



The Influence of Sustainability Report Disclosure as Moderating Variable towards the Impact of Intellectual Capital on Company's Performance

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ABSTRACT

The purpose of this paper is to examine the influence of sustainability report (SR) disclosure as moderating variable towards the impact of intellectual capital (IC) on company's performance based on 21 companies listed in Indonesia stock exchange and listed in National Center for SR chapter Indonesia for the period 2010-2013. This research used Pulic's model of value added intellectual coefficient (VAIC) to determine the IC of companies. Company's performance is presented as return on assets (ROA), return on equity (ROE), and revenue growth (RG). The required data to calculate the IC and company's performance was obtained from the annual reports while SR disclosure was obtained from SR. Results from linear regression analysis show that VAIC has positive effects on ROA and ROE. It means high ROA and ROE companies are associated with more VAIC. Aside from that, VAIC does not have effect to RG. Result from moderated regression analysis also show that SR disclosure has positive effects on ROA and ROE, but does not have any influence on RG. SR disclosure becomes pure moderator on ROA while become quasi moderator on ROE. It means SR disclosure is only as moderating variable on ROA while it can be both independent and moderating variable on ROE.

Keywords: Intellectual Capital, Company's Performance, Sustainability Report, Value Added Intellectual Coefficient, Moderating Variable

JEL Classifications: G32, M41

1. INTRODUCTION

In calculating the value of a company, analysts used the traditional measurement to capture the value which was only relying on the measurable things. They measured the company value based on stock price, size, net assets, etc., There were many argues came to the surface when discussing about this traditional measurement, because this measurement did not include the intangible resources that cannot be measured. Their system to measure the company value was not wrong, but it was inadequate enough to represent the real value of the company. We all know that in financial statement, we can find the value of intangible assets down there, but it is not enough to determine the value of intangible resources.

According to Cordazzo (2005. p. 442), the traditional system to value a company do not consider about the dematerialization of economic activity, the knowledge society, the service-based

economy, the technological advances, and such other macro and micro events. Intellectual capital (IC) can help a company to disclose its intangible resources. Oliveira et al. (2010. p. 575) stated that to improve transparency, legitimize status, and enhance reputation, a company needs to disclose its IC. The IC disclosures can be found in annual report, sustainability report (SR), and company website. IC could also straighten the information gap between the management and the shareholders.

Abhayawansa and Guthrie (2010. p. 217) stated that there is a connection between the IC with the market value of equity and company's performance. To add deeper understanding about IC, Veltri and Silvestri (2011. p. 241) stated that the level of knowledge mainly in competence and skills, high degree of technological innovation, and a high degree of interaction between personnel and clients are the major trigger for a good company's performance based on the level of service and assistance provided to the clients.

Widiyaningrum (2004, p. 24) concluded that the awareness of the importance of the IC in Indonesia is really low. It is understandable seeing that there are many industries in Indonesia are being dominated by the physical investment industries. That's why the point of seeing the potential company needs to be changed, the shareholders and investors must consider about the IC of a company.

IC disclosures can be found in the SR in which the stakeholders are the common readers, some of additional information of IC might be found in annual report and company website. IC disclosures would be a very good motivation to satisfy the stakeholders. According to Global Reporting Index or known as global reporting initiative (GRI), a SR is a report published by a company that consists about the economic, environmental, and social impacts caused by its activities. A SR also consists about the organization's values and governance model, and demonstrates the relation between its strategy and its commitment to a sustainable global economy. It is very unfortunate to stakeholders because the rule of the disclosing SR is still voluntary.

The increasing number of companies is happening because they want to make their operations sustainable and contribute to sustainable-related development. Based on GRI-3 Guidelines, SR can help a company to measure, learn, and deliver their three key areas: Economic, environmental, and social. Those three key areas are included in the IC disclosure index based on the methods by Bukh et al. (2005) and Oliveira et al. (2010). That's why the SR disclosure supports the resources of IC.

As stated by Wang (2008), in assessing the real value of a company, a company will have many advantages on changing tangible assets into IC. The innovation capabilities, skills, knowledge, and human resources of a company would be the great benefit for the company in the long term. By doing that, the leaders and managers also need to change the way of thinking and understanding the marketplace landscape. As a result, the investors would like to invest more their money in the high IC companies.

There are some studies about the impact of the IC on company's performance that have been done in domestic and abroad with different results. Joshi et al. (2013, p. 267) explained that to measure IC, most of researchers use value added IC (VAIC). VAIC produce comparative analysis between companies in many different sectors to obtain the valid measurement of IC, because VAIC has been robustly tested and been used internationally.

For the studies of the relation between the SR disclosure with IC, Oliveira et al. (2010) stated that there is a significant effect of the SR disclosure with the IC. It appears that GRI guidelines have helped improved the IC in a company. They also stated that companies can acquire an important intangible element - a good reputation to stakeholders by building positive image in SR.

2. LITERATURE REVIEW

2.1. IC

The research of IC is growing from year to year, most of the experts say that IC is very important to company and can create

the competitive advantage. Managing the intellectual resource properly will support the company to achieve its goals. While IC is important, the term of IC itself has been defined differently by many researchers (Mondal and Ghosh, 2012, p. 516). Generally, the term of IC is commonly used to explain the intangible assets or intangible resources of the company. Although IC are not generally counted and listed in the balance sheet, they can support the company to success and deal a great impact on its performance.

Mondal and Ghosh (2012, p. 517) explained that "researchers categorized all non-physical assets and resources of an organization into several components. Popular components include human capital (HC), structural capital (SC), and relation or customer capital (Table 1)." According to Joshi et al. (2013, p. 267), HC is defined as the knowledge, qualification, and skills of employees which can be enhanced with the training. Ghosh and Mondal (2009, p. 372) recognized HC as the most important and the largest intangible assets in a company. HC can be improved if the company can manage and develop the knowledge, competence, and the skills of the employee efficiently. By improving the HC, it means that the company performance will also be improved.

Joshi et al. (2013, p. 267) defined SC as the knowledge created by the company and cannot be separated from the company. It includes the database, procedures, routine, systems, company's structures, cultures, and others. SC supports the HC to do their job, hence that's why the SC and HC are related each other. Mondal and Ghosh (2012, p. 517) defined relation capital as the resources that are acquired by doing the external relationship, such as relationship with customers, suppliers, or other stakeholders. In other words, relation capital is the knowledge that is attached in the external relationship that need to be maintained and can affect the company's performance.

2.2. VAIC

VAIC was developed by Pulic (1998) in order to measure the IC of a company. It has been used in the investigation of the instruments

Table 1: List of intellectual items on sustainability report

| N | IC items |
|-----|---|
| | HC |
| 1. | Employees characteristics |
| 2. | Employees training |
| 3. | Employees skills |
| 4. | Employees wellness |
| | OC |
| 5. | Intellectual property |
| 6. | Information systems |
| 7. | Corporate culture and management philosophy |
| 8. | Management processes |
| 9. | Research and development |
| | RC |
| 10. | Distribution channels |
| 11. | Business collaborations |
| 12. | University and research centre collaborations |
| 13. | Company reputation |
| 14. | Customers |
| 15. | Suppliers |
| 16. | Financial relations |

Source: Cinquini et al. (2012, p. 543), HC: Human capital, OC: Organizational capital, RC: Relational capital

of IC relationship. It offers the measurement of the company's efficiency to manage their IC by looking at their all resources, such as physical, financial, and IC.

The advantage of using VAIC according to Clarke et al. (2011, p. 507) is all instruments of VAIC can be relatively easily obtained from the annual report and it is quantifiable. Chan (2009, p. 10) explained the advantages of VAIC are following:

1. VAIC instruments can be acquired in annual report and those are quantifiable. As a result, the quantitative method can be done without any involvement of subjective valuation like the scoring or scaling. It also helps the computation and analysis of a large sample size.
2. It allows the stakeholders and shareholders to capture and compare the IC instruments in order to value the company's performance by providing the relevant, useful, and informative indicators.
3. By using the financially oriented measurement, any indicators, connections, or ratios calculated can be used to compare with the traditional financial indicators. It could provide the advance analysis about the financial measurement.
4. It uses the relatively simple and easy index and coefficients computation procedure, hence can be easily to understand by people who already know how to read the traditional accounting information.
5. It creates a way to make the measurement of IC become standardized. The indicators of IC can be used for the comparison across nation.
6. It allows gathering the indicators from the public financial statement so it is reliable and available.
7. It delivers the measurement of IC that is getting along with the theory of stakeholder and resource based by using a value added (VA) approach.
8. It values employees and HC as the key source of IC, hence congruent with the definition of IC in the most literatures.
9. It is already used by most researchers in many countries, like Hongkong, Taiwan, Malaysia, and Singapore. By looking from that, IC research by using VAIC is already proven its credibility.

2.3. SR Disclosure

SR is a voluntary report issued by a company separately from the annual report and support a company to disclose its information that integrate social, economic, and environmental impacts on business. GRI defines SR as a practice of measuring and disclosing the company's activities as, responsibility to both internal and external stakeholders in order to achieve sustainable development. Beside as the support of sustainable development, this report can disclose everything that cannot be disclosed in annual report. SR can be the media for both internal and external stakeholders to provide information about the accomplishment of company to be responsible of its activities.

SR can enhance the information about the company that cannot be disclosed in annual report. It can contain what the company needs to report so the stakeholders can know what's going on inside. We can find some parts of IC can be received from the SR.

3. RESEARCH METHODOLOGY

3.1. Development of Hypotheses

3.1.1. The relationship between IC and company's performance

Resource-based theory explains that resources can create the advantages for the company. Wernerfelt (1984, p. 172) stated that resources could be anything and could be from both tangible and intangible assets. Anything here means that not only tangible and intangible assets, but also the intangible resources that appear to have potential to create VA for the company. Those intangible resources can be said as IC of company.

Hypothesis 1: VAIC is positively related to return on assets (ROA).

Hypothesis 2: VAIC is positively related to ROE.

Hypothesis 3: VAIC is positively related to revenue growth (RG).

3.1.2. The relationship between SR disclosure and IC

One of main purposes of companies in issuing SR is to disclose the additional information. That additional information will help company to build their transparency to their stakeholders hence will result in increasing reputation-related IC. According to IC definition, IC consists of three instruments; those are HC, SC, and relation or customer capital. The information about those instruments can be found in both annual report and SR. While annual report shows the amount of them, SR shows the explanatory details. GRI provides the guidelines how to compile good SR. GRI guidelines have the similar instruments like the IC instruments. Oliveira et al. (2010, p. 590) stated that publicly listed companies were found to use SR to deliver IC information to stakeholders. Those companies tried to improve relationship with external stakeholders by disclosing IC in SR.

Hypothesis 4: SR disclosure is positively related to the impact of VAIC on ROA.

Hypothesis 5: SR disclosure is positively related to the impact of VAIC on ROE.

Hypothesis 6: SR disclosure is positively related to the impact of VAIC on RG.

3.2. Dependent Variables

3.2.1. ROA

Financial performance in this research will use ROA as one of its indicators. ROA is one of the profitability ratios that can be used to measure the company performance in generating the profit from the total assets used. Needles et al. (2010, p. 204) stated that ROA reflects the benefit of both the profit margin and asset turnover. Profit margin doesn't calculate the total assets, while total assets turnover doesn't calculate the sales profitability. The formulation of ROA (Clarke et al. 2011):

$$\text{ROA} = \text{Profit before tax} / \text{average total assets} \quad (1)$$

3.2.2. ROE

ROE is a ratio to measure the company's efficiency in generating the profit from shareholders equity. Needles et al. (2010, p. 204) stated that ROE can help investors to know how much they have earned in the business. The formulation of ROE (Clarke et al. 2011):

$$ROE = \text{Profit before tax} / \text{average common stock equity} \quad (2)$$

3.2.3. RG

RG is a calculation of company's current year revenue compared to prior year revenue. The increasing value of RG can be a good signal for a company to grow even bigger. The formulation of RG (Clarke et al. 2011):

$$RG = (\text{Current year revenue} / \text{prior year revenue}) - 1 \quad (3)$$

3.3. Independent Variable

In this research, researcher uses VAIC as an independent variable. Pulic (as cited in Mondal and Ghosh, 2012) created the measurement basis for the independent variable in the present study. Management, shareholders, and other relevant stakeholder can monitor and evaluate the efficiency of VA by looking from a firm's total resources and each major resource component by using VAIC. A company with a higher VAIC means that they can manage their all available resources to create a higher value creation.

In order to calculate VAIC, the VA of a company need to be calculated first. This following algebraic equation is used by Firer and Williams (2003), Ghosh and Mondal (2009), Mondal and Ghosh (2012), and Clarke et al. (2011):

$$VA = NI + T + DP + I + W \quad (4)$$

Where:

NI=Net income after tax

T=Tax

DP=Depreciation

I=Interest expense

W=Total employee expenses

Otherwise, as stated by Pulic (as cited in Mondal and Ghosh, 2012), VA can be calculated by sum up the operating revenues then deduct it by operating expenses (materials, maintenance, other external costs). VAIC consist of three efficiency measurements, the first one is HC efficiency (HCE). HC represents the value of the employees. It consists of their skills, experiences, productivity, and knowledge (Clarke et al., 2011). Pulic (as cited in Mondal and Ghosh 2012) calculates HCE as following equation:

$$HCE = VA / HC \quad (5)$$

Where:

VA=Value added

HC=HC (total employee expenses)

The second efficiency measurement is SC efficiency (SCE). SC in IC consists of the company strategy, brand names, organizational networks, customers' database, and patents. Pulic (as cited in Clarke et al., 2011) calculates SC and SCE as:

$$SC = VA - HC \quad (6)$$

$$CE = SC / VA \quad (7)$$

Where:

SC=Structural capital

VA=Value added

HC=Human capital

Pulic (as cited in Mondal and Ghosh, 2012) argues there is an inverse relationship between SC and HC in the value creation process. Whenever SC contributes less in value creation process, HC will contribute more.

The third efficiency measurement is capital employed efficiency (CEE). Clarke et al. (2011) defines CEE as the efficiency of IC that HCE and SCE fail to capture. CEE shows how much the creation of VA by spending the money on CE. Mondal and Ghosh (2012, p. 517) defined CE or relation capital as the resources that are acquired by doing the external relationship, such as relationship with customers, suppliers, or other stakeholders. In other words, relation capital is the knowledge that is attached in the external relationship that need to be maintained and can affect the company's performance. Pulic (as cited in Firer and Williams, 2003) calculates the CEE as following equation:

$$CEE = VA / CE \quad (8)$$

Where:

VA=Value added

CE=Capital employed (book value of a company's net assets)

Together, all the efficiency measurements (HCE, SCE, and CEE) bring the VAIC as one. VAIC can be calculated by compiling all the equations above to become a final equation:

$$VAIC = HCE + SCE + CEE \quad (9)$$

3.4. Moderating Variable

Moderating variable in this research is the SR disclosure. SR provides the non-quantified IC which really helps the company to add more value creation process. Cinquini et al. (2012) defines the IC items that stated in SR that can help the companies to deliver the information of their IC. The formulation of SR index as following:

$$SRI = \sum X \quad (10)$$

Where:

X=Dummy variables: 1=Disclosed; 0=Not disclosed.

3.5. Sample

The population for the study is all companies that listed in Indonesia stock exchange and issued SR listed on National Center for SR Chapter Indonesia consecutively for 4 years, which are approximately 40 companies. The documenting period is 4 years, which is derived from 2010 until 2013. Several screening operation were performed on these files. The technique for sample taken is conducted with purposive sampling in order to obtain representative sample according to the set of criteria, which leave 21 companies to be the final sample of the present study.

3.6. Regression Models

The regression models for this research are:

$$ROA = \alpha_0 + \alpha_1 VAIC + e \tag{1}$$

$$ROE = \alpha_2 + \alpha_3 VAIC + e \tag{2}$$

$$RG = \alpha_4 + \alpha_5 VAIC + e \tag{3}$$

$$ROA = \alpha_6 + \alpha_7 VAIC + \alpha_8 SRI + e \tag{4}$$

$$ROE = \alpha_9 + \alpha_{10} VAIC + \alpha_{11} SRI + e \tag{5}$$

$$RG = \alpha_{12} + \alpha_{13} VAIC + \alpha_{14} SRI + e \tag{6}$$

$$ROA = \alpha_{15} + \alpha_{16} VAIC + \alpha_{17} SRI + \alpha_{18} VAIC.SRI + e \tag{7}$$

$$ROE = \alpha_{19} + \alpha_{20} VAIC + \alpha_{21} SRI + \alpha_{22} VAIC.SRI + e \tag{8}$$

$$RG = \alpha_{23} + \alpha_{24} VAIC + \alpha_{25} SRI + \alpha_{26} VAIC.SRI + e \tag{9}$$

4. FINDINGS

Research hypotheses are tested by comparing the equation of the regression model with α significance value of α . If the value is smaller than the level of significance (5%) then there is a positive relation of each independent variable on dependent variable. Equation regression models are also tested together. If the value is smaller than the level of significance (5%) then there is a positive relation of all independent variables on dependent variable.

4.1. Normality Test

The residual normality assumption has been fulfilled, because under the Kolmogorov test stated a significance value of 0.200 which is >0.05 ($\alpha=5\%$).

4.2. Autocorrelation Test

The run test result a significance value 0.272 which is >0.05 ($\alpha=5\%$), it can be concluded that there is no residual autocorrelation in the regression model.

4.3. Heteroscedasticity Test

Based on scatterplot output, there is no particular pattern for irregular spread points and below the axis 0 on the Y axis. It means no symptoms heteroscedasticity.

4.4. Regression Test

Taken from regression test, in the future the effect of intellectual capital on companies' financial performance will vary depending on type of industry.

4.5. Discussion of Results

All of the data have passed the classic assumption testing, based on Tables 2-4. It makes the present study can be regressed in order to know the result of the proposed models.

Table 2: One-sample kolmogorov smirnov test

| Model test | ROA | ROE | RG | VAIC | SRI | VAIC.SRI |
|-------------------------------------|--------|--------|--------|--------|--------|----------|
| Kolmogorov Smirnov Z | 1.059 | 1.07 | 0.924 | 1.146 | 1.335 | 1.283 |
| Asymptotic significant (two-tailed) | 0.212 | 0.203 | 0.361 | 0.144 | 0.057 | 0.074 |
| Distribution result | Normal | Normal | Normal | Normal | Normal | Normal |

ROA: Return on assets, ROE: Return on equity, RG: Revenue growth, VAIC.SRI: Value added intellectual coefficient

Table 3: Durbin Watson test

| Model | Du | Durbin Watson | 4-du | Conclusion |
|-------|------|---------------|------|--------------------|
| 1 | 1.67 | 2.098 | 2.33 | No autocorrelation |
| 2 | 1.67 | 2.096 | 2.33 | No autocorrelation |
| 3 | 1.67 | 2.145 | 2.33 | No autocorrelation |
| 4 | 1.7 | 2.218 | 2.3 | No autocorrelation |
| 5 | 1.7 | 2.255 | 2.3 | No autocorrelation |
| 6 | 1.7 | 2.16 | 2.3 | No autocorrelation |
| 7 | 1.72 | 2.253 | 2.28 | No autocorrelation |
| 8 | 1.72 | 2.273 | 2.28 | No autocorrelation |
| 9 | 1.72 | 2.16 | 2.28 | No autocorrelation |

4.5.1. The impact of IC on ROA

The first hypothesis stated that the IC, identified using VAIC, is positively related to ROA. IC is the key of company's performance. Based on the resources based theory, IC can create something intangible resource that can trigger to the greater value of ROA. Based on Table 5, the significance value of VAIC is 0.002, which is <0.05 . As a conclusion we accept the first hypothesis at significance level of 5%. It shows that IC give significant impact to the company's ROA which is one of the proxies of company's performance. Specifically, IC has positive relation with the company's ROA. So, our first hypothesis is accepted which means that the greater the degree of IC owned by companies, they will have greater ROA.

The result of this research is consistent with Chen et al. (2005) who stated that IC is positively related to the ROA. They stated that their empirical study could prove that investors would like to invest in companies that have high value of IC. In addition, companies with high value of IC could lead to better ROA. Although the instruments of IC are being restrained to be disclosed in annual report, investors still tend to invest in companies that have high IC in order to take the advantages of invisible value from IC.

4.5.2. The impact of IC on ROE

The second hypothesis stated that the IC, identified using VAIC, is positively related to ROE. Based on Table 5, the significance value of VAIC is 0.008, which is <0.05 . As a conclusion we accept the second hypothesis at significance level of 5%. It shows that IC give significant impact to the company's ROE which is one of the proxies of company's performance. Specifically, IC has positive relation with the company's ROE. So, our second hypothesis is accepted which means that the greater the degree of IC owned by companies, they will have greater ROE.

The result of this research is consistent with Fathi et al. (2013) who stated that IC is positively related to the ROE. They suggested

business might move their treatment from a whole of tangible assets to some of intangible assets. This research is also congruent with Ifada and Hapsari (2012) which investigated the relationship between IC and companies' financial performance in Indonesia. The results of this study were there was a positive effect of IC on companies' ROE. They also stated that in the future, the effect of IC on companies' financial performance will vary depending on type of industry.

4.5.3. The impact of IC on RG

The third hypothesis stated that the IC, identified using VAIC, is positively related to RG. Based on Table 5, the significance value of VAIC is 0.445, which is more than 0.05. As a conclusion we reject the third hypothesis at significance level of 5%. It shows that IC don't have any impact to the company's RG which is one of the proxies of company's performance. So, our third hypothesis is rejected which means that the greater the degree of IC owned by companies, they will have no effect on RG.

The result of this research is consistent with Maditinos et al. (2011) who proved that IC does not have anything to do with the RG. They stated although IC mostly could show a growing acceptance among academics, this result would begin to raise some various arguments and critics about the usage of the IC which will lead to further research on the subject.

4.5.4. The impact of IC on ROA with SR disclosure as moderating variable

The fourth hypothesis stated that SR disclosure is positively related to the impact of VAIC on ROA. IC is the key of company's performance. Based on the resources based theory, IC can create something intangible resource that can trigger to the greater value of ROA. But the impact of VAIC on ROA with complete disclosure of SR will result greater than the incomplete

disclosure of SR. Based on Table 5, the significance value of VAIC is 0.002 and VAIC.SRI is 0.049, which are <0.05. As a conclusion we accept the fourth hypothesis at significance level of 5%. It shows that IC and SR disclosure give significant impact to the company's ROA which is one of the proxies of company's performance. Specifically, IC and SR disclosure has positive relation with the company's ROA. So, our fourth hypothesis is accepted which means that the greater the degree of IC owned by companies, they will have greater ROA. The result will even greater when the SR is completely disclosed. The significance value of SR is more than 0.05. As conclusion, we accept that SR disclosure in this model research's role is as pure moderating variable.

4.5.5. The impact of IC on ROE with SR disclosure as moderating variable

The fifth hypothesis stated that SR disclosure is positively related to the impact of VAIC on ROE. IC is the key of company's performance. Based on the resources based theory, IC can create something intangible resource that can trigger to the greater value of ROE. But the impact of VAIC on ROE with complete disclosure of SR will result greater than the incomplete disclosure of SR. Based on Table 5, the significance value of VAIC is 0.007 and VAIC.SRI is 0.027, which are <0.05. As a conclusion we accept the fifth hypothesis at significance level of 5%. It shows that IC and SR disclosure give significant impact to the company's ROE which is one of the proxies of company's performance. Specifically, IC and SR disclosure has positive relation with the company's ROE. So, our fifth hypothesis is accepted which means that the greater the degree of IC owned by companies, they will have greater ROE. The result will even greater when the SR is completely disclosed. The significance value of SR is <0.05. As conclusion, we accept that SR disclosure in this model research's role is as quasi moderating variable.

Table 4: Glejser test

| Model | Variable | Significant | Model | Variable | Significant | Model | Variable | Significant |
|-------|----------|-------------|-------|----------|-------------|-------|----------|-------------|
| 1 | VAIC | 0.16 | 4 | VAIC | 0.093 | 7 | VAIC | 0.12 |
| | | | | SRI | 0.917 | | SRI | 0.29 |
| | | | | VAIC.SRI | | | VAIC.SRI | 0.06 |
| 2 | VAIC | 0.66 | 5 | VAIC | 0.176 | 8 | VAIC | 0.28 |
| | | | | SRI | 0.271 | | SRI | 0.99 |
| | | | | VAIC.SRI | | | VAIC.SRI | 0.06 |
| 3 | VAIC | 0.38 | 6 | VAIC | 0.369 | 9 | VAIC | 0.37 |
| | | | | SRI | 0.542 | | SRI | 0.57 |
| | | | | VAIC.SRI | | | VAIC.SRI | 0.86 |

VAIC.SRI: Value added intellectual coefficient

Table 5: Regression test

| Model | Variable | Significant | Model | Variable | Significant | Model | Variable | Significant |
|-------|----------|-------------|-------|----------|-------------|-------|----------|-------------|
| 1 | VAIC | 0.002 | 4 | VAIC | 0.002 | 7 | VAIC | 0.002 |
| | | | | SRI | 0.039 | | SRI | 0.075 |
| | | | | VAIC.SRI | | | VAIC.SRI | 0.049 |
| 2 | VAIC | 0.008 | 5 | VAIC | 0.008 | 8 | VAIC | 0.007 |
| | | | | SRI | 0.019 | | SRI | 0.041 |
| | | | | VAIC.SRI | | | VAIC.SRI | 0.027 |
| 3 | VAIC | 0.445 | 6 | VAIC | 0.459 | 9 | VAIC | 0.462 |
| | | | | SRI | 0.561 | | SRI | 0.568 |
| | | | | VAIC.SRI | | | VAIC.SRI | 0.999 |

VAIC.SRI: Value added intellectual coefficient

4.5.6. The impact of IC on RG with SR disclosure as moderating variable

The sixth hypothesis stated that SR disclosure is positively related to the impact of VAIC on RG. IC is the key of company's performance. Based on the resources based theory, IC can create something intangible resource that can trigger to the greater value of RG. But the impact of VAIC on RG with complete disclosure of SR will result greater than the incomplete disclosure of SR. Based on Table 5, the significance value of VAIC is 0.462 and VAIC.SRI is 0.999, which are more than 0.05. As a conclusion we reject the fifth hypothesis at significance level of 5%. It shows that IC and SR disclosure do not give any impact to the company's ROE which is one of the proxies of company's performance. Our sixth hypothesis is rejected which means that the greater the degree of IC owned by companies, they will don't have anything to do with the RG.

5. CONCLUSIONS

The present study attempted to investigate the influence of SR disclosure as moderating variable towards the impact of IC on company's performance of public listed companies in Indonesia, period 2010-2014. The main idea was only the impact of IC on company's performance, but researcher wanted to add SR disclosure as moderating variable because SR disclosure, according to Oliveira et al. (2010), has significant effect to the value of IC itself. The methodology used for VAIC is adopted from Pulic's model and for SR disclosure is adopted from Cinquini et al. (2012) model.

The conclusion is the IC will be more intensive in giving positive effect to ROA and ROE if the SR is disclosed more completely. SR disclosure acts like a catalyst. Whenever the IC is high the effect will be also high to the both ROA and ROE, vice versa. SR help companies to deliver the information of IC of companies which have been issued in annual report. Annual and SR are helping each other to create higher value of ROA and ROE. SR contain useful information for the reader which are not attached in annual report hence can create something valuable for the companies. Therefore, fourth and fifth hypothesis are accepted.

IC doesn't give any effect to RG as well as the SR disclosure. Companies with higher IC and SR will have nothing to do with RG. RG somehow can't truly express the company performance since RG model only calculates between current year revenue over prior year revenue. A company might have better revenue in prior year but their real performance might be better in the current year. That can be happened if we consider about the other possibilities. Therefore, sixth hypothesis is rejected.

Overall, the empirical findings suggest that the Indonesian companies should be more concerned about the value of IC and the SR disclosure one. Although one of the dependent variable, RG, is failed to proof the usage of IC and SR, but other dependent variables, ROA and ROE, have significant effect of them. Companies should intensify the disclosure of SR because of the intangible advantages that they will get, as the same as this findings of this study. As well as SR, companies should be more

concerned about the IC parts (human capital, SC, and relation capital or capital employed) because they can lead to better company's performance.

6. LIMITATIONS AND FUTURE STUDIES

1. Because researcher cannot find either the annual report or SR from companies that might be potentially used for the samples in this research, it is expected that the future studies can include samples that couldn't be found by the researcher.
2. There are a lot of companies that didn't publish SR continuously each year in Indonesia. Some companies already started to publish it in earlier but also stopped earlier. There are also some companies just started to publish it in recent years. It takes efforts by companies to create and publish SR, since it's not mandatory. Researcher hopes that there will be more companies that will publish SR continuously.

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