

ANALYSIS OF THE EFFECT OF FINANCIAL LEVERAGE AND LIQUIDITY TOWARDS STOCK VALUE AND PROFITABILITY AS THE INTERVENING VARIABLE IN TRADING COMPANIES LISTED AT INDONESIA STOCK EXCHANGE 2010-2014

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ABSTRACT

This research aims to investigate the effect of financial performance variables of Debt to Equity Ratio (DER) and Current Ratio (CR) to the Stock Price with Return On Equity (ROE) as the intervening variable. The study is conducted to wholesale and retail companies that are listed in Indonesia Stock Exchange within 2010-2014 periods.

The samples are chosen by using Purposive Sampling Method, where 15 companies in Wholesale and Retail trading sub-sector are selected. There are two independent variables in this research, they are Debt to Equity Ratio (DER) and Current Ratio (CR), one dependent variable which is Stock Price as well as one intervening variable, Return on Equity (ROE). Analysis methods used in this research are multiple linear regression, simple linear regression and through path analysis.

The result shows that both Debt to Equity Ratio (DER) and Current Ratio (CR) have simultaneous positive and significant influence towards Return on Equity (ROE). Additionally, Return on Equity (ROE) variable positively and significantly affects the Stock Price. It can also be concluded that Debt to Equity Ratio (DER) and Current Ratio (CR) have an effect towards Stock Price with Return on Equity (ROE) as its intervening variable. It was found that DER has a coefficient of 0,318 to the Stock Price through ROE, whereas CR has indirect effect of 0,2415 towards Stock Price with ROE as intervening variable.

Keywords: *Debt to Equity Ratio, Current Ratio, Return on Equity, Stock Price*

INTRODUCTION

For the past several years, Indonesia experienced positive impact of economic growth and political stability which makes the investors interested to invest whether for short term, medium as well as long term in the country's stock market. The Indonesian market has become more attractive with a wider selection of companies that decided to go public and look for funding from the investors. Wholesale and retail trading is one of the sub-sectors of companies listed at the Indonesian Stock Exchange which is commonly known as *Bursa Efek Indonesia*. Investment climate of trading sector is expected to have a good prospect in the future due to increased consumerism in the region. One of the most important objectives of a company in a stock market is to have their

firm's share traded in a reasonable price. This is mainly because a public limited company is owned by a board of stockholders who would like to gain return from money they have invested. According to Brau and Fawcett (1997:425), companies are motivated to go public as it could help them to reduce the cost of capital and it is one of the firm's strategy to increase the value of the company.

To achieve this objective, the management has to operate efficiently while providing high quality goods and services at the lowest possible cost. High quality goods and services means better sales which leads to profitability as well as increase in stock price. Financially, profitability is affected by many factors, like the ability of the firms to pay its liabilities and utilize its assets efficiently.

Fundamental ratio which is done by analyzing a company's financial report is often used by the investors as well as the management to measure the fitness of a firm. The ratio analysis also provides indicators that could measure profitability rate, liquidity, corporate's income, asset turnover and company's obligation.

The financial ratio variables used in this research are financial leverage and liquidity towards stock value through profitability. The leverage variable is represented by Debt to Equity Ratio (DER), liquidity by Current Ratio (CR) and profitability variable is represented by Return on Equity (ROE) whereas stock value can be seen from the stock price.

Ardiatmi (2014: 6) finds out that Debt to Equity Ratio (DER) has positive and significant correlation towards Return on Equity (ROE). Whereas Aminatuzzahra (2010: 3) discovers that Debt to Equity Ratio (DER) has negatively significant effect towards profitability that is projected through Return on Equity (ROE). Another research which results in negative correlation between DER and ROE belongs to Shubita and Alsawalhah.

Vieira (2010) in his research finds that the average profitability of companies with high liquidity was much higher than that of lower liquidity. This finding is supported by another study conducted by Aminatuzzahra (2010: 4), where it was found that Current Ratio (CR) has a positive and significant effect towards Return on Equity (ROE) of go public manufacturing companies in year 2005-2009. However, a different result was obtained from a study done by Ardiatmi (2014:3). She finds out that Current Ratio (CR) has a negative and significant effect towards Return on Equity. Another research by Sri Nurdianti (2009:2) indicated a negative correlation between liquidity and profitability at PT. Telekomunikasi Indonesia.

From the previous researches, we could see that there are research gaps between each research. This research aims to provide an

alternative perspective on the impact of leverage and liquidity towards stock price with profitability as intervening variable. The factors that distinguish this research from previous studies is that profitability act as intervening variable. Another difference is the sector of the companies being used as the object of the sample are wholesale and trading companies sub-sectors listed in Indonesia Stock Exchange.

PROBLEM FORMULATION

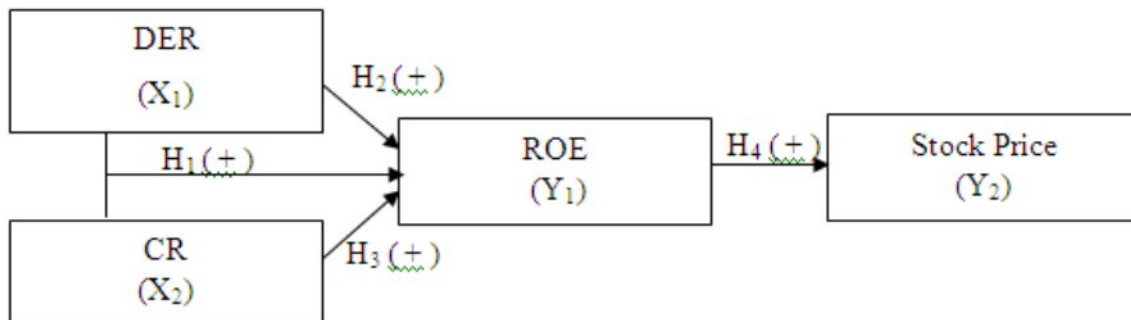
- 1) Do Debt to Equity Ratio (DER) and Current Ratio (CR) simultaneously influence Return on Equity (ROE) of wholesale and retail trading companies listed at Indonesia Stock Exchange year 2010-2014?
- 2) Does Debt to Equity Ratio (DER) partially influence profitability that is projected through Return on Equity (ROE) of trading companies listed at Indonesia Stock Exchange year 2010-2014?
- 3) Does Current Ratio (CR) partially influence profitability that is projected through Return on Equity (ROE) of trading companies listed at Indonesia Stock Exchange in year 2010-2014?
- 4) Does profitability that is projected by Return On Equity (ROE) affect the Stock Price of trading companies listed at Indonesia Stock Exchange year 2010-2014?
- 5) Does Debt to Equity Ratio (DER) influence Stock Price through intervening variable of Return on Equity (ROE)?
- 6) Does Current Ratio (CR) influence Stock Price through intervening variable of Return on Equity (ROE)?

HYPOTHESIS

Theoretical Framework

The theoretical framework in this research acts as empirical model that explain the relationship between each variables, which can be formulated as **Figure 1.**

Figure 1: Theoretical Framework



The Figure 1 shows that independent variables consist of DER (X₁) and CR (X₂) whereas ROE (Y₁) act as intervening variable with dependent variable of Stock Price (Y₂).

Hypothesis Formulation

Based on the problem formulation, theoretical reviews, previous research as well as empirical model, the writer could make hypothesis as follow:

1. The Effect of DER and CR towards ROE

Based on the supporting theories, we can make a hypothesis for simultaneous testing of DER and CR towards ROE as follows:

DER and CR simultaneously and significantly influence ROE

2. The Effect of DER towards ROE

Solvability or leverage ratio shows the amount of debt compared to the assets a company has. A high DER ratio illustrates that a company is operating with debt as its capital. When used correctly, a company's debt can be generated to profits compared to operating by using its own equity. This shows that there is positive correlation between DER towards profitability.

The above theory is supported by research done by Ardiatmi (2014) and Ulupui (2011)

where they find a positive correlation between the independent variable towards dependent variable. Therefore, we can conclude a following hypothesis:

Debt to Equity Ratio (DER) partially, positively influence ROE

3. The Effect of CR towards ROE

Each company has its own capability in paying its obligation or short-term debt. Sawir (2009) in Ardiatmi (2014:40) stated that low liquidity ratio shows that there is problem of liquidation within a company, whereas a liquidity that is too high indicates that there is a high amount of money unused which may potentially decrease the company's profitability.

Ardiatmi (2014) and Aminatuzzahra (2010) find that CR has negative effect towards ROE. However, Vieira (2010) and Ulupui (2011) in their research claimed that there is positive correlation between liquidity and profitability. According to the explanations, we can assume that high or low CR has an effect towards profitability. From the above summary, a hypothesis can be made as follows:

Current Ratio Partially and Significantly Influence Return on Equity

4. The effect of ROE towards Stock Price

Return on Equity is the ratio used to measure how much profit is owed to the owner of equity (Kurnianto, 2013:61). ROE also give information to the investors about the return rate of a company from its performance in making profit.

In general, higher profit means higher return for the investors. According to Signaling Theory, which states that when a company sends a good signal to the market in the form of information, the market will be able to determine which companies has good performance. The statement is supported by the research of Kurnianto (2013) and Panggabean (2005) which find that Return on Equity (ROE) has a positive and significant effect towards stock price. Therefore, a hypothesis is made as follows:

ROE has positive and significant effect towards Stock Price

RESEARCH METHODS

Research Objects

In conducting this research, the writer focuses on the financial reports of wholesale and

trading companies sub-sector which are listed as public limited corporations in Indonesia Stock Exchange in year 2010 to 2014. The data type used by the writer is secondary data. The criterias in which the data is sorted out are: (1) The number of companies being researched are 15; (2) The companies are listed in Indonesia Stock Exchange; (3) The companies are categorized as trading company in wholesale or retail sub-sector; (4) The companies have been in the stock market at least since 2009; (5) The value of Debt to Equity Ratio and Current Ratio cannot be negative; (6) The companies are still listed in Indonesia Stock Exchange in recent economic year (2015).

Data Analysis Technique

The data analyzing technique used in this research follows path analysis, the method is used to describe the cause and effect relationship of each variables. To explain the theoretical framework, the method is to divide the structure into two sub-structures (see Figure 2 and Figure 3).

Figure 2: Diagram of Path Analysis Sub-Structure 1

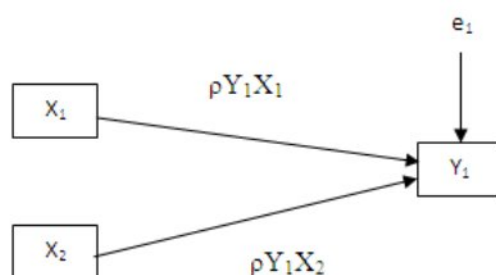
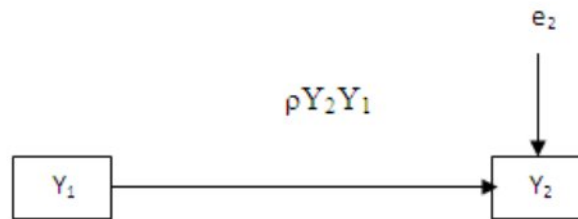


Figure 3: Diagram of Path Analysis Sub-Structure 2



From the two sub-structures (Figure 2 and Figure 3), equations which is used to describe

the relationship between each regression models can be made.

Equation of Regression Model 1

$$Y_1 = a + \rho Y_1 X_1 + \rho Y_1 X_2 + e$$

Equation of Regression Model 2

$$Y_2 = a + \rho Y_1 Y_2 + e$$

Explanation:

- ρ = Path Coefficient
- X_1 = Debt to Equity Ratio (DER)
- X_2 = Current Ratio (CR)
- Y_1 = Return On Equity (ROE)
- e = Residual Factors
- Y_2 = Stock Price
- a = Constants

RESULT AND DISCUSSION

	X	Y		Value		Adjusted R ²	Result
		ROE	Stock Price	F/t Test	Sig		
H1	DER & CR	Positive and Significant	-	$F_{\text{calculate}} = 16,960 > 3,119$	0.000	0,301 (30,1%)	H1 is accepted
H2	DER	Positive and Significant	-	$t_{\text{calculate}} = 5,524 > 1,666$	0.000	-	H2 is accepted
H3	CR	Positive and Significant	-	$t_{\text{calculate}} = 4,196 > 1,666$	0.000	-	H3 is accepted
H4	ROE	-	Positive and Significant	$F_{\text{calculate}} = 27,718 > 3,968$	0.000	0,265 (26,5%)	H4 is accepted

1. DER and CR simultaneously and significantly influence profitability that is projected through ROE.

The result of analysis show that liquidity and leverage have significant and positive influence towards profitability when tested simultaneously. This is based on the F test result which indicates $F_{\text{calculate}} = 16,960$ and $\text{sig} = 0,000 < 5\%$, the $F_{\text{calculate}}$ was higher than F_{table} (3,119). This finding is hypothetically similar to previous research done by Vieira (2010).

2. DER partially and significantly influences ROE

Debt to Equity Ratio which is representation of leverage variable in the research shows a positive correlation towards ROE. According to table 4. , DER has $t_{\text{calculate}} = 5,524$, which is more than the t_{table} (1,666) with $\text{sig} 0,000 < 0,05$. It means that the result shows a significant correlation. The value indicates that the higher DER percentage a company has, the higher the Return on Equity. The result is consistent to research done by Ardiatmi (2014) and Ulupui (2011) where they also find that Debt to Equity Ratio has positive impact towards ROE.

3. CR partially and significantly influences ROE

According to the table, T test of current ratio towards stock price was $t_{\text{calculate}} = 4,196 > 1,666$ with $\text{sig} 0,00 < 0,05$. The result shows that current ratio partially and significantly influences Return on Equity, it also has positive correlation to the profitability variable. The result of this research is consistent to the research done by Vieira (2010) where he found that a more liquid company has higher profitability. However, the finding is contrasting to Ardiatmi (2014) and Aminatuzzahra (2010) research where they both find Current Ratio has negative correlation towards Return on Equity.

4. ROE partially and significantly influence stock price

Return On Equity, which measures profitability in this particular research has $F_{\text{calculate}} = 16,960 > 3,119$ with $\text{sig} 0,00$. In other word, profitability has positive and significant correlation towards stock value. The result matches the writer's hypothesis and the previous research such as Panggabean (2005) and Kurnianto (2013).

CONCLUSIONS

According to analysis result which has been explained in the previous chapter, there are several conclusions that can be made for this research:

1. The growth of leverage ratio of wholesale and retail companies in 2010-2014 periods is declining.
2. The growth of liquidity ratio of wholesale and retail companies in 2010-2014 periods is declining.
3. The growth of profitability ratio of wholesale and retail companies in 2010-2014 periods is declining.
4. The growth of stock value of wholesale and retail companies in 2010-2014 periods is declining.
5. The regression analysis shows that leverage and liquidity simultaneously has positive and significant correlation towards profitability that is projected by Return On Equity (ROE).
6. Regression analysis shows that leverage partially has positive and significant correlation towards Return on Equity of wholesale and retail companies listed in Indonesia Stock Exchange in 2010-2014 periods.
7. Current Ratio or liquidity variable shows partially positive and significant correlation towards Return on Equity of wholesale and retail companies listed in Indonesia Stock Exchange within 2010-2014 periods.
8. The result of regression analysis shows a positive and significant result between ROE and share price.
9. The path analysis result shows that Leverage variable has indirect effect to

Stock Price through Profitability as much as 0,31815 or 31,8%.

10. Path analysis indicates that Liquidity variable has indirect effect to Stock Price through Profitability as much as 0,2415 or 24,15%.

Suggestions

Based on the conclusions, it is better for wholesale and retail companies to utilize loans efficiently so that the company could generate more profits. Writer also suggests that the companies should be able to manage its capital structure as well as possible so that costs of capital can be reduced, therefore, increasing profitability which leads to increase in stock price.

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