficient of the determination indicates that the independent variables involved in this study were able to affect the divergence of changes in the dependent variable by 60.1 percent, while the residual 39.9 percent was consequenced another variable not had in this study. The t-test states that the regression coefficient value of the Current Ratio is minus 1.037 with a significance of 0.358, which is higher than (>) 0.05, thereupon H_1 is rejected, and no confirm previous research (Imamul Haque & Afzal, 2017: 61-66) and (Tripathy & Shaik, 2020) which should try to maintain liquidity ratios and prove evidence statistically with positive signs. This means that the Current Ratio does not predispose the Return On Assets. The t-test states that the regression coefficient value of the Debt-to-Equity Ratio is 0.746 with a significance of 0.497, which is higher than (>) 0.05, thereupon H_2 is rejected, and no confirm previous research Abdur Rouf (2015: 25-32) and Tripathy & Shaik (2020: 1233-1240) which prove evidence statistically with negative and positive signs. This means that Debt-to Equity Ratio does not predispose to the Return on Assets. The F-stats that the Current Ratio and Debt-to Equity Ratio is 3.014 with a significance of 0.159, which is higher than (>) 0.05, thereupon H_3 is rejected, and no confirm previous research (Tripathy & Shaik, 2020: 1233-1240), which proves evidence statistically. This means that the Current Ratio and Debt-to-Equity Ratio does not predispose to the Return on Assets simultaneously.

Conclusion

Upon the results and discussion above, the inferences in this research are:

1. The Current Ratio (CR) has no significant affect on Return on Assets
2. The Debt-to Equity Ratio (DER) has no significant affect on Return on Assets
3. The Current Ratio and Debt-to-Equity Ratio (DER) has no significant affecting on Return on Assets simultaneously

Furthermore, studies can use the latest observation year period, and adding the number of corporations, will provide a greater possibility of obtaining results that are close to the real conditions. Companies, it is expected to be able to regulate DER so that debt can be financed by capital smoothly. Because when DER goes up, profits will go down and vice versa. For CR and ROA, the company is expected to increase so that the company can develop even more. For investors and potential investors who will invest in a company, it is better not to just rely on this ratio because there are many other unknown factors in this study that can show the company's financial performance.

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