

## Determinants of the Firm Value Using Capital Structure as the Intervening Variable for Firms in LQ 45 Index in Indonesia

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**Abstract :** This study aims to examine determinants (influencing factors) of the firm value. Those determinants are profitability, liquidity, and the firm size using the capital structure as an intervening variable. The population in this study is firms selected in LQ 45 index in the Indonesia Stock Exchange in August – January from 2012 to 2016 with 85 samples selected using purposive sampling. The Simultaneous Equation Modelling with Warp1 PLS 6.0 is used to test the research hypothesis. The results of the analysis showed that profitability, liquidity, and the firm size significantly influenced not only the firm value but also the capital structure. The capital structure is also able to mediate the effect of profitability, liquidity and the firm size to the firm value.

**Keywords:** profitability, liquidity, firm size, capital structure, corporate values, determinants, intervening.

Date of Submission: 06-07-2019

Date of acceptance: 23-07-2019

### I. Introduction

Firm value describes the condition of the firm. It can be said that if the firm value is good, the firm will be considered in good condition by prospective investors. When the demand for shares increases, the share price will tend to increase. Conversely, when many people sell their shares, the share price tends to decrease. The LQ 45 index is one of the stock index indicators in the Indonesia Stock Exchange (IDX). The firm value in this study is proxied by Price to Book Value (PBV) and Price Earning Ratio (PER). Price to Book Value (PBV) is basically the same as Price Earning Ratio (PER), but their focus is different. Price Earning Ratio (PER) focuses on net income generated firms while Price to Book Value (PBV) focuses on the firm equity value (Brigham and Houston, 2011: 92). Information from Price to Book Value (PBV) is significant for investors because the greater the Price to Book Value (PBV), the more expensive the share price will be, which will lead to the rise of the firm value. When the ratio reaches above one, it means that the stock market value is greater than the book value. To maintain firm performance in order to maximize its value, getting funding sources is crucial. The funds may come from internal and external sources. The combined composition of debt and equity is called the capital structure (Brigham and Daves, 2007: 508).

The capital structure in this study is Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR). Debt to Equity Ratio (DER) is a ratio that measures total liabilities to equity (shareholders equity). According to Fahmi (2012: 128), Debt to Equity Ratio (DER) shows the amount of the collateral available to creditors and is used as a measure in analyzing financial statements. In this study, profitability ratios are measured by Return on Equity (ROE), Return on Assets (ROA) and Net Profit Margin (NPM). Return on Equity (ROE) is a ratio that shows how much the firm's ability to generate net income to return equity to shareholders. (Kasmir 2010: 139).

The firm size seen from Total Assets (TA) or total net sales owned by the firm can be used for firm operations (Suharli, 2006: 54) which describes the firm size. The average firm value compared to the average profitability, liquidity, and the firm size, using the capital structure as intervening variables for firms in LQ 45 index on the Indonesia Stock Exchange during the period of 2012 to 2016 can be seen in the table below:

**Table 1.1**  
**The Average Firm Value, The Capital Structure, Profitability, Liquidity and The**

Variable		2012	2013	%	2014	%	2015	%	2016	%
FV	Y1	13.74	10.74	(21.79)	12.16	13.15	13.29	9.33	13.04	(1.87)
CS	Y2	50.26	52.12	3.70	53.12	1.93	55.17	3.85	57.75	4.68
Profitability	X1	22.27	23.68	6.35	21.21	(10.42)	17.52	(17.39)	17.23	(1.66)
Liquidity	X2	207.42	222.52	7.28	185.04	(16.84)	154.61	(16.45)	144.99	(6.22)
FS	X3	13.27	13.36	0.65	13.41	0.39	13.47	0.43	13.51	0.31

The purpose of this study is (1) to find and to test the effect of profitability on firm value, (2) to find out and to test the effect of liquidity on firm value, (3) to find out and to test the effect of firm size on firm value, (4) to find out and to test the effect of profitability on capital structure, (5) to find out and to test the effect

of liquidity on capital structure, (6) to find out and to test the effect of firm size on capital structure, (7) to find out and to test the effect of profitability on firm value when mediated by capital structure, (8) to find out and to test the effect of liquidity on firm value when mediated by capital structure, and (9) to find out and to test the effect of firm size on firm value when mediated by capital structure.

## **II. Theoretical Review and the Hypothesis Development**

Investment decisions are influenced by funds and capital costs and are defined as the current fund expenditure where the return occurs in the future. For firms that have gone public, the firm value can be assessed from the value of shares. Jogiyanto (2008: 117) explains that values that are related to shares are called the book, market, and intrinsic values. Book value is the value of shares according to the firm bookkeeping, the market value is the value of shares in the stock market, and the intrinsic value is the actual value of the stock. Investors need to know and understand these three values as important information in stock investment decision making because they can help investors to know which stocks grow and are affordable.

The indicator for firm value in this study is proxied to Price to Book Value (PBV) or the price per book value ratio. The price per book value ratio is the relationship between stock market price and book value per share. High Price to Book Value (PBV) not only will make the market believe in the firm's future prospects, but also is used to assess the price of a stock by comparing the stock market price with the firm book value. Theoretically, the firm value must reflect the value of its book. (Tandelilin, 2010: 194). Capital structure in this study is a balance, or comparison, between debt and the equity used by the firm to finance its assets. (Riyanto, 2010: 216).

In this study, profitability is proxied by ROA, ROE, and NPM. This ratio reflects the efficiency of all parts of a firm called production, personnel, marketing, and finance. (Sudana, 2011: 22).

### **H1: Profitability influences the firm value significantly**

The payment sources can be obtained from current assets owned by the firms. A firm's ability to fulfill its short-term obligations will be responded positively by the market, which is in accordance with the concept of the signaling theory.

### **H2: Liquidity influences the firm value.**

The ease in controlling a firm's assets will increase its value. Firm size is considered capable of influencing its value. In other words, the larger the firm size, the easier for the firm to obtain funding sources internally and externally.

### **H3: The firm size influences the firm value**

The determination of the use of these indicators is based on the previous researchers who examined the effects of profitability on capital structure. This shows that high profitability will be followed by low capital structure.

### **H4: Profitability influences the Capital Structure**

In this study, to measure profitability level, the researcher implemented Current Ratio (CR), Quick Ratio (QR) and Cash Ratio (CSR).

### **H5: Liquidity influences the Capital Structure**

In this study, to measure firm size, the researcher implemented Total Asset (TA) and Net Sales (NS) ratios.

### **H6: Firm size influences the capital structure**

Profitability gives an effect indirectly to firm value when mediated by capital structure. This means that capital structure can mediate the profitability relationship affecting firm value.

### **H7: Profitability influences the firm value when mediated by the capital structure as an intervening variable.**

In this study, to measure firms' liquidity levels, Current Ratio (CR), Quick Ratio (QR) and Cash Ratio (CSR) are used.

### **H8: Liquidity influences the firm value when mediated by the capital structure as an intervening variable.**

Firm size affects firm value indirectly when mediated by capital structure. It means that capital structure can mediate the relationship of liquidity which affects firm value.

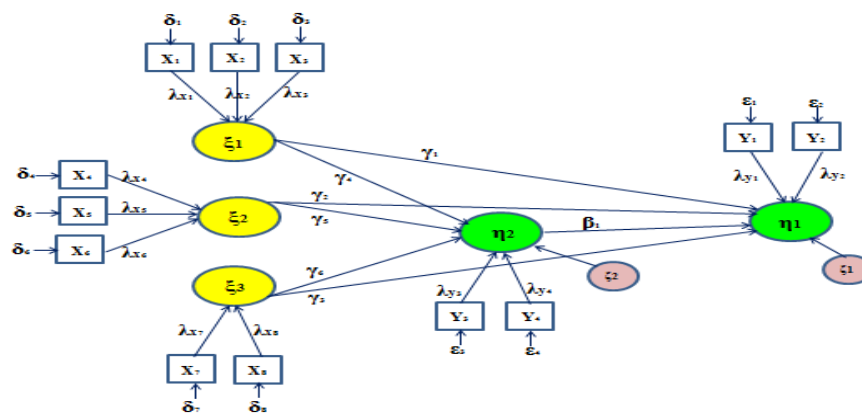
### **H9: The firm size influences the firm value when mediated by the capital structure as an intervening variable**

### III. Research Methods

This research is a causality study because there is a relationship among the three variables. The relationship in this study is casual because the variables give causes and effects each other. The variables are (1) an exogenous variable (free/independent) or an influencing variable, (2) an endogenous variable (dependent/dependent) or an affected variable, and (3) an intervening variable or a variable affecting the relationship between independent and the dependent variables. The last variable makes an indirect relationship between the two variables so that they cannot be observed and measured. Hypothesis testing is done not to compare parameters but to test the significance of population parameters using Partial Least Square Path Modeling as the analysis technique. Partial Least Square is a modeling concept similar to path analysis involving latent variables so that the minimum sample size determination is in accordance with the concept of path analysis.

This study uses Structural Equation Modeling (SEM) analysis, a type of multivariate analysis. SEM is a family of statistical models that seeks to explain the relationship among many variables. SEM is a unique statistic because its foundation is between two familiar multivariate techniques, called factor analysis and multiple regression analysis (Hair et al., 2010: 634). Furthermore, to conduct SEM analysis, appropriate computer tools or software are needed. So far, the tools used in SEM analysis are Amos, Lisrel, and PLS. The analysis method in this study uses the PLS (Partial Least Square) method. After developing a theoretical framework model, the next step is to illustrate the conceptualization through a path diagram. The path diagram illustrating the relationship among the research variables can be seen in Figure 3.1.

Figure 3.1  
Research Paradigm in the Structural Equation



#### Notation

Description:

$\xi_1$ =Exogenous latent variables representing profitability

$\xi_2$ =Exogenous latent variables representing liquidity

$\xi_3$ = Exogenous latent variables representing firm size

$\eta_1$ = Exogenous latent variables representing firm value

$\eta_2$ = Exogenous latent variables representing capital structure as intervening variables

$\zeta_1$ = Error variant or epsilon endogenous latent variable ( $\eta_1$ ) representing firm value

$\zeta_2$ = Error variant or epsilon endogenous latent variable ( $\eta_2$ ) representing capital structure as intervening variables

$X_1$  s/d  $X_3$ = Manifest variable/indicators for exogenous latent on profitability

$X_1$ = Manifest variables/indicators for exogenous latent on profitability namely Return on Equity (ROE).

$X_2$ = Manifest variable/indicators for exogenous latent on profitability namely Return on Asset (ROA).

$X_3$ = Manifest variable/indicators for exogenous latent on profitability namely Net Profit Margin (NPM).

$X_4$  s/d  $X_6$ = Manifest variable/indicators for exogenous latent on liquidity

$X_4$ = Manifest variable/indicators for exogenous latent liquidity namely Current Ratio (CR).

$X_5$ = Manifest variable/indicators for exogenous latent on liquidity namely Quick Ratio (QR).

$X_6$ = Manifest variable/indicators for exogenous latent on liquidity namely Cash Ratio (CSR).

$X_7$  s/d  $X_8$ = Manifest variable/indicators for exogenous latent on firm-size

$X_7$ = Manifest variable/indicators for exogenous latent on firm-size namely Total Asset (TA).

$X_8$ = Manifest variable/indicators for exogenous latent on firm-size namely Net Sales (NS).

$\delta_1$  s/d  $\delta_8$  = Error variant or epsilon manifest variable/exogenous variable indicators  $X_1$  up to  $X_8$ .

$Y_1$  s/d  $Y_2$  = Manifest variable/indicators for endogenous latent variables on firm value

$Y_1$  = Manifest variables/indicators for endogenous latent variables on firm value namely Price to Book Value (PBV).

$Y_2$  = Manifest variables/indicators for endogenous latent variables on firm value namely Price Earning Ratio (PER).

$Y_3$  s/d  $Y_4$  = Manifest variable/indicators for endogenous latent variables on modal structure as intervening variables

$Y_3$  = Manifest variable/ indicators for endogenous latent variables on firm value namely Debt to Asset Ratio (DAR).

$Y_4$  = Manifest variable/indicators for endogenous latent variables on Debt to Equity Ratio (DER).

$\epsilon_1$  s/d  $\epsilon_4$  = Error variant or manifest epsilon variabel/indicators for endogenous latent variables  $Y$

$\lambda^{(x)}_1$  s/d  $\lambda^{(x)}_8$  = The weight of manifest variable factor indicators for endogenous latent variables  $X$

$\lambda^{(y)}_1$  s/d  $\lambda^{(y)}_4$  = The weight of manifest variable factors/indicators for endogenous latent variables  $Y$

$\gamma_1$  = Exogenous latent variable path coefficient profitability towards endogenous latent variables on firm value

$\gamma_2$  = The path coefficient of the exogenous latent variable liquidity towards endogenous latent variables on firm value

$\gamma_3$  = The exogenous latent variable path coefficient of firm size towards endogenous latent variables on firm value

$\gamma_4$  = Exogenous latent variable path coefficient of profitability towards endogenous latent variables on capital structure as an intervening variable.

$\gamma_5$  = The path coefficient of the exogenous latent variable liquidity towards the endogenous latent variable on capital structure as an intervening variable

$\gamma_6$  = The exogenous latent variable path coefficient of firm size to endogenous latent variable on capital structure as an intervening variable

□ = Signs stating manifest variables/indicators for both exogenous and endogenous latent variables

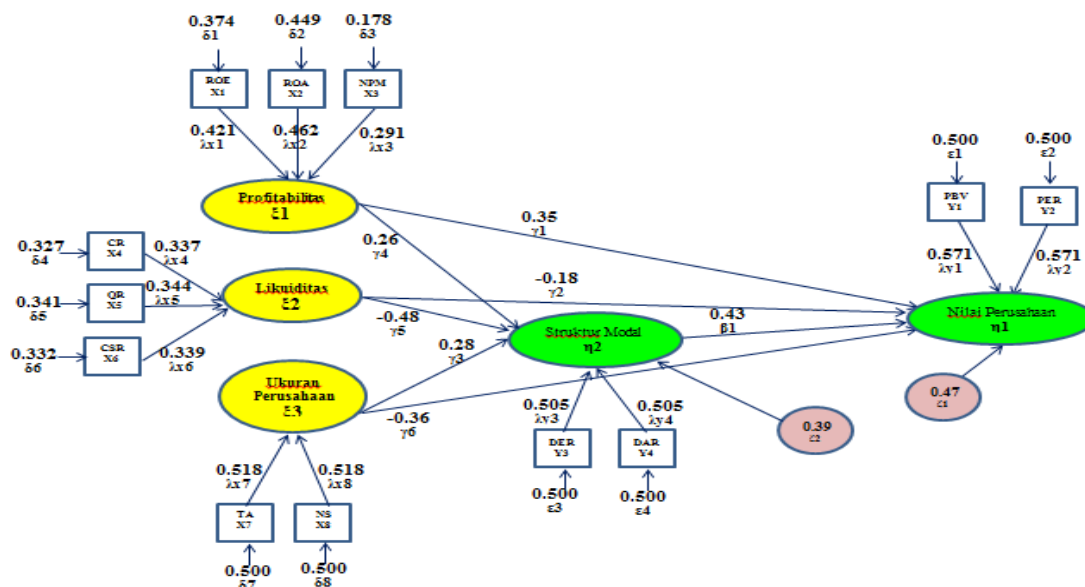
○ = Signs indicating latent/construct variables, both exogenous and endogenous

→ = Signs stating the influence between exogenous and endogenous latent variables

#### IV. Research Findings and Discussion

The results of the SEM WarpPLS test in this study were used to determine the relationship among the independent variables namely profitability, liquidity and firm size on firm value as the dependent variable and capital structure as intervening/mediating variables.

**Figure 4.1**  
**Results of Model Analysis with Single Mediator**



Source: Secondary data processed in this study (2018)

The determination coefficient explains how big the relationship of factor variability can be influenced by other factors. The picture above shows R2 for the firm value is 0.47 and for the capital structure is 0.39. This

result means that the capital structure affects the firm value by 47% and 53% when influenced by other factors. Meanwhile, profitability, liquidity and firm size affect the capital structure by 39% and 61% when influenced by other factors.

Path Coefficient and P-Value test results see the magnitude of the coefficient and the significance level of the relationship among profitability, liquidity, and firm size to firm value and capital structure as mediating variables. The results are as follows.

**Figure 4.2**  
**The results of Path Coefficients and P-Value**

Path	Direct Effect		Result	
	Koefisien	P-Value		
<b>PROFITABILITY, FIRM VALUE</b>	0.35	<0.01	Positive	Significant
<b>LIQUIDITY, FIRM VALUE</b>	-0.18	0.02	Negative	Significant
<b>FIRM SIZE, FIRM VALUE</b>	-0.36	<0.01	Negative	Significant
<b>PROFITABILITY, CAPITAL STRUCTURE</b>	0.26	<0.01	Positive	Significant
<b>LIQUIDITY, CAPITAL STRUCTURE</b>	-0.48	<0.01	Negative	Significant
<b>FIRM SIZE, FIRM VALUE</b>	0.28	<0.01	Positive	Significant
<b>CAPITAL STRUCTURE, FIRM VALUE</b>	0.43	<0.01	Positive	Significant

Source: Data processed in this study (2018)

Based on table 4.2 above, the discussion of the results of this study was conducted on five variables, namely: (1) firm size, (2) capital structure, (3) profitability, (4) liquidity, and (5) firm value. The results of hypothesis testing are as the following:

**4.1.1 Test of Hypothesis One (H<sub>1</sub>)**

The test result of hypothesis one (H<sub>1</sub>) is that profitability gives a significantly positive effect on firm value with a significance value (P Value 0.01 <0.05 and the coefficient value is 0.35). It means that hypothesis one (H<sub>1</sub>) is accepted, which is profitability that gives an effect on firm value.

**4.1.2 Test of Hypothesis Two (H<sub>2</sub>)**

The test result of hypothesis two (H<sub>2</sub>) is that liquidity gives a significantly negative effect on firm value with a significance value (P Value 0.02 > 0.05 and the coefficient value is -0.18). It means that hypothesis two (H<sub>2</sub>) is accepted, which is liquidity gives an effect on firm value.

**4.1.3 Test of Hypothesis Three (H<sub>3</sub>)**

The test result of hypothesis three (H<sub>3</sub>) is that firm size has a significant negative effect on firm value with a significance value (P Value 0.01 <0.05 and the coefficient value -0.36). It means that hypothesis three (H<sub>3</sub>) is accepted, which is firm size affects the firm value.

**4.1.4 Test of Hypothesis Four (H<sub>4</sub>)**

The test result of hypothesis four (H<sub>4</sub>) is that profitability has a significantly positive effect on the capital structure with a significance value (P Value 0.01 <0.05 and the coefficient value is 0.26). It means that hypothesis four (H<sub>4</sub>) is accepted, which is profitability affects the capital structure.

**4.1.5 Test of Hypothesis Five (H<sub>5</sub>)**

The test result of hypothesis five (H<sub>5</sub>) is that liquidity has a significant negative effect on the capital structure with a significance value (P Value 0.01 <0.05 and the coefficient value is -0.48) It means that hypothesis five (H<sub>5</sub>) is accepted, which is liquidity affects the capital structure.

**4.1.6 Test of Hypothesis Six (H<sub>6</sub>)**

The test results of hypothesis six (H<sub>6</sub>) is that firm size has a significant positive effect on the capital structure with a significance value (P Value 0.01 <0.05 and the coefficient value is 0.28). It means that hypothesis six (H<sub>6</sub>) is accepted.

**4.1.7 Test of Hypothesis Seven (H<sub>7</sub>)**

The test result of hypothesis seven (H<sub>7</sub>) is that profitability affects firm value when mediated by the capital structure as an intervening variable with a significance value (P Value) 0.01 <0.05 and standard error value 0.081 and variance indirect effect value of 24% which means that the model has a partial effect (partial mediation). This means that hypothesis seven (H<sub>7</sub>) is accepted, which is profitability gives an effect on firm value when mediated by the capital structure as an intervening variable.

**4.1.8 Test of Hypothesis Eight (H<sub>8</sub>)**

The test result of hypothesis eight (H<sub>8</sub>) is that liquidity affects the firm value when mediated by the capital structure as an intervening variable with a significance value (P Value) 0.01 <0.05 and standard error 0.081 and

variance indirect effect value of 53.42% which means the model has a partial mediating effect (partial mediation) .This means that the hypothesis eight (H8) is accepted, which is liquidity gives an effect on firm value when mediated by the capital structure as an intervening variable.

**4.1.9 Test of Hypothesis Nine (H<sub>9</sub>)**

The test result of hypothesis nine (H9) is that the firm size influences the firm value when mediated by the capital structure as an intervening variable with a significance value (P Value) 0.01 <0.05 and standard error value 0.081 and the variance indirect effect value of 50% which means the model has a partial mediating effect (partial mediation) .This means that hypothesis nine (H9) is accepted, which is the firm size influences the company value when mediated by the capital structure as an intervening variable.

**4.2 The Single Mediator Test**

To find out the significance of the indirect and total effect of profitability, liquidity and firm size towards firm value mediated by capital structure see the following results:

**Table 4.4 Variance Accounted For (VAF) Indirect Effect**

Relationship	Indirect Effect		VAF
	Error Standard	P-Value	
Profitability → Capital Structure → Firm Value	0.081	0.03	24 %
Liquidity → Capital Structure → Firm Value	0.081	<0.01	53 %
Firm Size → Capital Structure → Firm Value	0.081	0.02	50 %

Source: Data processed in this study (2018)

Next, to find out the magnitude of the indirect effect variant, we can calculate it using the Variance Accounted For (VAF) formula. Variance Accounted For (VAF) values range from 0 to 1. The highest Variance Accounted For (VAF) indicates that the mediation effect is perfect. Variance Accounted For (VAF) can be calculated using the formula below. (Ghozali and Latan (2014: 217-218).

This means that the magnitude of the indirect effect for the profitability-firm value relationship is mediated by the capital structure. Because the VAF value is 0.24209 (range 0-1) or 24% (VAF value between 20% - 80%) and P-value is smaller 0.03 <0.05, it means that there is a partial mediation effect from the capital structure on the profitability to firm value. In this study, the capital structure is an intervening variable for profitability affecting the firm value. See Table 4.4.

Table 4.5

**Model Fit Testing and General Model Testing**

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Model fit and quality indices
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Average path coefficient (APC)=0.334, P<0.001
Average R-squared (ARS)=0.430, P<0.001
Average adjusted R-squared (AARS)=0.406, P<0.001
Average block VIF (AVIF)=1.335, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF)=1.716, acceptable if <= 5, ideally <= 3.3
Tenenhaus GoF (GoF)=0.611, small >= 0.1, medium >= 0.25, large >= 0.36
Simpson's paradox ratio (SPR)=1.000, acceptable if >= 0.7, ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if >= 0.9, ideally = 1
Statistical suppression ratio (SSR)=0.714, acceptable if >= 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=0.857, acceptable if >= 0.7

General model elements
-----
Outer model analysis algorithm: PLS regression
Default inner model analysis algorithm: Linear
Multiple inner model analysis algorithms used? No
Resampling method used in the analysis: Stable
Number of data resamples used: 100
Number of cases (rows) in model data: 85
Number of latent variables in model: 5
Number of indicators used in model: 12
Number of iterations to obtain estimates: 8
Range restriction variable type: None
Range restriction variable: None
Range restriction variable min value: 0.000
Range restriction variable max value: 0.000
Only ranked data used in analysis? No
    
```

From the output in table 4.5 above, it can be seen that the general result above shows that the model has good fit, where P value for Average Path Coefficient (APC), Average R-Squared (ARS) and Average Adjusted R-Squared (AARS) <0.001 with APC value = 0.334, ARS value = 0.430 and AARS value = 0.406.

Likewise, Average block value of VIF (AVIF) generated is 1,335 (acceptable if <= 5, ideal <= 3.3) and Average Full Collinearity value of VIF (AFVIF) generated is 1,716 (acceptable if <= 5, ideal <= 3.3) which means that there is no problem with multicollinearity between indicators and latent variables. (inter-indicators and inter-latent variables).

The result of Tenenhaus GOF is 0.611 > 0.36 which means that the model fit is very good. There is no problem of causality found in this research model in this study. It can be seen from the data generated for the Symson's Paradox Suppression Ratio (SPR) index 1.0 > 0.7, R-Squared Contribution Ratio (RSCR) 1.0 > 0.9, Statistical Suppression Ratio (SSR) 0.714 > 0.7 and Non-Linear Bivariate Causality Direction Ratio (NLBCDR) 0.857 > 0.7. It can also be seen that the number of iterations for this model is done 8 times.

The information above shows that APC, ARS, SPR, RSCR, and SSR are acceptable, so this research model is formulated. This research model can be used to predict the influence of independent variables on the dependent variable. It can be seen that profitability affects the firm value through the capital structure of 24 % and the remaining 76% is influenced by variables outside this research model. Liquidity affects the firm value through the capital structure of 53% and the remaining 47% is influenced by variables outside this research model. The firm size influences the firm value through the capital structure of 50% and the remaining 50% is influenced by variables outside this research model. See Table 4.6.

**Table 4.6 R-Squared Coefficients**

Dependent Variabel	R – Square
Firm Value	0.470
Capital Structure	0.390

Source: Processed data used in this study

The results of R-Squared output as in table 4.6 shows the adjusted R Squared value for the firm value variable is 0.470 which means that the effect of profitability, liquidity and firm size variables on firm value is 47% and the remaining 53% is influenced by other variables outside this research model, while the effect of profitability, liquidity and the firm size variables on the firm value to the capital structure is 39% and the remaining 61% is influenced by variables outside this research model. This adjusted R2 is included in the moderate / medium category (R<sup>2</sup> results of 0.70 means "strong", ≤ 0.45 means "moderate / medium" and ≤ 0.25 "weak").

**4.3 Multi-Group Sensitivity test**

To confirm the R\_Squared Coefficients value, a multi-group sensitivity test was conducted on the determination coefficient of the relationship among independent variables such as profitability, liquidity, firm size and the intervening variable (the capital structure) on the dependent variable (firm value). The determination coefficient for profitability variable is 0.023, the liquidity variable is 0.262, and the firm size is 0.105, so the total determination coefficient relationship of the independent variables on the mediation variable (the capital structure) is 0.023 + 0.262 + 0.105 = 0.390 meaning that it is still consistent at 39% with R\_Squared Coefficients at 39%.

While the determination coefficient of profitability variable is 0.167, liquidity variable is 0.038, the firm is 0.083 and the mediation variable (the capital structure) is 0.183, so the total determination coefficient relationship of independent variables and mediating variables on the dependent variable (firm value) is 0.167 + 0.038 + 0.083 + 0.183 = 0.471 which means it is still consistent at 47% with R\_Squared Coefficients by 47%. The sensitivity test is shown in the R-squared contribution table below:

**Tabel 4.7 R-Squared Contribution**

	Profitability	Liquidity	Size	Firm Value	Capital Structure
Profitability					
Liquidity					
Size					
Firm Value	0.167	0.038	0.083		0.183
Capital Structure	0.023	0.262	0.105		

**Notes : R-Squared contribution of predictor lat. Vars.; columns = predictor lat. vars; rows = criteria lat. Vars.; negative sign = reduction in R-Squared.**

Source: Processed data used in this study (2018)

**4.3.1 Hypothesis Testing Results**

To show that the research results are in accordance with the empirical research model, the results and discussions of the research hypothesis testing are summarized in Table 4.8 below.

**Table 4.8 Summary of the Hypothesis Testing Results**

Exogenous Variable	Endogenous variable	Regression Results		P Value		VAF	Coefficients		Results
Profitability	Firm Value	H <sub>1</sub>	Affecting	+	Significant	<0.01		0.35	Accepted
Liquidity	Firm Value	H <sub>2</sub>	Affecting	-	Significant	0.02		-0.18	Accepted
Firm Size	Firm Value	H <sub>3</sub>	Affecting	-	Significant	<0.01		-0.36	Accepted
Profitability	Capital Structure	H <sub>4</sub>	Affecting	+	Significant	<0.01		0.26	Accepted
Liquidity	Capital Structure	H <sub>5</sub>	Affecting	-	Significant	<0.01		-0.48	Accepted
Firm Size	Capital Structure	H <sub>6</sub>	Affecting	+	Significant	<0.01		0.28	Accepted
Profitability	Firm Value mediated by the Capital Structure	H <sub>7</sub>	Affecting	+	Statistically significant & Partial Mediation	0.03	24%		Accepted
Liquidity	Firm Value mediated by the Capital Structure	H <sub>8</sub>	Affecting	+	Statistically significant & Partial Mediation	<0.01	53%		Accepted
Firm Size (Total Asset)	Firm Value (Price to Book Value) mediated by the capital structure (Debt to Equity Ratio)	H <sub>9</sub>	Affecting	+	Statistically significant & Partial Mediation	0.02	50%		Accepted

Source: Processed Secondary Data, 2018

**V. Conclusions and Implications of the Research**

**5.1. Conclusions**

Based on the results of this study, conclusions can be taken as follows:

1. The results of the first hypothesis testing prove that profitability has an effect on the firm value of LQ 45. Thus, the greater the ability of LQ 45 firms to generate profits, the higher the firm value, measured from Price to Book Value (PBV) and Price Earning Ratio (PER). From these results, it can be concluded that the better the profitability of a firm, measured by Return on Equity (ROE), Return on Assets (ROA) and Net Profit Margin (NPM). Higher profitability has an impact on the increasing numbers of investors who want to invest their funds in the firm. This profit is a positive signal for the company to attract investors. This is because profitability is an evaluation benchmark for investors on the company, which can be seen from how much profit the firm makes. The higher profitability of a firm will provide a positive perspective for investors and potential investors to get dividends. This will attract more investors and potential investors to invest their funds in the firm so that the stock price will be relatively increased and thus can increase the firm value.
2. The results of the second hypothesis testing prove that liquidity has an effect on the firm value of LQ 45. The underlying reason may be due to several firms listed in the LQ 45 index from 2010 to 2014 having a greater number of current assets compared to their current debt, causing liquidity is very influential for investors. In addition to this, the firms in the LQ45 index have the best liquidity, so creditors put their trust regarding the firms' ability to pay off their short-term debt.
3. The results of the third hypothesis testing prove that the firm size affects the firm value in LQ 45. The increasing level of sales and total assets has an impact on increasing the firm value which is a reflection of the LQ 45 firm value. By the increasing firm value level, shareholders' prosperity will also increase. Therefore, many investors want to invest their funds in LQ 45 firms whose sales and total assets continue to increase.
4. The results of the fourth hypothesis testing prove that profitability influences the capital structure of LQ 45 firms. This means that the use of the composition of long-term debt or the capital structure will affect the profitability of LQ 45 firms. If the composition of the capital structure indicated by Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR) decreases, it will affect the increasing ability of LQ 45 firms to obtain profits reflected from profitability.



5. The results of the fifth hypothesis testing prove that liquidity influences the capital structure of the firms in LQ 45. This implies that the relationship between the ability of the LQ 45 to pay off debts that are due using current assets held to the capital structure has a contradictory relationship. A firm in the LQ 45 index which is more liquid has a decreasing tendency to use long-term debt.
6. The results of the sixth hypothesis testing prove that the firm size influences the capital structure of the firms in the LQ 45 index. This implies that in every decision-making done by the LQ 45 management always relates to the capital structure that will be used by the firms in LQ 45 index. In this study, investors always pay attention to the role of the firm size indicated by Net Sales (NS) and Total Assets (TA). The sale or total assets increase along with the increasing tendency to use long-term debt.
7. The results of the seventh hypothesis testing prove that the capital structure is able to mediate the relationship of profitability and the company value in the LQ 45 index. The investors' decision to buy LQ 45 shares is influenced by the size of the capital structure. They will always look at the performance of the firms in the LQ 45 index in generating profits.
8. The results of the eighth hypothesis testing prove that the capital structure is able to mediate the relationship of liquidity and the firm value in the LQ 45 index. This means that the liquidity level of firms in the LQ 45 index is high, despite having enough funds to finance their operations, but some firms still have to add external debt or loans from outside them. This means the firms reduce the interest expense of the loan and reduce the income-expenditure to pay interest expense. A large profit level is a sign that the firms in the LQ 45 index are in a steady state that later will have an impact on the high level of the firm value.
9. The results of the ninth hypothesis testing prove that the capital structure is able to mediate the relationship between firm size and firm value of the LQ 45 index. This shows that the policy of using debt in the capital structure provides a signal or sign for investors that the funding policy by the firms in LQ 45 index influences the firm value. The relationship between the firm size and the firm value in the LQ 45 index means that the larger the firm size, the higher the firm value seen from the size of the capital structure form several firms included in the LQ 45 index.

## **5.2. Implication of The Research For Practitioners**

1. Management is advised to further increase the level of sales and total assets owned because these indicators are a reflection of the firm size. These indicators are able to increase firm value.
2. Firms in the LQ 45 index should improve their ability to earn profits because of the higher the profitability of a firm, the higher the firm value.
3. Creditors and prospective investors should be more careful especially in looking at the capital structure of a firm. Firms that have achieved the optimum capital structure will only cause a decrease in their firm value. The influence of liquidity as a determinant of a firm value shows that firms included in the LQ 45 index do contain firms that have the best liquidity, so there is no more doubt from creditors regarding the firm's ability to pay off its short-term debt.

## **For Scholars**

1. Suggestions for further research: the researchers can use other variables that may be mediated and use different proxies to measure the variables above.
2. The weaknesses of this study are expected to be a correction in the development of further research, especially regarding the influence of investment decisions or funding decisions on firm value.
3. This study uses samples belonging to the LQ 45 index so that the results of this study can be generalized to other sectors. It is suggested to further researchers to extend the research scope to other industrial sectors.

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Murti Widyaningsih" Determinants of the Firm Value Using Capital Structure as the Intervening Variable for Firms in LQ 45 Index in Indonesia" *IOSR Journal of Business and Management (IOSR-JBM)*, Vol. 21, No. 7, 2019, pp. -.29-38