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# Intellectual Capital, Capital Structure And Growth Of The Company And Its Implications On Value Index Formers Lq-45

Sumani\*, Ika Barokah Suryaningsih

**Abstract:** The purposes of this study is to investigate the effect of intellectual capital, capital structure and growth of the company and its implications on value index formers LQ-45. The population of this study is all companies forming the LQ-45 index of the 2012 to 2018 period. Then, the sample of this study is only the companies that recorded consistent over the study period. This study uses regression analysis. The results indicate that intellectual capital proxied by variables VACA, VAHU and STVA partially have no significant effect on the capital structure, but have significant effect on the company's growth. Intellectual capital proxied by variables VACA, VAHU and STVA has significant effect on the value of the company; nevertheless, intellectual capital proxied by variables VAIC™ has no significant effect on the company's capital structure, but has significant positive effect on the company's growth. On the other hand, the company's growth significantly influence the company's capital structure, and the company's capital structure significantly influence the company's firm value, but the effect of company's growth is not significant

**Index Terms:** Intellectual Capital, Capital Structure, Growth Company, and Value.

## 1. INTRODUCTION

Company's ownership over knowledge and technology generally are not accompanied by an adequate report on the ownership of knowledge. The main reason of this problem is due to the ownership of such knowledge often in the form of intangible assets or Intellectual Capital, so it is difficult to make it in the form of an account. The Intellectual Capital is important, because it is one of the information required by investors. This is due to Intellectual Capital information can help investors to assess the capability of the company to create wealth in the future better. Globally, there is an increasing market demand for transparency [1]. A fast-changing economic environment demands today's business to be able to survive in overcoming challenges in the economic environment. [2] argues that there are two challenges in front of business organization, first is a global challenge and second is stakeholder challenge. Global Challenge is a challenge that come from international organizations. The Global Challenge marked by globalization, deregulation of markets some countries, cooperation between countries like ACFTA, AFTA and NAFTA, technological change, and the tariffs exemption. While stakeholder challenge is the challenge that comes from the company's stakeholders, i.e. consumer demand for improved quality of goods and services the organization's produced, service quality, and organization's social responsibility for the neighborhood environment. Such challenges have to be faced by the organizations in order to survive in the current economic environment. The developments in the economic affected significant changes to the management of a business and its competitive strategy decision. Therefore, business organizations increasingly emphasize the importance of knowledge assets as a form of intangible assets [3]. Knowledge is recognized as an essential component of a business and more sustainable strategic resources to obtain and to maintain competitive advantage [4].

The Human Capital (HC) quality will increase if the company is able to utilize the knowledge owned by its employees. According to [5], HC represents the individual knowledge stock of an organization that is represented by its employees. HC is a combination of genetic inheritance, education, experience, and attitude about life and business, which will support the structural capital and capital employed [6]. Investment in training and human resource development is an extremely important investment [7] because of the experience, skills, and knowledge of human resources has an economic value for companies that create a productive and adaptive capability. Knowledge is recognized as an essential component of business and more sustainable strategic resources in gaining and maintaining a competitive advantage. The use of this knowledge will allow the company to use other resources efficiently and economically, to give it an edge over the competition. According [8], since the late 1980s, most of the market value of the business that using the set of knowledge experienced greater growth. This is in line with [9] that stated that in the modern era, as now, the determining value of an organization is the knowledge, human resources and changes in structural costs. The approach used in the assessment and measurement of knowledge assets are intellectual capital [10]. Furthermore, [11], explains that the intellectual capital (IC) is a group of knowledge assets act as an attribute of the organization and contribute significantly in improving the competitive position by adding value for stakeholders. In addition, [5] also explained that the IC is an entire process and assets, and all intangible assets that have considered against the accounting method including the contribution of knowledge from the man himself as the company's resources. Knowledge assets in question are innovation, information systems, organizational management, and human resources owned by the company. Smedlund and [12] briefly proposed intellectual capital as the capability of the organizations to create, to transfers, and to implement knowledge. Some results of these studies can provide information that knowledge serve as company's strategic resource that can be used to develop the competitiveness of the company. This is because knowledge can add value, are rare, and difficult to imitate by competitors and can not be replaced by any other types of resources. Information

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Intellectual capital can also help investors to assess the capability of the company to create wealth in the future better. Clearly, [1] explains that market demand will increase after their intellectual capital. According [13]–[15], [15] IC can be divided into physical capital (PC), human capital (HC), and structural capital (SC) components. PC is a capital of the company in the form of financial funds and physical assets that are used to help the creation of company's value added [15]. HC is the capital associated with the development of human resources, such as competence, commitment, motivation and loyalty of employees [14]. SC is the capital of the company, including the knowledge that will remain in the company and intellectual capital that are used to reduce the work demand for the employees in order to improve the ability of the employees [16]. The indirect measurement of the IC [17], which is the method of value added intellectual coefficient (VAIC™). The initial step of this model is calculating the value added (VA). VA is the most objective indicator to assess the success of a business and demonstrated the company's value creation capability. Furthermore, [17] also explains that the main components of VAIC™ include: (a) physical capital (VACA-Value Added Capital Employed); (b) human capital (VAHU-Value Added Human Capital), and (c) structural capital (STVA-Strucrual Capital Value Added). Pulic also reiterated that the creation of VA on companies allow benchmarking and predict the ability of the company in the future. It is useful to all stakeholders who resides in the value creation process (employers, employees, and management, investors, shareholders and business partners) and can be applied at all levels of business activity [18]. The ability to apply the IC measurement has limitations for large sample size and widely diversified [19]. The output (OUT) represented the revenue and covers all products and services sold in the market [20], while the input (IN) covers the entire load used in generating revenue. [20] Further explained the important thing in this model, which labor expenses, is not included in IN. That is because it's active role in the process of value creation, intellectual potential (represented in labor expenses are not counted as an expense (cost) and are not included in the IN component). Therefore, a key aspect of the Pulic's model is to treat labor as an entity of value creation. The study conducted by [21], [20], [14], [22], and [23] are using Pulic's model (VAIC™), which examined the relationship between the IC and the market value and financial performance, the results indicate that the IC has a positive effect on the market value and financial performance of the company. However, the study results of [19], [24], [25], [7], and [26], indicate that the IC has not significant effect on the financial performance of the company. Furthermore, the results [25]'s study showed that IC is proven to have positive effect but not significant to the market value. In addition, the company's growth is also the company's ability to increase the size. The success of the growth and sustainability of the company would be realized if a company could manage its intellectual resources [27]. [28] Suggests that growth is the most traditional measure that shows the growth of an organization. In addition, there are few studies on the IC and the growth of the company, among others, [21], [25], [29], which indicate the significant positive effect of IC on the company's growth. However, the growth rate of the companies has no significant effect on the future performance of the company [29]. In order to fund the company's growth, an optimize capital structure management is necessary. [30] discloses a capital structure mix (proportion)

of long-term debt financing and equity financing. Companies that use the debt without the understanding of its financial condition will cause the obligation to increase the company's expense. The worst possibility of errors in the funding decision by the debt is bankruptcy. [31], stated that optimum capital structure is achieved when it contains the minimum cost of capital. [32] also reveal the optimum capital structure is capital structure that is able to maximize the company's stock price (firm value). The company's main purpose is to maximize the wealth or the value of the company [33]. Maximizing the value of the company is very important for the company, because maximizing company's value is parallel to maximizing shareholder wealth. According to [32], the firm value is the present value of free cash flow expected in the future. Present value is the current value of the rate of return expected by shareholders in the future. [32] Also revealed that the primary goal of management is to maximize shareholder wealth as reflected in maximization of its stock price. Prices that were willing to be paid by the prospective buyer is defined as the market price of the company itself, so that the market price means the price that investors are willing to pay for each share of the company.

## 2 RESEARCH METHODS

### 2.1 Research design

This study was designed as a quantitative research that is used to describe the effects of intellectual capital together with capital structure and company's growth and its implication on company value. Multiple regression analysis is used as the analysis tools. This reasearch is an explanatory research which purpose is to test the relationship of one variable to another variable or to know how a variable affects other variables. This study uses data from the companies that forming the LQ-45, listed in the Indonesian Stock Exchange during the period of this research, i.e. 2012-2018.

### 2.2 Population and Sample

The population in this study is all companies forming LQ-45 index between the periods of year 2012 - 2018. The company that forming LQ-45 index is a company that has a large market capitalization and tend to be stable. In addition, the company that forming LQ-45 index derived from a whole range of sub-sectors. The companies that forming the LQ-45 index were on the top 95% of the total annual average transaction value of regular stock market, and were on the top 90% of the annual average market capitalization, so that the companies that forming the LQ-45 index should have higher intellectual capital than the other company that are not forming the LQ-45 index. The period of year 2012-2018 was chosen because on that period the global economic conditions had improved, including in Indonesia, after a prolonged crisis. Therefore, the selected study samples are the companies that are consistently forming the LQ-45 index over the study period, did not make acquisitions and have a complete data (contain all the variables).

### 2.3 Operational Definition of Variables

- a. Value Added Intellectual Coefficient (VAIC™) presents information on the value creation efficiency of tangible and intangible assets owned by the company because of intellectual capital. VAIC™ obtained by summing the Value Added Efficiency of



Capital Employed (VACA), Value Added Efficiency of Human Capital (VAHU), and Value Added Efficiency by Structural Capital (STVA). Here are the details:

1. VACA is the contribution made by each unit of physical working capital (equity and net income) to company is value-added. VACA measured by using a ratio scale.
  2. VAHU is the relationship between VA and HC, which indicates the company's ability to generate value added of every penny invested in human capital. VAHU measured using a ratio scale.
  3. STVA shows the contribution of structural capital (SC) in the formation of the company's firm value. In the Pulic model,  $SC = VA - HC$ . STVA measured by using a ratio scale.
- b. The capital structure is composed of long-term debt financing and equity. The proxy used to measure capital structure is debt to asset ratio (DAR). The scale used is the scale ratio.
- c. Company Growth / Growth (GR) is proxied by Asset Growth (AG), which is the growth of total current assets added by the growth of fixed assets. GR was measured by using ratio scale.
- d. Company value is proxied by Market to Book Value Ratio (MBV ratio), which is to determine how much the ratio of stock prices in the market compared to the book value of its shares. This variable is using a ratio scale.

## 2.4 Data analysis method

1. VAIC<sup>TM</sup> indicates intellectual abilities. VAIC<sup>TM</sup> is the sum of three components, namely: VACA, VAHU, and STVA with the formulation:

$$VAIC^{TM} = VACA + VAHU + STVA$$

- a.  $VA = OUT - IN$   
Where:  
VA = Value Added  
OUT (Output) = Total sales and other revenue  
IN (Input) = Expenses and costs except labor cost
  - b.  $VACA = VA / CE$   
Where:  
VACA = Comparison of value added to the physical working capital  
VA = Value Added  
CE = Available funds (equity and net income)
  - c.  $VAHU = VA / HC$   
Where:  
VAHU = Comparison of value added to the expenditure on labor  
VA = Value Added  
HC = Labor cost
  - d.  $STVA = SC / VA$   
 $SC = VA - HC$   
Where:  
STVA = Comparison with the structural capital value added  
SC = Difference value added with personnel costs (VA - HC)  
VA = Value Added
2. Capital Structure is proxied by debt to asset ratio (DAR)

$$\text{Debt to Asset Ratio (DAR)} = \frac{\text{Long Term Debt}}{\text{Total Asset}}$$

3. Company's growth is proxied by Asset Growth (AG)

$$\text{Asset Growth} = \frac{\text{Asset tahun } t}{\text{Asset tahun } t-1} - 1 \times 100\%$$

4. Company's firm value is proxied by Market to Book Value (MBV)

$$\text{Market to Book Value (MBV)} = \frac{\text{Market value per share}}{\text{Book value per share}}$$

## 2.5 Data analysis technique

### Normality of the Data

Prior to test hypotheses, it is necessary to test the normality of the data. [34] Describes the normality test is performed to determine whether the value of the residuals are normally distributed or not. Good research model has a residual value that is normally distributed. Detection of normality in this study using the Kolmogorov-Smirnov test.

### Classic assumption test

#### Multicollinearity

Multicollinearity refers to a linear relationship between some or all of the independent variables in the research model. To determine whether there is multicollinearity on the model or not, the detection is performed first, and if multicollinearity is detected, then an action to eliminate the effects of multicollinearity is conducted [35]. In this study, multicollinearity is detected by using Tolerance and VIF (Variance Inflation Factor) value. The common cut-off value, which is used to indicate the presence of multicollinearity, is Tolerance value  $\leq 10$  or  $VIF \geq 10$  [34].

#### Autocorrelation

Autocorrelation refers to the correlation between the observation's members that are sorted by time series or cross section. This test aims to test whether in the research model there is a correlation between a disturbance term observations with the other observations [35]. To find out whether autocorrelation is existed or not, detection is conducted beforehand. The detection of autocorrelation in this study is using the Durbin Watson Test.

#### Heteroscedasticity

Heteroscedasticity test aims to test whether there is heteroscedasticity on regression model variance of residual each observation. The regression model that meets the requirements is having a similar variance of the residuals for each observation or called homoscedasticity. In this study, the detection of heteroscedasticity is using Scaterplot graphic by SPSS output results. If there is no clear pattern, and the point to point are spreaded, then the indication of heteroscedasticity is not happening [35].

#### Regression Analysis

This study uses regression analysis techniques. According to Gujarati [35], regression is a relationship or influence of two or more independent variables on the dependent variable.

There are eight-regression model developed in this study, namely:

Model 1: The effect of intellectual capital (VACA, VAHU, and STVA) on capital structure

$$DAR_{i,t} = a + b1 VACA_{i,t} + b2 VAHU_{i,t} + b3 STVA_{i,t} + e_{i,t}$$

Model 2: The effect of intellectual capital (VACA, VAHU, and STVA) on the company's growth

$$AG_{i,t} = a + b1 VACA_{i,t} + b2$$

$$VAHU_{i,t} + b3 STVA_{i,t} + e_{i,t}$$

Model 3: The effect of intellectual capital (VACA, VAHU, and STVA) on the company's firm value

$$MBV_{i,t} = a + b1 VACA_{i,t} + b2 VAHU_{i,t} + b3 STVA_{i,t} + e_{i,t}$$

Model 4: Effect of intellectual capital (VAIC<sup>TM</sup>) on capital structure

$$DAR_{i,t} = a + b1 VAIC_{i,t}^{TM} + e_{i,t}$$

Model 5: The effect of intellectual capital (VAIC<sup>TM</sup>) on the company's growth

$$AG_{i,t} = A + b1 VAIC_{i,t}^{TM} + e_{i,t}$$

Model 6; The effect of company's growth on capital structure

$$DAR_{i,t} = a + b1 AG_{i,t} + e_{i,t}$$

Model 7: the effect of capital structure of the company's firm value

$$MBV_{i,t} = A + b1 DAR_{i,t} + e_{i,t}$$

Model 8: the effect of the company's firm value on the company's growth

$$MBV_{i,t} = a + b1 AG_{i,t} + e_{i,t}$$

### Hypothesis test

t statistical test is used to indicate how far the influence of the independent variables partially explaining variations on the dependent variable. Independent variable is indicated to have a partial significant effect on the dependent variable if the p-value is less than or equal to the significance level [34].

## 3 RESULTS

### Normality of the Data

The results of the study indicated that all the variables are within the normal distribution range. It is shown from the significant value, in which all variables have a significance value greater than 0.05.

### Regression equations

Based on the results, it can be shown some regression equation, from model 1 to model 8 as follows:

Model 1:  $DAR = 4.610 + 0.054 VACA - 0.325 VAHU + 0.068 STVA + e$

Model 2:  $AG = 7.352 + 0.313 VACA + 0.246 VAHU + 0.273 STVA + e$

Model 3:  $MBV = 8.163 - 0.208 VACA - 0.258 VAHU + 0.229 STVA + e$

Model 4:  $DAR = 6.781 + 0.092 VAIC^{TM} + e$

Model 5:  $AG = 5.786 + 0.291 VAIC^{TM} + e$

Model 6:  $DAR = 5.426 - 0.207 AG + e$

Model 7:  $MBV = 6.209 - 0.327 DAR + e$

Model 8:  $MBV = 6,821 + 0.107 AG + e$

The model explains that VAHU negatively correlated with Capital structure and MBV. In addition, VACA and DAR negatively correlated with MBV, also AG negatively correlated with DAR. However, other variables positively correlated with DAR, AG, and MBV.

### Classic assumption test

Multicollinearity test results showed that the independent variables are freed from multicollinearity; this is indicated as the VIF  $\geq 10$  and Tolerance value  $\leq 10$ . This means that the regression models are freed of multicollinearity assumptions. Next, heteroscedasticity test results with scatterplot for all regression models showed that heteroscedasticity do not happen, because all the dots are spread and do not form a specific pattern on each of the regression model. Next,

autocorrelation results using Durbin Watson Test indicate that all the regression model have no negative autocorrelation, since the value of  $dU < DW < 4 - dL$  ( $H_0$  supported). This means that the regression model in this study has no disturbance term correlation between the observations with the other.

### Hypothesis testing

The first hypothesis testing: Intellectual capital (IC) proxied by VACA, VAHU, and STVA has positive effect on the capital structure of the company. The result details can be seen in Table 1 below:

**Table 1 Results of the First Hypothesis Testing**

| Variable | Coef.  | DAR                |       |
|----------|--------|--------------------|-------|
|          |        | t <sub>count</sub> | sig.  |
| Constant | 4.610  |                    |       |
| VACA     | 0.054  | 1.726              | 0.119 |
| VAHU     | -0.325 | -3.574             | 0.013 |
| STVA     | 0.068  | 1.620              | 0.882 |

Source: SPSS output

Table 1 illustrates that the IC proxied by VACA, VAHU and STVA has no significant effect on the capital structure (proxy: DAR). This evidence indicated by VACA and STVA.  $t_{count} < t_{table}$  and  $sig. > 5\%$ . However, VAHU has a significant negative effect on the capital structure.

The second hypothesis testing: Intellectual capital (IC) proxied by VACA, VAHU, and STVA has an effect on the company's growth. The result details can be seen in Table 2 below:

**Table 2. Results of the Second Hypothesis Testing**

| Variable | Coef. | Asset Growth (AG)  |       |
|----------|-------|--------------------|-------|
|          |       | t <sub>count</sub> | sig.  |
| Constant | 7.352 |                    |       |
| VACA     | 0.313 | 3.791              | 0.001 |
| VAHU     | 0.246 | 2.915              | 0.000 |
| STVA     | 0.273 | 2.906              | 0.006 |

Source: SPSS output

Table 2 illustrates that IC proxied by VACA, VAHU and STVA has a positive and significant impact on the company's growth (proxy: AG). This evidence indicated by  $t_{count} > t_{table}$  and  $sig. < 5\%$ . The third hypothesis testing: Intellectual capital (IC) proxied by VACA, VAHU, and STVA has an effect on company's firm value. The details can be seen in Table 3 below:

**Table 3. Results of the Third Hypothesis Testing**

| Variable | Coef.  | MBV                |       |
|----------|--------|--------------------|-------|
|          |        | t <sub>count</sub> | sig.  |
| Constant | 8.163  |                    |       |
| VACA     | -0.208 | -3.925             | 0.002 |
| VAHU     | -0.258 | -3.487             | 0.006 |
| STVA     | 0.229  | 2.989              | 0.009 |

Source: SPSS output

Table 3 illustrates that IC proxied by VACA, VAHU and STVA has a significant effect on the company's firm value (proxy: MBV). This evidence indicated by  $t_{count} > t_{table}$  and  $sig. < 5\%$ . While the correlation direction VACA and VAHU on MBV is negative, STVA has a positive and significant effect on the firm value. The fourth hypothesis shows Intellectual capital (IC) proxied by (VAIC<sup>TM</sup>) has an effect on the company's capital structure. The details can be seen in Table 4 below:

**Table 4. Results of the Fourth Hypothesis Testing**

| Variable           | DAR   |                    |       |
|--------------------|-------|--------------------|-------|
|                    | Coef. | t <sub>count</sub> | sig.  |
| Constant           | 6.781 |                    |       |
| VAIC <sup>TM</sup> | 0.092 | 1.791              | 0.305 |

Source: SPSS output

Table 4 illustrates that IC proxied by VAIC<sup>TM</sup> has no significant positive effect on the company's capital structure (proxy: DAR). This evidence indicated by  $t_{count} < t_{table}$  and  $sig. > 5\%$ . The fifth hypothesis testing: Intellectual capital (IC) proxied by VAIC<sup>TM</sup> has an effect on the company's growth. The result details can be seen in Table 5 below:

**Table 5 Results of the Fifth Hypothesis Testing**

| Variable           | Asset Growth (AG) |                    |       |
|--------------------|-------------------|--------------------|-------|
|                    | Coef.             | t <sub>count</sub> | sig.  |
| Constant           | 5.786             |                    |       |
| VAIC <sup>TM</sup> | 0.291             | 3.515              | 0.007 |

Source: SPSS output

Table 5 illustrates that IC proxied by VAIC<sup>TM</sup> has a significant positive effect on the company's growth (proxy: AG). This evidence indicated by  $t_{count} > t_{table}$  and  $sig. < 5\%$ . The sixth hypothesis testing: company's growth proxied by AG has an effect on company's capital structure (DAR). The result details can be seen in Table 6 below:

**Table 6 Results of the Sixth Hypothesis Testing**

| Variable | DAR    |                    |       |
|----------|--------|--------------------|-------|
|          | Coef.  | t <sub>count</sub> | sig.  |
| Constant | 5.426  |                    |       |
| AG       | -0.207 | -3.793             | 0.000 |

Source: SPSS output

Table 6 illustrated that company's growth proxied by AG has a negative significant effect on the company's capital structure (DAR), this evidence indicated by  $t_{count} > t_{table}$  and  $sig. < 5\%$ . The seventh hypothesis testing: the company's capital structure proxied by DAR has an effect on the company's firm value (MBV). The result details can be seen in Table 7 below:

**Table 7 Results of the Seventh Hypothesis Testing**

| Variable | MBV    |                    |       |
|----------|--------|--------------------|-------|
|          | Coef.  | t <sub>count</sub> | sig.  |
| Constant | 6.209  |                    |       |
| DAR      | -0.327 | -3.793             | 0.001 |

Source: SPSS output

Table 7 illustrated that the company's capital structure proxied by DAR has a negative significant effect on the company's firm value (MBV). This evidence indicated by  $t_{count} > t_{table}$  and  $sig. < 5\%$ . The eighth hypothesis testing: the company's growth proxied by AG has an effect on the company's firm value (MBV). The result details can be seen in Table 8 below:

**Table 8 Eighth Hypothesis Testing Results**

| Variable | MBV   |                    |       |
|----------|-------|--------------------|-------|
|          | Coef. | t <sub>count</sub> | sig.  |
| Constant | 6.821 |                    |       |
| AG       | 0.107 | 1.793              | 0.094 |

Source: SPSS output

Table 8 illustrates that the company's growth proxied by AG has no significant effect on the company's firm value (MBV). This evidence indicated by  $t_{count} < t_{table}$  and  $sig. > 5\%$ .

## 4 DISCUSSION

### 4.1 The Effect of Intellectual Capital (VACA, VAHU, and STVA) on the Capital Structure

Intellectual Capital proxied by VACA, VAHU and STVA partially has no significant effect on the capital structure (proxy: DAR). The proxies of Intellectual Capital, which has no significant effect on the capital structure, are VACA and STVA. This means that despite VACA increased (value added increasing in much larger value compared to the company's equity), it has no impact on the improvement of the company's capital structure. It is also the same as the STVA effect on the capital structure. The happening condition is due to an increase in the resources owned by the company (value added), especially on employees and structural capital, does not have an impact on increasing the amount of funding required (debt). As long as the resources owned by the company is managed and utilized properly, i.e. the lack of accountability of organizations and all stakeholders are treated fairly by the organization, as well as the manager must manage the organization for the benefit of all stakeholders [2]. Besides [36], has also confirmed that the strength of stakeholders to influence corporate management should be seen as a function of the degree of control over an organization's existing resources. These test results are also in accordance with the resource-based theory that explains that the company can maintain productivity with the company's competitive advantages by implementing strategies for creating value added, in this case is the IC that are difficult to imitate by company's competitors [37]. The results are consistent with the study conducted by [24], and [26], but does not support the study conducted by [38], [19], [21], and [25].

### 4.2 The Effect of Intellectual Capital (VACA, VAHU, and STVA) on the Company's Growth

Intellectual Capital proxied by VACA, VAHU and STVA has a significant effect on the company's growth (proxy: AG). This is in accordance with the opinion of [21], which stated if the company is able to manage its intellectual resources (IC) to the maximum, it will acquire value added regularly and continuously, so the company is able to grow and survive. In addition, [39] has insisted that full utilization of all resources of the company, both tangible and intangible resources, will encourage the growth and sustainability of the company's success. Furthermore, [27] confirms that the success of the growth and sustainability of the company will be realized if the company can manage its intellectual resources to the maximum.

### 4.3 The Effect of Intellectual Capital (VACA, VAHU, and STVA) on the Company's Firm Value

Intellectual Capital proxied by VACA, VAHU and STVA has a significant effect on the company's firm value (proxy: MBV). The results are consistent with the opinion of [21], that Intellectual Capital have a positive effect on the company's market value. However, the study of [25] showed that intellectual capital does not have a positive effect on the company's market value.

### 4.4 The Effect of Intellectual Capital (VAIC<sup>TM</sup>) of the Capital Structure

Based on the findings that Intellectual Capital proxied by VAIC<sup>TM</sup> has no significant effect on the company's capital



structure (proxy: DAR). The results support the idea of [40], that in today's phenomenon more and more companies are investing their wealth in employee training, research and development, customer relations, computer systems and administration. These investments are often referred to as intellectual capital (IC) that grow and compete with the physical and financial capital investment. Meanwhile, investment in capital structure concept is emphasizing more on physical and financial capital investment. Rationalization used to describe this opinion is that the rise and fall of the composition of the debt and equity of the company put more emphasis on business risk, company size, profitability and growth. This is in accordance with the results of study conducted by [41], [21], [42], and [43], that profitability, company size, growth, macroeconomic and business risks affecting the company's funding decisions (capital structure).

#### 4.5 The Effect of Intellectual Capital (VAIC™) on the Company's Growth

This study results showed that Intellectual Capital, which proxied by VAIC™ has a significant positive effect on the company's growth (proxy: AG). It should be reiterated that the IC proxied by VAIC™ is the sum of VACA, VAHU and STVA. It turns out that the results of this study are consistent with the hypothesis tests, i.e. the influence of VACA, VAHU and STVA that partially tested. This condition reaffirmed that Intellectual Capital is a very important variable in improving the company's growth. Thus, the results of this study strengthen the results of prior study conducted by [39], [27], [21], [25], [29], and [23].

#### 4.6 The Effect of Company's Growth on the Capital Structure

The result of the sixth hypothesis proved that company's growth proxied by AG has a significant negative effect on the company's capital structure (DAR). This condition describes when the needs or company's assets growth have increased, hence the payment preference will be preferred to use of the equity rather than debt. The results are consistent with study conducted by [44], [45], [46], [47] and [48] that also concluded that company's growth has a significant effect on the capital structure. Nevertheless, contrast to those result, the study by [49], [50], [51], [52], [53], and [54], indicate that the company's growth did not affect the capital structure.

#### 4.7 The Effect of Capital Structure on the Company's Firm Value

This study results indicate that the capital structure proxied by DAR has a significant negative effect on the value of the company (MBV). These results are consistent with the [32], which explains the optimal capital structure, is capital structure that is able to maximize the stock price. The results of this study support the study by [55], [52] and [54], i.e. capital structure can increase the value of the company, but is not consistent with research conducted by [56] which states that the capital structure does not affect the company's firm value.

#### 4.8 The Effect of the Company's Growth on the Company's Firm Value

The eighth result indicates company's growth, that proxied by AG, has no significant effect on the company's firm value (MBV). This result further prove that the company's firm value is more influenced by the Intellectual Capital and capital structure rather than company's growth. This condition also

indicates that the observed companies (companies that forming LQ45) are not experiencing fluctuating growth relative to its assets, which means that since the owned assets are already large, hence an additional investment has less impact on the percentage increase in the company's wealth. The results of this study do not concur with those of Mai (2005), which stated that growth has a positive effect on firm value (ROE and Tobin's Q).

## 5. CONCLUSION

Based on the results and discussion, it can be concluded that: (1) Intellectual Capital proxied by VACA, VAHU and STVA partially has no significant effect on the capital structure (proxy: DAR); (2) Intellectual Capital proxied by VACA, VAHU and STVA partially has a significant effect on the company's growth (proxy: AG); (3) Intellectual Capital proxide by VACA, VAHU and STVA has a significant effect on the company's firm value (proxy: MBV); (4) Intellectual Capital proxied by VAIC™ has no significant effect on the company's capital structure (proxy: DAR); (5) Intellectual Capital proxied by VAIC™ has a significant positive effect on the company's growth (proxy: AG); (6) the company's growth proxied by AG has a significant negative effect on the company's capital structure (proxy: DAR); (7) The capital structure proxied by DAR has a significant negative effect on the company's firm value (proxy: MBV); (8) the company's growth proxied by AG has no significant effect on the company's form value (proxy: MBV).

## 6. SUGGESTION

Further researchers suggested adding the external variable (macro variable) in order to come with the better results model, particularly on the impact of the capital structure and firm value. Moderating or mediating variables should be added, so the role of intellectual capital variable on the dependent variable is clearer. While there are several hypothesis is rejected, it does not mean that this result is not important, which means that companies must give attention to the influence of these variables on the firm value and capital structure forming LQ'45 of the company.

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