

## CAPITAL STRUCTURE DETERMINANTS AND IT'S INFLUENCE TO VALUE OF THE FIRM

Wholesale and Retail Companies Listed at Indonesia Stock Exchange 2008-2012

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### ABSTRACT

Every year, wholesale and retail industry in Indonesia always grow positively, even in the Asia Pacific region its the fastest. Therefore, investors see this as one of promising investment but Indonesia Capital Market Directory data indicates that most of wholesale and retail company is a high risk company, defined by company capital structure. Because of that before making decision to investment, investor need to analyze financial report to know determinants of capital structure and its influence to value of the firm.

Analysis was performed using financial statement data of 21 wholesale and retail companies listed on Indonesia Stock Exchange in 2008-2012 using path analysis to see the direct and indirect influence of independent variable ( liquidity, profitability and firm size) to dependent variable (value of the firm and capital structure) and whether the capital structure is an intervening variable . Results of analysis proved that independent variables simultaneously and partially significant influence to capital structure but it doesn't significant t influence to value of the firm but if its through capital structure, then its partially and simultaneously significant influence to value of the firm. Its means that capital structure is proven as an intervening variable.

**Key words :** *wholesale, retail, investment, capital structure, value of the firm, determinants, liquidity, profitability, firm size, path analysis, intervening*

### INTRODUCTION

The growth of wholesale and retail industry in Indonesia is increasing every year, even in the Asia Pacific region it is an industry with rapid growth. This growth is supported by income per capita, people's lifestyles, people's purchasing power, ease and wholesale and retail infrastructure which always grow. Given the huge market growth, its reasonable if investors see this as a business opportunity and wholesale and retail industry became one of the promising investment from the standpoint of investors. Data Indonesia Capital Market Directory in the period 2008-2012 shows that wholesale and

retail company is acompany with a high risk, therefore, before investing, investors must first do financial analysis to see how the company's financial position and performance. In financial analysis, investor will analyze financial statements. In the financial statements, investors will find information about the company's capital structure.

The capital structure is a source of corporate funds and a combination of debt and equity in the company long term financial structure. The Company which is operate use it's debt greater than it's equity means that the company is a high level risk company. High-risk capital structure is a

capital structure with debt to equity value is greater than 1. Data from Indonesia Capital Market Directory in the period 2011-2012 showed us that the wholesale and retail company mostly has DER value greater than 1. So the wholesale and retail company is consider as a company with a high degree of risk. It is therefore necessary to analyze the determinants that influence to capital structure and how it's influence to the value of the firm with determinant used is liquidity, profitability and firm size.

## LITERATURE REVIEW

### Pecking order theory

Pecking order theory states that the Company with high level of profitability show a low levels of debt, because the high profitability company has a abundant sources of internal funds (Breadley, Myers, & Marcus, 2007). Pecking order theory has two rules, the rule are using internal funds and issuing securities that have minimal risk. Pecking order theory implies that if the source of funds from outside the company is required then firstly the company need to issue debt before issuing shares. Only if the capacity of the company to use debt reaches a maximum value then the company can consider to issue stock. Considering there are various kinds of debt, the pecking order theory also indirectly expressed the company's managers should publish debt with a minimum risk.

### Capital Structure

The capital structure is a permanent proportion spend to cover the needs of corporate spending, using funds obtained from a combination or sources that comes from within and outside the company. It's should reflect the balance between debt and equity. Sources of fund that comes from outside is obtained from loans or debt (both short and long term) while the source of funds from the capital obtained from equiy itself (share capital, retained earnings and reserves).

The capital structure is divided into two essential parts, debt and equity, where the sum of debt and equity is create the value of the firm. The capital structure can be calculated through Debt to Equity Ratio (DER). Companies that have a high DER value means that doing it's operation, the company using debt and it's means that the company is not liquid and has a high level of risk.

Capital structure theory explains the long-term expenditure policies that may influence the value of the firm, the cost of capital of the company and the company's stock price as well as a combination of long-term debt and equity capital that can make optimal capital structure. Optimal capital structure is a capital structure that maximizes the value of the firm or to minimize the cost of capital of the company or to maximize the company's stock market price.

Capital structure theory is a theory that the most sophisticated and elegant in finance. But none of the theory of capital structure is able to evaluate the optimal capital structure for a company, so that in the determination of an optimal capital structure, managers or economists need to take evidence exists in the real world.

The First capital structure theory is known by Franco Modigliani and Merton Miller in 1958, called the theory of MM. According to them, In the capital structure using funds from debt does not have any influence on the value of the firm, but when it began to consider to use the tax factor, the use of debt will always be more profitable and can increase the value of the firm, assuming that when it used there is no bankruptcy costs, no transaction fees and interest on loans and deposits of the same deposit for individuals or companies.

Trade off theory saying that if companies use leverage, then the company would get benefit from tax savings, but in the other side the company need to calculate a costs that would arise from the use of leverage, such as bankruptcy costs and agency costs increased as a result of

the decline in the credibility of a company (Keown, 2005).

Signaling theory explains that when the company is able to generate profits, its tend to increase the amount of debt, due to the additional interest payments and income before taxes. Companies that predict lower profits will tend to use low debt levels. High corporate debt will increase the possibility that the company faced financial difficulties. The more successful a company, the possibility to use more debt is increasing. Companies can use the additional interest to reduce the bigger tax on corporate profits. The more secure the company in terms of financing, additional debt only slightly increase the risk of bankruptcy. Rational company would increase the debt if additional debt can increase profits while rational investor would see debt as a signal of an increase in the value of the firm.

Here are the factors that may have a significant impact on the optimal capital structure, the stability of sales, asset structure, operating leverage, growth rate, profitability, tax, controll, management attitude, the attitude of lenders and credibility appraisal company, market conditions, internal conditions corporate and financial flexibility (Weston and Brigham, 1997).

### **The value of the Firm**

The Company is an organization that combines and organizes various resources for the purpose of producing goods and services for sale (Salvatore, 2005). The company's main purpose according to theory of the firm is to maximize the value of the firm. Maximizing the value of the firm is very important for a company, because with maximizing the value of the company also means maximizing shareholder wealth. The company's value is the market value of enterprises securities (Keown, 2005)

The value of the firm is investor perception level of success of the company and is often associated with the

stock price. High stock price made the high value of the firm. The high value of the company will make the market believe not only on the company's performance today, but also on the company's prospects in the future.

Shares are proof of ownership of a person or entity against a company. Companies that need funds in the form of equity can be acquired through the issuance of shares. The shares can be sold directly to the owner of the funds or the investors or the general public through the stock market.

Stock return is the rate of profit earned by the owner or investor funds on short-term stock investments and long-term stock investment. A rational investor would consider two things when making invesments, that is the expected return and risk.

### **Liquidity**

Liquidity is the ability of a company to pay bills in the short term without disrupting operations. In the balance sheet, the company's liquidity is characterized by the division of current assets divided by short-term debt. A company that able to pay all its financial obligations called liquid company, and a company that has no able to pay all its financial obligations called ilikuid company. A company rate of liquid is when the value of the division of current assets value to short-term debt is greater than 1. In general, investors in making investment also saw the company's liquidity so that liquidity is also affecting the company's capital structure. Investors who invest will increase long-term debt or short-term debt, and it changing the capital structure of the company.

### **Profitability**

Profitability is a measure that indicates the company's ability to generate profits for its shareholders over the assets. Profit distributed to shareholders called dividends will cause the company requires external funding thereby increasing company long-term debt or short-term debt

and retained earnings cause the company have additional funds capital resulting in a change of corporate capital and a reduction in the use of the loan / debt. Therefore, it can influence the company capital structure.

Profitability is important in the company's survival in the long term, because the profitability indicate whether the company has good prospects in the future. Each company will always try to improve its profitability, because the higher the level of profitability of a company, the survival of the company will be more secure. Increased profitability indicates that the performance of management in managing operational source of funding to generate net income increased and more efficient, so it can be said that in addition to the efficient management in managing the investments of the company, investors also pay attention to the performance of management capable of managing resources. Growing profitability shows the company's prospects are better due to the potential for increased corporate profits. This is captured by investors as a positive signal of the companies that will increase investor confidence and facilitate the management of the company to attract capital in shares. If there is an increase demand for shares of a company, then it will indirectly raise the company's value in the stock market.

### **Firm Size**

Firm size described the size of the company, Firm size indicated by total sales, total assets and the average level of sales (Seftianne, 2011). Total assets as the use of funds affect the capital structure because it determines how a company should provide funds to finance its assets which led to change the composition of the debt and equity of the company.

Companies with large size have greater access and wide to obtain external sources of financing, so condition to obtain a loan would be easier because it is

said that companies with large size have a greater chance to win the competition or to survive in the industry.

Large companies have many advantages compared to small-sized companies. The Advantages of companies with large size is it can determine the level of ease companies to obtain funds from the capital market, the size of the company determines bargaining power in financial contracts, and there is a possible that a large size company have a scale of influence in cost and can earn more much profit (Sawir, 2004).

### **PREVIOUS RESEARCH**

Margaretha and Rizky (2010) conducted a study with dependent variable used is capital structure and independent variables used were firm size, tangibility, profitability, growth, non-debt tax shield, age and investment. The object of research was 40 manufacture companies listed on the Stock Exchange in the period 2005-2008, this research using multiple regression analysis. The conclusion from these studies is generally profitability, liquidity, growth and non-debt tax shield has influence with capital structure, while the the company size, tangibility, age and investment had no influence. In this research, Margaretha and Rizky (2010) measure the influence of independent variables in short-term capital structure and long-term capital structure. In short-term capital structure, the variables that have an influence is tangibility, profitability, liquidity, growth, non-debt tax shield and the age of the company , while firm size and investment variable has no effect. In Long-term capital structure, the variables that have an influence firm size, tangibility and non-debt tax shield, while profitability, liquidity, growth, age and investment variable has no effect.

Utami (2009 ) conducted a study with dependent variable used is capital structure and independent variables used were firm size, business risk , growth rate,

structure of asset and profitability. The object of research was 10 manufacturing companies listed on the Stock Exchange in the period 2003-2006, this research using multiple regression analysis. The conclusion from these studies is firm size, business risk and growth rate have no influence to capital structure while the structure of asset and profitability have positive influence to capital structure.

Kartika (2009) conducted a study with dependent variable used is capital structure and independent variables used are business risk, structure of asset, profitability, firm size. The object of research was 71 manufacture companies listed on the Stock Exchange in the period 2004-2006, this research using multiple regression analysis. The conclusion from these studies is business risk does not have an influence to capital structure while structure asset, profitability and firm size significant positive have an influence to capital structure.

Ganerse and Suarjaya (2014) conducted a study with dependent variable used is stock returns and independent variables used were liquidity, profitability and firm size. The object of research was 16 food and beverage companies listed on the Stock Exchange in the period 2008-2011, this research using multiple linear regression analysis. The conclusion from these studies is variable profitability, liquidity and firm size simultaneously significant influence to stock returns, but only variable profitability and firm size is partially significant influence to stock returns.

Sabir and Malik (2012) conducted a study with dependent variable used is leverage of firms and independent variables used are profitability, liquidity, firm size and tangibility. The object of research was 5 pakistan oil and gas companies in the period 2005-2010, this research using multiple regression analysis. The conclusion from these studies is profitability variable is negatively influence to leverage of firms

while the other variables showed a positive relation with leverage of firms.

Safitri, Sinarwati and Atmadja (2015) conducted a study with dependent variable used is stock returns and independent variables used are profitability, liquidity and leverage. The object of research was 55 manufacture companies listed on the Stock Exchange in the period 2009-2013, this research using multiple regression analysis. The conclusion from these studies is variable profitability, liquidity and leverage simultaneously significant influence to stock returns

## **HYPOTHESIS**

### **Liquidity Influence To Capital Structure**

Liquidity is the ability of a company to pay bills in the short term without disrupting operations. In the balance sheet, the company's liquidity is characterized by the division of current assets divided by short-term debt. A company that able to pay all its financial obligations called liquid company, and a company that has no able to pay all its financial obligations called ilikuid company. A company rate of liquid is when the value of the division of current assets value to short-term debt is greater than 1. In general, investors in making investment also saw the company's liquidity so that liquidity is also affecting the company's capital structure. Investors who invest will increase long-term debt or short-term debt, and it changing the capital structure of the company. It is supported by research conducted by Farah Margaretha and Rizky Aditya Ramadhan (2010). The result showed that the liquidity has influence to capital structure. Based on the description above, the first hypothesis formulated in this study are as follows

H1: If liquidity has increased, then the capital structure will decreased

### **Profitability Influence To Capital Structure**

Profitability is a measure that indicates the company's ability to generate profits for its shareholders over the assets. Profit distributed to shareholders called dividends will cause the company requires external funding thereby increasing company long-term debt or short-term debt and retained earnings cause the company have additional funds capital resulting in a change of corporate capital and a reduction in the use of the loan / debt. Therefore, it can influence the company capital structure. Endang Sri Utami (2009) in his research using variables profitability with the results of positive effect on the profitability of the capital structure. Based on the description above, it can be formulated the hypothesis in this study is as follows

H2: If the profitability has increased, then the capital structure will increase.

### **Firm Size Influence To Capital Structure**

Firm size described the size of the company, Firm size indicated by total sales, total assets and the average level of sales (Seftianne, 2011). Total assets as the use of funds affect the capital structure because it determines how a company should provide funds to finance its assets which led to change the composition of the debt and equity of the company. Andi Kartika (2009) conducted a study which has the result of firm size significantly influence the capital structure. Based on the description above, it can be formulated third hypothesis in this study is as follows

H3: If the size of the company has increased, then the capital structure will be increased.

### **Liquidity Influence To Value of The Firm**

An an investor would see the level of liquidity of the company when investments. The liquidity of the company reflect the level of activity of a stock

traded on the stock exchange, the more active the higher level of demand for the company's stock. Under the laws of supply and demand, if an item has a high level of demand for the goods it will increase the price. Based on the description above, it can be formulated fourth hypothesis in this study is as follows

H4: If Liquidity has increased, then the value of the firm will increase.

### **Profitability Influence To Value of The Firm**

Pecking order theory states that the Company with high level of profitability show a low levels of debt, because the high profitability company has a abundant sources of internal funds (Breadley, Myers, & Marcus, 2007). Companies that have a low level of debt will attract investors to invest or increase investor confidence due to high profitability demonstrate the effectiveness and efficiency of corporate management in running the operation. Increased investor confidence that could raise the company's value in the stock market. Based on the description above, it can be formulated fifth hypothesis in this study is as follows

H5: If the profitability has increased, then the value of firm will increase.

### **Firm Size Influence To Value of The Firm**

The size of the company is an important factor in the formation of the company's value. Larger companies can generate earnings greater and getting a higher return than smaller companies. This is supported by research conducted Ganerse and Suarjaya (2014) which result show that the size of the company partially positive significant effect on stock returns, if the size of the company large then the stock returns generated will be higher. Based on the description above, it can be formulated sixth hypothesis in this study is as follows

H6: If the company firm size increases, then the value of the firm will increase.

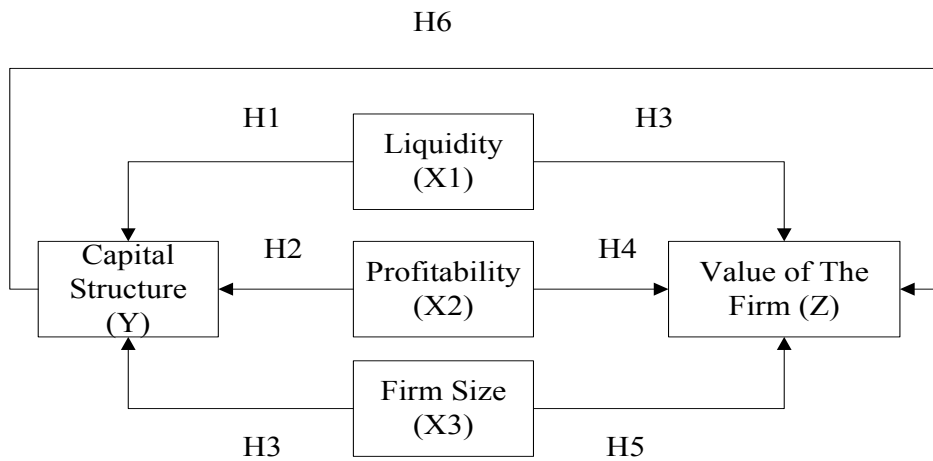
**Capital Structure Influence to Value of the Firm**

The capital structure is divided into two essential parts, debt and equity, where the sum of debt and equity is create the value of the firm. The capital structure can be calculated through Debt to Equity Ratio (DER).. Currently there are no rules that determine the fair value of DER, but generally DER value should be less than 1, because the DER value more than 1 indicates that the company is running their operation using debt higher than the equity. It's means that the company is high level risk. Investors when seeing a high lever risk of the company will reconsider whether the risk taken is balanced with the rate of return earned. This is supported by

research conducted by Sari and Abundanti (2012) which has the result that the capital structure negatively affect the value of the company. Based on the description above, it can be formulated seventh hypothesis in this study is as follows

H7: If the structure of the capital increase, then the value of the firm will decline.

The relationship between the variables in this study illustrates the dependency relationship of dependent variable with independent variables. Its show one to one relation from independent variables to dependent variable and describes the intervening variable. Here is a picture of the research model



**Picture 1 Research Model**

**RESEARCH METHODS**

**Research Design**

This research using clause design, which is looking for direct and indirectly relationship or influence between the variables of liquidity , profitability and firm size to capital structure and value of the firm.

**Data Collection Techniques and Sampling**

This study using secondary data financial report of 21 wholesale and retail companies. The sources of secondary data is Indonesia Capital Market Directory

issued by the Indonesia Stock Exchange in 2010-2013 containing financial data from period 2008-2012.

The sampling technique using purposive sampling method. It is a method of sampling with particular consideration based on interests or research purposes. The criteria used in sampling is a company engaged in wholesale and retail industry listed in Indonesia Stock Exchange in the period 2008-2012 and has a value of DER, ROE, current ratio, and total assets positive.

**Operational Definition and Measurement of Variables Capital Structure**

The capital structure is a combination of debt and equity in the company long term financial structure. To measure the value of the capital structure, the researchers used the Debt to Equity Ratio (DER), which shows the proportion of funds from debt to finance the company's activities. Companies that have a high DER value means that the company is running their operation using debt higher than the equity. It's means that the company is high level risk.

$$Debt\ Equity\ Ratio = \frac{Total\ Debt}{Total\ Equity} \quad (3.1)$$

**Value of The Firm**

The company's value is the market value of enterprises securities (Keown, 2005). The value of the company is investor perception of the level of success of the company and is often associated with the stock price. To measure the value of companies, researchers used stock return that shows the level of profit earned by the owner or investor funds on short-term stock investments and long done.

$$Share\ Return = \frac{Harga\ Saham\ t - Harga\ Saham\ t-1}{Harga\ Saham\ t-1} \quad (3.2)$$

**Profitability**

Profitability is the company's ability to earn income from business activities. To measure the variables of profitability, researchers used a Return on Equity (ROE), which indicates the company's ability to generate profit after tax by using their own equity of the company. The higher ROE value indicates that the use of equity capital committed by the management company more efficient. Increased profitability indicates that improved performance management in managing operational financing sources of funds effectively to produce a net profit.

$$ROE = \frac{Earning\ after\ taxes}{Total\ Equity} \quad (3.3)$$

**Liquidity**

Liquidity is the ability of a company to pay bills in the short term without disrupting operations. To measure liquidity variables, researchers used a current ratio which indicates the company's ability to repay current liabilities using current assets. Current ratio chosen as a measurement variable with the consideration that current ratio involve inventory in it, given that the company's main activity is selling goods produced by manufacturers with the amount of great stuff, so that this ratio can be used to determine the extent to which the ability of the company need to meet the demands of short-term creditors by using the assets are expected to be cash. Moreover, the current ratio can be used to predict the extent to which the company's ability to pay its obligations. The greater the current ratio, the better the position of creditors, as it will give a good signal where the possibility of the company to pay its obligations on time is enormous.

$$current\ ratio = \frac{Current\ Assets}{currents\ liabilities} \quad (3.4)$$

**Firm Size**

Firm size id describe a large or small a company. To measure the variable size companies, researchers used a total nominal asset.

**Table 1 Reseach Variables**

Variabel	Pengukuran	Skala
Liquidity	Current Ratio	Ratio
Profitability	ROE	Ratio
Firm Size	Total Asset	Nominal
Capital Structure	DER	Ratio
Value of The Firm	Stock Return	Ratio

**Analysis Method**

This study will be using two stage least squares (TSLS) analysis method to determine the effect, directly or indirectly



between liquidity, profitability and the size of the company to the value of the firm with capital structure as an intervening using path analysis techniques.

In the statement of financial position, it illustrates the pattern of financing assets as use of fund from liabilities as the source of funds. Financing patterns show interplay relationship, where the value of current liabilities and long-term debt will be amended if there is a change in the value of current assets, and long-term debt with equity would change if the value of fixed assets changed. If the composition of the liabilities change, then the company's capital structure will change, because the composition of liabilities and equity formed a company's capital structure.

The interplay is one to one relation that can be drawn into a structural equation follows:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon \quad (3.6)$$

$$Z = \alpha + \beta_4X_1 + \beta_5X_2 + \beta_6X_3 + \varepsilon \quad (3.7)$$

$$Z = \alpha + \beta_7Y + \varepsilon \quad (3.8)$$

Where :

Z = Value of the Firm

Y = Capital Structure

$\alpha$  = Constanta

$\beta_i$  = Path coefficient

X1 = Liquidity

X2 = Profitability

X3 = Firm Size

$\varepsilon$  = Error

## RESULT

### Descriptive Analysis

The lowest value of current ratio from 81 data is 0,68 and the highest is 10,2. The lowest value achieved by PT Hero Supermarket in 2012 and the highest value achieved by PT Triwira Insanlestari in 2009. The average value of the current ratio is 2,17 with standard deviation value is 1,9 . It means that wholesale and retail company have average ability to pay short-term obligations 2 times greater than their

obligations so that the company is a liquid companies.

The lowest value of return on equity from 81 data is 0,002 and the highest is 0,81. The lowest value achieved by PT Inti Perkasa Sigmagold in 2008 and the highest value achieved by PT Matahari Putra Prima in 2010. The average value of the ROE is 0,14 with standard deviation value is 0,13. This value indicates wholesale and retail company have an average rate of return on equity about 13-14% pa. The average value and standard deviation showed no major fluctuations in the wholesale and retail company.

The lowest value of total assets from 81 data is 0,04 and the highest value is 11,42. The lowest value achieved by PT Millennium Pharmacon International Tbk in 2012 and the highest value achieved by PT Matahari Putra Prima in 2010. The average value of total assets is 2,15 with standard deviation value is 2,49.

The lowest value of debt equity ratio from 81data is 0,10 and the highest value is 23,94. The lowest value achieved by PT Ace Hardware in 2009 and the highest value achieved by PT Permata Sakti Prima Tbk in 2008. The average value of DER is 2,46 with standard deviation value is 3,83. The average value of DER showed that wholesale and retail companies is a company with high level of risk because of DER value greater than 1.

The lowest value of stock return from 81 data is 0,81 and the highest value 3,31. The lowest value achieved by PT Triwira Insan Lestari Tbk in 2009 and the highest value achieved by PT Mitra Adi Perkasa Tbk in 2010. The average value of return is 0,33 with standard deviation value is 0,77. Standard deviation value is greater than the average value, this indicates that there is fluctuations in wholesale and retail companies stock returns.

**Quality Test Data**

**Normality test**

Normality test used to determine whether the data used normally distributed or not. Parametric analysis such as linear regression requires that data should be normally distributed. One method used to test for normality is the Kolmogorov-Smirnov Z method. Decision-making method to this test is, if the significance value > 0.05 then the data were normally distributed and if the significance < 0.05 then the data were not normally distributed. The Result of normality test for independent and dependent variable in this research has significant value of 0,2. The significant value is greater than 0.05 so the conclusions is sample of data from this research is normal distributed.

**Classical Assumption Test**

**Heteroscedasticity**

Heteroscedasticity test aims to determine whether there are similarities in the regression model residual variance from one observation to another observation. Method for detecting the presence or absence of heteroscedasticity is looking at the graph plot between the predicted value of the dependent variable (ZPRED) with residual (SRESID), the point spread with no clear pattern above and below the number 0 on the Y axis

Test Heteroskidastity of the capital structure by looking at the graph plot between the predicted value of the dependent variable (ZPRED) with residual (SRESID) has the result that the dots spread pattern is unclear above and below the number 0 on the Y axis so that it can be concluded that the regression model did not happen heteroscedasticity problem.

Test Heteroskidastity of value of the firm by looking at the graph plot between the predicted value of the dependent variable (ZPRED) with residual (SRESID) has the result that the dots spread pattern is unclear above and below the number 0 on the Y axis so that it can be concluded that

the regression model did not happen heteroscedasticity problem.

**Multicollinearity**

Multicollinearity test aims to test whether there is strong or high regression correlation was found between the independent variables, this test is using the value of VIF (Variance Inflation Factors) and tolerance.

Rules in this test is if  $VIF > 10$  and the value of tolerance  $< 0.1$ , then there is multicollinearity between independent variables in regression models and if  $VIF < 10$  and tolerance values  $> 0.1$ , then there is no multicollinearity between independent variables in the regression model.

Multicollinearity test conducted on the three equations have results tolerance value greater than 0.1 and VIF smaller than 10, so that the conclusions drawn are there is no multicollinearity in the third equation.

**Table 2 : Result of Multicollinearity Test**

Variable	Multicollinearity			
	Capital Structure		Value of The Firm	
	Tole	VIF	Tol	VIF
Liquidity	0,918	1,089	0,935	1,070
Profitability	0,826	1,211	0,790	1,266
Total Asset	0,895	1,118	0,839	1,192
Capital Structure			1,000	1,000

**Autocorrelation**

Autocorrelation is the correlation between observations in a single variable. how to detect the presence of autocorrelation is using Durbin Watson (DW) statistics. To help concluding the relationship autocorrelation, DW has a table that is used as a rule of comparison test conducted DW.

DW table consists of two values, the lower limit (dL) and the upper limit (dU). dL and dU value obtained through Table DW to see how many samples as well as many independent variables used. dL and

dU used as a comparison test DW, with the rules if the value  $DW < dL$  and  $DW > 4-dL$  means that there is a correlation, if the value of  $dL < DW < dU$  or  $4-dU < DW < 4-dL$  means no definite decision and if value  $dU < DW < 4-dU$  means no correlation occurs.

The result of autocorrelation test conducted on equation 3.6 using the Durbin-Watson is 1,938. Based on the table with a significant DW 0.05 with a value of  $k = 3$  (number of independent variables) and  $N = 40$  (amount of data), the obtained values of  $dL = 1.3384$  and  $dU = 1.6589$ . If the results of DW inserted into the test table, it can be concluded that the Durbin-Watson value of 1.938 is located in the area  $dU < DW < 4-dU$  which means there is no autocorrelation in the equation 3.6.

The result of autocorrelation test conducted on equation 3.7 using the Durbin-Watson is 1,245. Based on the table with a significant DW 0.05 with a value of  $k = 3$  (number of independent variables) and  $N = 21$  (amount of data), the obtained values of  $dL = 1.0262$  and  $dU = 1.6694$ . If the results of the DW inserted into the test table, it can be concluded that the Durbin-Watson value of 1,245 located in the area  $dL < DW < dU$  which means no definite decision on the equation 3.7.

The result of autocorrelation test conducted on equation 3.8 using the Durbin-Watson is 1,464. Based on the table with a significant DW 0.05 with a value of  $k = 1$  (the number of independent variables) and  $N = 21$  (amount of data), the obtained values of  $dL = 1.2212$  and  $dU = 1.4200$ . If the results of DW inserted into the test table, it can be concluded that the Durbin-Watson value of 1.464 is located in the area  $dU < DW < 4-dU$  which means there is no autocorrelation in the equation 3.8.

## Hypothesis Testing

### Analysis of Coefficient Determination

$R^2$  Analysis - R Square or the coefficient of determination used to know how big the donation presentation independent variables together on the dependent

variable. For linear regression model that uses three or more independent variables, to analyze the coefficient of determination will use the adjusted R Square while for the linear regression model that uses 1 independent variables, to analyze the coefficient of determination will use the value of R Square.

Adjusted R Square of equation 3.6 is 0.37, the conclusion drawn is that the effect of variable liquidity, profitability and the size of the company to variable capital structure is 37.2% and the influence of other factors not examined was 62.8%

Adjusted R Square of equation 3.7 is 0.111, the conclusion drawn is that the effect of variable liquidity, profitability and company size on the variable value of the company was 11.1% and the influence of other factors not examined was 88.9%

Adjusted R Square of equation 3.8 is 0,211, the conclusion drawn is that the effect of variable capital structure to the variable value of the company is 21.1% and the influence of other factors not examined was 78.9%

### Test F (ANOVA)

Test F was used to test the influence of independent variables together on the dependent variable. Decision making is based on the significance value, if  $Sig > 0.05$  then  $H_0$  is accepted and if  $Sig < 0.05$  then  $H_0$  is rejected.  $H_0$  is the null hypothesis which state that there is no simultanly influence on the dependent variable form independent variables.

Test F on equations 3.6 and 3.8 show the Sig value less than 0.05, the conclusion drawn in the equation 3.6 is variable liquidity, profitability and the size of the companies simultanly influence the capital structure and the conclusions drawn in the equation 3.8 is a variable structure capital simultanly influence the value of the firm.

Test F in equation 3.7 shows the Sig greater than 0.05, the conclusion drawn in the equation 3.7 is variable liquidity, profitability and the size of the companies

simultantly does not influence the value of the firm.

**Test T - Partial Significant**

Test T was used to test the influence of partially independent variables to dependent variable. Decision making is based on the significance value, if Sig>0.05 then H<sub>0</sub> is accepted and when Sig<0.05 then H<sub>0</sub> is rejected. H<sub>0</sub> is the null hypothesis which state that there is no partially influence from the independent variables to the dependent variable.

Test T at each independent variable in the equation 3.6 and 3.8 show the Sig value less than 0.05, the conclusion drawn in the equation 3.6 is variable liquidity, profitability and company size significantly influence the capital structure and the conclusions drawn in the equation 3.8 is a variable capital structure significantly influence the value of the Firm.

**Table 3 Value of T**

Variable	t			
	Capital Structure		Value of The Firm	
	t	Sig.	t	Sig
Liquidity	-2,377	0,23	1,786	0,092
Profitability	2,248	0,31	-0,074	0,942
Total Asset	-3,968	0,00	1,374	0,187
Capital Structure			-2,253	0,036

**Intervening Analysis**

From individual relationships between independent variables on the dependent variable there is an intervening variable that needs to be analyzed its influence in the research model. Through multilevel regression analysis, we get coefficient path directly connecting the variable liquidity, profitability and firm size variable value of the firm and capital structure and we get coefficient path directly connecting capital structure to value of the firm. To see whether the

capital structure is an intervening variable to value is the firm is by looking the sum value of indirect influence. If the amount of the indirect influence is greater than the direct influence of value of the firm, then the intervening variables proved influential.

Based on the table 2 below, the amount of indirect influence is greater than the direct influence of value of the firm, so that the study was able to prove that the capital structure is an intervening variable that is able to give effect to the relationship between the variables of liquidity, profitability and the size of the company to the value of the Firm

**Table 4 Direct and Indirect Influence**

Variabel	DER	Return Saham	
	PL	PL	PTL
A	B	C	D = B x -0,459
Current Ratio	-0,315	0,389	0,145
ROE	0,314	-0,017	-0,144
TA	-0,532	0,316	0,244
DER		-0,459	
			0,245

**Discussion**

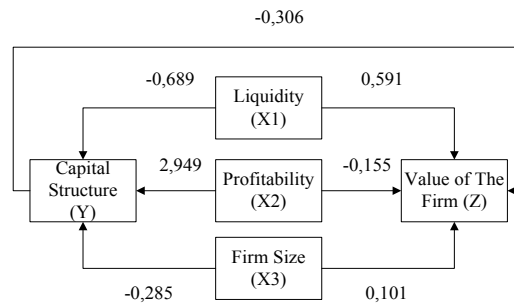
Based on the results of the analysis above, relationship between independent variables and dependent variable in the equation 3.6 - 3.8 can be described as a path diagram analysis. Below is a structural equation formed from the coefficients in our model

$$Y = 3003 - 0,689 X1 + 2,949 X2 - 0,285X3 \tag{4.1}$$

$$Z = -0,345 + 0,591 X1 - 0,155 X2 + 0,101 X3 \tag{4.2}$$

$$Z = 1270 - 0,306 Y \tag{4.3}$$

Significant value equation 4.1 and 4.3 is smaller than 0.05, while significant value equation 4.2 is greater than 0.05



Picture 2 Path Diagram

Based on structural equation above, it can be explained as follows:

**Capital structure significantly influence to value of the firm**

Statistical tests showed that the capital structure has a negative coefficient 0.306 unit and significant value 0.036, which means that if there is a value added to capital structure 1 unit, then the value of the firm will decrease 0.306 units. Significant value of capital structure is smaller than 0.05 so the conclusions drawn are capital structure significantly influence the value of the firm. This proves H7 proposed by the researchers, that the investor will consider investing in the company's capital structure, when the company increased its capital structure due to the use of debt increases, investors will consider it when buying shares of the company. The results are consistent with results of previous studies Okky Safitri, Sinarwati and Anantawikrama Tungga Atmadja (2015) which states that the variable leverage positive effect on firm value.

**Liquidity significantly influence to capital structure**

Statistical tests showed that the liquidity has a negative coefficient of 0.689 unit and the significant value of 0.023, which means that if there is a liquidity value added 1 unit then the capital structure will decrease 0.689 units. Significant value of liquidity is smaller than 0.05 so the conclusions drawn are

liquidity significantly influence the capital structure. Results of this study are not consistent with results of previous studies by Mahvish Sabir and Qaisar Ali Malik (2012) which states that the liquidity has a positive influence to the capital structure of the oil and gas company in pakistan because the results of this study stated that liquidity has a negative influence to the capital structure.

**Profitability significantly influence to capital structure**

Statistical tests showed that the profitabilit has a positive coefficient 2.949 unit and significant value 0.031, which means that if there is a value added to profitability 1 unit then the capital structure will be increase 2,949 units. Significant value of profitability is smaller than 0.05 so the conclusions drawn are profitability significantly influence capital structure. The results are consistent with results of previous studies by Endang Sri Utami (2009) which states that the profitability has positive influence to capital structure. Profitability is the most dominant factor influencing capital structure.

**Firm size significantly influence to capital structure**

Statistical tests showed that firm size has a negative coefficient 0.285 unit and significant value of 0.000, which means that if there is a value added to firm size 1 unit, then the capital structure will

decrease 0.285 units. Significant value of firm size is smaller than 0.05 so the conclusions drawn are firm size significantly influence to capital structure variables. Results of this study are not consistent with results of previous studies by Andi Kartika (2009) which states variables firm size has positive influence to capital structure because the result of this research is firm size negatively influence to capital structure.

**Liquidity doesn't have influence to value of the firm**

Statistical tests showed that the liquidity has a positive coefficient of 0.591, which means that if the value of liquidity rose 1 point then the value of the firm will increase 0.591 units but liquidity significant value is 0.092, so its mean that the liquidity variables does not influence the value of firm.

**Profitability doesn't have influence to value of the firm**

Statistical tests showed that the profitability has a negative coefficient of 0.155, which means that if the value of profitability rose 1 unit then the value of the firm will be reduced 0.155 units but the significant value is 0.942, so its mean that the profitability variable does not influence to value of the firm.

**Firm size doesn't have influence to value of the firm**

Statistical tests showed that the firm size has a positive coefficient 0.101, which means that if the value of the size of the company rose 1 point, then the value of the company's value will increase by 0.101 units but the significant value is 0.187, it means that firm size does not influence to value of the firm

**Table 5 Result Hypothesis Testing**

Hypothesis		Result	Description
H1	If liquidity has increased, then the capital structure will decreased	Retain	Liquidity has a negative influence to capital structure
H2	If the profitability has increased, then the capital structure will increase	Retain	Profitability has a positive influence to capital structure
H3	If the size of the company has increased, then the capital structure will be increased	Reject	Firm size has a negative influence to capital structure
H4	If Liquidity has increased, then the value of the firm will increase	Reject	Liquidity is not significantly influence to value of firm
H5	If the profitability has increased, then the value of firm will increase	Reject	Profitability is not significantly influence the value of firm
H6	If the company firm size increases, then the value of the firm will increase	Reject	Firm size is not significantly influence to value of firm
H7	If the structure of the capital increase, then the value of the firm will decline	Retain	capital structure has a negative influence to the value of firm

**Manajemerial nt Implications**

Companies must pay attention to the company's capital structure. Capital structure must be made and managed

optimally because as the result of this research that capital structure has influence to value of the firm. If the company made

additional debt, the level of risk the company will be increased as well.

Increasing value of the firm could happen if the company stock is often traded, therefore all activities must be centered to increase value of the firm. One of the way to increase value of the firm is by investment decisions and funding decisions. Investment and funding decisions must be planned carefully because the investment decisions taken will affect the left side of the balance sheet and funding decisions taken will affect the right side of the balance sheet. An increase in the value of the firm will lead to an increase in all financial aspects like profitability.

The dominant factors affecting capital structure is profitability, so the company must improve profitability, improvement of profitability will made company performance increasing. If profitability increase, the company can also consider to obtain internal financing through retained earnings so it can reduce external financing from debt. A decrease from external financing will reduce value of debt to equity, causing the company's risk level is reduced. In conducting its operations, the company also recommended to more effective and efficient, therefore the value of profitability will increase. Increasing value of profitability does not guarantee an increase in value of firm but it still needs to be done because of the value of profitability is a guarantee to investors that the company has a future.

Liquidity is the ability of a company to pay bills in the short term without disrupting operations. In general, investors in making investment will see whether a company is liquid or not, a company with good value of liquidity in running its operation does not require additional debt so it will lower capital structure and reduced the level of risk, therefore the company must always maintain value of liquidity and must increase the value of liquidity.

The company in addition assets must pay attention to the return on assets, good assets are assets that can add company's revenues so the company does not need additional loans to manage. In there is an absence of additional debt then there is no additional risk level.

Based on these results, the fundamental analysis directly does not significantly influence the value of the firm but if through the capital structure, the fundamental analysis indirectly significantly influence the value of the firm, so the company must always maintain the company's financial fundamentals and the composition of the debt and equity of the company. For investors and prospective investors in making investment should have to pay attention to the information contained in the financial statements in this liquidity, profitability and the size of the company as consideration in making the right investment decisions and profitable.

## CONCLUSION & SUGGESTION

### Conclusion

The conclusion drawn by this study are variable of liquidity, profitability, and firm size simultantly and partially proved significantly influence capital structure variables. Partially, the variable of liquidity has negative influence to capital structure variables, the variable of profitability has positive influence to capital structure variables and the variable of firm size hasnegative influence to capital structure variables. Variable of liquidity, profitability, firm size simultantly and partially proved significantly not influence to the variable value of firm. Variable of capital structure is proven as an intervening variable that influence the relationship between the variables of liquidity, profitability, and firm size to value of the firm variable. Variable of profitability is the most dominant variable influencing capital structure variable followed by liquidity variable and firm size variable.

### Research Limitation

Test results of value of the firm can not be verified due to lack of data, in the period 2008-2012 the stock value of wholesale and retail company is not significant change. When doing data analysis, some data does not pass outliers testing so the amount of data was shrinkage. Researchers can't obtain financial statement data after 2012 so analysis doing in this research not in updated period

### Suggestion

For further research , it is recommended to use a longer period in order to increase the number of samples and it is recommended to choose another variable to be studied considering the coefficient of determination variable from this study only affects the capital structure of 37.2 % and affects value of the firm of 11.1 %. When doing a selection of the object of study make sure that object of study is issuing financial statements for 10 years, so that the sample data is bigger. Object of study is recommended to selected company that is often traded on the stock exchange.

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