H3a: There is a significant positive relationship between HC and companies' MCAP

H3b: There is a significant positive relationship between SC and companies' MCAP

Hc: There is a significant positive relationship between RC and companies' MCAP

## RESEARCH DESIGN

### Sample Selection

This study chose the agricultural industry in Malaysia and Indonesia as the setting. The total sample chosen is 53 companies comprising of 39 Malaysian agricultural companies and 14 Indonesian agricultural companies. In deciding the sample of this study, the companies must fulfil the following criteria:

1. The companies must be listed on Bursa Malaysia under the plantation sector for Malaysian companies and listed in the Indonesia Stock Exchange under the agricultural sector for Indonesian companies by the end 2012. This study chose the annual reports until 2012 only because starting from 2012 onwards the Indonesian companies have adopted the fair value model for their agriculture following their convergence with the International Financial Reporting Standards. Malaysia on the other hand, still adopted the cost model. The different accounting practices in both countries would result in different accounting outcomes that makes an 'apple to apple' comparison impossible.

2. The annual reports of the financial year 2012 in English must be available in the Bursa Malaysia and Indonesia Stock Exchange website

The listed companies on the stock exchange were selected as the sample as they are more likely to disclose IC information (Ferreira & Moreira, 2012). The sample covers all listed companies under the plantation/agriculture sector and are listed on the main or second board.

## Data Collection Method

This study used content analysis on the annual reports of the two companies. The content analysis method iwasconducted in two phases. The first phase was reading the annual report of each company. The second phase involved coding the information, both qualitative and quantitative in the coding sheet according to the designated framework of IC indicators (Guthrie Petty & Ricceri, 2006). This methodology permits the presentation of published information in a structured, objective and reliable manner (Guthrie et al., 2012). Three principles must be adhered namely, stability, reproducibility, and accuracy. To demonstrate reliability and validity of data collection, this study reliedon two independent coders when conducting the content analysis (Foong, Loo & Balaraman.,2009).

## IC Disclosure Checklist

The categories or indicators of IC classification used in the content analysis must be coherently and operationally defined in order to avoid inconsistency which could potentially distort the results (Beattie & Thomson, 2007). After an extensive review on IC disclosure studies in the literature, the framework used in this study is based on three categories of IC namely, HC, SC and RC. For the purpose of analysis, a comprehensive IC framework developed by Li et al. (2008) was adopted.

## Scoring IC Disclosure

Past studies have examined the extent of IC disclosure practices using a dichotomous basis (0,1) (see Abdolmohammadi, 2005; Li et al., 2008; Ousama et al., 2012; Sumon, Loo & Balaraman., 2014). The dichotomous approach concerns on the absence or presence of attributes in the disclosure checklist and is more objective as scaling errors can be avoided. A '0' was given if an item in the checklist does not appear in the annual report and value of '1' was given if an item was disclosed. However, this approach is frequently  criticised as not being able to capture the quality of disclosures (Haji & Ghazali, 2012).

To overcome such criticism, this study used a three-point scale (0-2) (Bozzolan, O'Regan & Ricceri., 2006; Wijana, Sutrisno & Wirakusuma., 2013) and sentences were selected as recording units as it is deemed far

267

more reliable than any unit of analysis as individual words lack meaning without the sentence (Wijana et al., 2013). The sentences were scored in the following manner: '0' if the information did not appear in annual reports; a value of '1' was given for providing information in qualitative form, and the highest score of 2 was denoted if items were disclosed in quantitative terms. If an attribute appeared more than once throughout the annual report, it was only being recorded once.

## Variables

To examine the potential relationship between the extent of IC disclosure and company performance, the dependent variable and its measurement were identified. The proxy of company performance is market capitalization (MCAP). The dependent variable was selected based on some empirical evidences gathered from past studies (Clarke, Seng & Whiting, 2011; Mehralian et al., 2012). For the purpose of this study, the dependent variable, MACP is defined the number of shares outstanding multiplied by share price.

## Independent Variables

To measure the independent variables (extents of IC disclosure), content analysis was employed on the 53 selected agriculture companies of Malaysia and Indonesia. The IC framework checklist by Li et al. (2008) consistingof 61-IC attributes (HC *n=22, SC n=18, RC n=21,) was adopted and was scored using a three-point scale (0-2). The amount of disclosure at category level was calculated by adding the scores of each IC attributes within the category. This indicates that the maximum points for all three categories that a company can score is 122 (i.e. HC=44, SC=18, RC=42 or each attributes (x) 2 points). An overall disclosure index (ICD) was then determined by total of actual score awarded divided by the maximum potential score applicable to that company. This index has also been used successfully in  previous studies* (Bukh et al., 2005; Li et al., 2008).

$$\text{ICD} = \frac{\sum_{i=1}^{m} d_i}{m}$$

Where,

$d_i$ = expresses attributes is with a value of 2 if disclosed in quantitative terms, 1 if qualitative form, and 0 if the attribute was not disclosed

$m$ = *maximum possible score a company could achieve, that is 122 (61 items multiplied by two [quantitative disclosure]).*

## Control Variables

To isolate the effects of other factors with predictable influences on company performance, the study included country as the control variable. The control variable for this comparative study is country code (CC), whereby Malaysia was coded as '1' and Indonesia was coded as '2'.

## Regression Models

To examine the relationship on the extent of IC disclosure on company performance, a regression model was developed to test the direct relationship between independent and dependent variables. The regression line provides an estimation of the linear relationship between a dependent variable and one or more independent variables. The regression was adopted from (Ousama et al., 2011) with some modifications. The multiple regression equation for this study was constructed as follows:

Model 1: $MCAP = \beta_0 + \beta_1 ICD + \beta_2 CC + \varepsilon_j$
Model 2: *$MCAP = \beta_0 + \beta_1 HCD + \beta_2 SCD + \beta_3 RCD + \beta_4 CC + \varepsilon_j$*

Where,

MCAP = Market capitalization;
ICD = Overall IC disclosure;
CC = Country Code;
$\beta_0$ = intercept;
$\beta_1$ = parameters to be estimated, *i = 1, . . . ,4;*
$\varepsilon_j$ = *error term.*

## RESULTS

### Extent of IC Disclosure

Table 1 displays the descriptive statistics for IC disclosure and each category of IC disclosure for Malaysian and Indonesian agricultural companies for the year 2012. Looking at ICD results by country, the mean of IC attributes disclosed in annual reports is 62.13 for Malaysia and Indonesia scored a slightly higher result, at 63.38. The descriptive results indicate that the extent of ICD practices is broadly similar in the two countries. Both countries reported IC information in the annual report at the same level (>60%). The average of the extent of ICD was found to be higher compared to prior studies such as Li et al. (2008) and Foong et al. (2009) at 51.00, 30.00 and 47.00, respectively.

**Table 1: Descriptive Statistical Results of the Extent of ICD**

| Country | | ICD | | HCD | | | SCD | | | RCD | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | n | Mean | SD | Mean | SD | % | Mean | SD | % | Mean | SD | % |
| Malaysia | 39 | 62.1316 | 6.8504 | 22.7368 | 3.9366 | 37 | 18.3947 | 3.12392 | 30 | 21.0000 | 2.7996 | 33 |
| Indonesia | 14 | 63.3846 | 9.5179 | 21.7692 | 6.1665 | 34 | 18.1538 | 3.73823 | 29 | 23.4615 | 2.8171 | 37 |
| Total | 53 | 62.4510 | 7.5348 | 22.4902 | 4.5580 | 36 | 18.3333 | 3.2537 | 30 | 21.6275 | 2.9797 | 34 |

*Notes:n=total sample, ICD=Overall IC disclosure, HCD=human capital disclosure, SCD=structural capital disclosure, RCD= relational capital disclosure, SD=standard deviation*

It has been argued that the country specific features such as legal system practices by the country may affect the extent of the disclosure practices. As reported by Hope (2003), legal system is the most important explanatory variable to explain the nature and extent of disclosure. He also argued that companies in the common law country seem to disclose more information compared to companies situated in code law countries. The results in this study contradict with Hope's argument. However, the results in this study support Bozzolan et al. (2006) that the country level features such as type of legal system practiced is not necessarily related in explaining the extent of information disclosed in annual reports.

About the total of disclosure for the overall sample, the mean score of 62.45 (>60%) suggests that companies in both countries, on average, are aware of the importance of IC disclosure. The results support the stakeholder theory and legitimacy theory, whereby companies in both countries realised

270

that the annual report is an efficient means to communicate with their stakeholders and hence, motivate them to increase voluntary disclosure of information in annual reports in order to legitimize their status.

## Extent of IC Disclosure by IC Categories

The analysis of IC disclosure by categories highlighted that the companies disclosed more on HC, compared to the other IC categories. The mean score for the total sample indicates that about 36% of the disclosures relate to HC, about 34% relate to RC and remaining 30% relates to SC. This result represents the extent of IC disclosure of the agriculturalindustry. The large percentage represented by HC might be explained by the nature of the industry itself, whereby the agricultural industry ishighly labour intensive and requireshighly skilled workers in their daily operations (Fadzilah & Lim, 2011). Hence, reporting on such items could benefit the companies in gaining competitive advantage. The result is consistent with the findings of Fadzilah and Lim (2011) who revealed that plantation companies disclosed more information on HC categories in their annual report and claimed that the amount of disclosure differs across companies and industries.

At the country level, out of the three individual categories, the most reported categories of Malaysian companies are HCD (37%), followed by RCD at 33% and SCD at 30%. The result is consistent with the findings of study in the same country and industry focussed study by Fadzilah and Lim (2011). Besides the criteria of agriculture industry that requires the company to possess high labour intensity and skilful workers in their daily operations, the other possible reasons that could explain why Malaysian companies are more proactive in providing information in relation to HC is associated with the existence of the two economic plans, which are the Master Plan and the New Economic Model (NEM). The four critical elements identified by the government to transform Malaysia into a developed nation are: to have knowledge and skilled human capital, to have adequate support for education and training infrastructure, to develop RandD capability, and to develop a SandT base. It is also apparent that the government is expecting the private sector, particularly to public listed companies to play an active role by investing in these four elements. Therefore, investing in these elements is not only because of government pressure, but also because it can strengthen the internal capabilities that eventually contribute to companies'

271

productivity and value. Furthermore, the fact that the government has put so much emphasis on the development of a K-based nation could possibly lead to companies' awareness on the importance of showing the users of annual reports the importance of their HC.
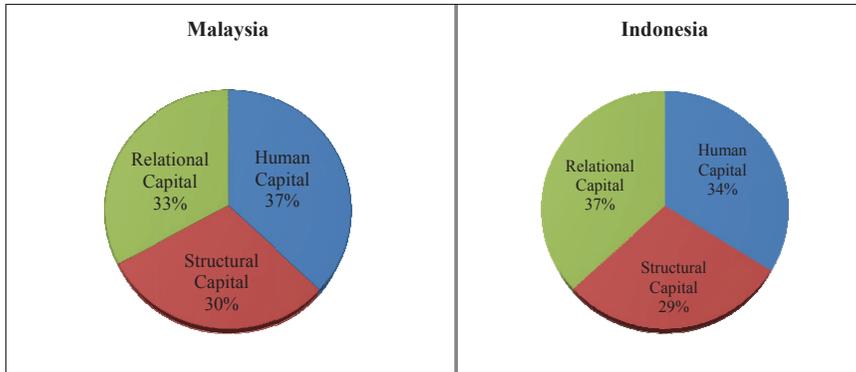


**Figure 2: Extent of ICD for Malaysian and Indonesian Agriculture Companies**

In contrast, Indonesian companies reported highly in RCD categories which scored 37%, HCD at 34% and also least reported on SCD categories at 29%. The result is in line with other studies conducted in the same country, but using a sample of the mixed industries (Sihotang & Winata, 2008). Thus, suggest reasons for differences at the organisational level. Abeysekera (2007) indicated that one possible explanation on why companies are more proactive in disclosing information in relation to their external capital or RC is due to increase in global competition for capital where companies need to uphold their investors' confidence. In the case of Indonesia, one of the possible explanations for the relative importance of RC relates to the Indonesia Strategic Framework for Development 2012-2016 between the Governments of Indonesia and New Zealand. Through this program, the New Zealand will invest in five focus areas reflecting Indonesia's priorities as well as New Zealand areas of comparative advantage which includes development in the agricultural industry. Such business collaboration improves effectiveness and efficiency of business operations by combining each other's core competencies. Disclosing on such information could provide competitive advantage to the companies and demands the company to disclose more information on RC. The comparison results of ICD for each country and category is depicted in Figure 2.

272

## Extent of ICD by Attributes

Further analyses on the extent of ICD based on the ranking according to their frequency of disclosure are provided in Table 2, 3 and 4. There are 22 attributes for HCD, 18 attributes for SCD and 21 attributes for RCD. Upon analysis, this study shows that most of the mean scores for the two countries is below 1.00. Therefore, IC information disclosed by both countries was more qualitative (discursive) in nature which is consistent with prior studies (Guthrie et al., 2006; Haji & Ghazali, 2012).

Table 2 provides the comparison of top three attributes disclosed for each category according to country. The table shows that, for HCD attributes, Malaysia companies provide information on vocational qualifications, employee productivity and employee education with a mean score of 1.42, 1.39 and 1.32, respectively. As Malaysia scores the top mean for vocational qualification, this attribute ranked in Indonesia at number 20, which is at the bottom three of the HCD total attributes. Another attribute that does not show a major difference between both countries is employee education, even though Indonesia ranked this item at number 4, the mean score is higher than the Malaysian companies ranking at number 3. The Malaysian companies actively disclosing vocational qualifications might be influenced by the governments' action to promote multi skills and highly skilled workforce to increase productivity and the 10th Malaysia Plan (2011-2015) specifically addresses the HC deficiency and the need to train qualified students and develop a skilled workforce. In addition, the Higher Education Strategic Plan under the Ministry of Higher Education was put in place to revamp education to meet labour market needs. Therefore, disclosure on employee education would be a competitive advantage to the company.

273

**Table 2: Comparison of Top Three HCD**
**Attributes Disclosed by Both Countries**

| IC categories | *Malaysia* | | | *Indonesia* | | |
|---|---|---|---|---|---|---|
| | Rank | IC attributes | Mean | Rank | IC attributes | Mean |
| | 1 | Vocational qualifications | 1.42 | 20 | Vocational qualifications | 0.38 |
| | 2 | Employee productivity | 1.39 | 6 | Employee productivity | 1.38 |
| | 3 | Employee education | 1.32 | 4 | Employee education | 1.54 |
| **HCD** | *Malaysia* | | | *Indonesia* | | |
| | Rank | IC attributes | Mean | Rank | IC attributes | Mean |
| | 13 | Number of employees | 0.97 | 1 | Number of employees | 2.00 |
| | 21 | Employee age | 0.76 | 2 | Employee age | 1.69 |
| | 11 | Employee commitments | 1.00 | 3 | Employee commitments | 1.62 |

For Indonesia, Table 2 shows that the top three most popular attributes disclosed for HCD are the number of employee, employee age and employee commitments with mean scores of 2.00, 1.69 and 1.62, respectively. The number of employees, which has a mean score of 2.00 (maximum point) indicates that all Indonesian companies in the sample disclosed that information and that information is disclosed in a quantitative manner. Among that three attributes, employee age shows a significant difference whereby Malaysia reported at the bottom two of the total attributes. For HCD, it can be concluded that, the Indonesian companies disclosed more on the quantitative nature since this item has a higher mean score compared to the Malaysian companies. The results indicate that loyalty is important for the companies as it emphasizes and discloses employee commitments and the number of employees in their annual report.

Table 3 presents the comparison of top three SCD attributes disclosed by Malaysian and Indonesian companies. Financial dealings are considered the most popular attribute reported by both countries, where the mean score for Malaysia is 1.68 and for Indonesia 1.69. There is not much major differences in the mean score for technology and distribution network, but slightly high for RandD where Malaysia ranked this item at number 2 and Indonesia ranked this item at number 13. For SCD, it can be concluded that both countries disclosed broadly at a similar level. Note that RandD and technology are the two top attributes disclosed by Malaysian companies as there is a pressure from the governments to invest in these two elements.

Disclosing such information will benefit the company. On the other hand, Indonesian companies are making efforts to legitimise parts of their operations (i.e. organisation structure) that cannot be legitimised by the traditional reporting systems.

**Table 3: Comparison of Top Three SCD
Attributes Disclosed by Both Countries**

| IC categories | *Malaysia* | | | *Indonesia* | | |
|---|---|---|---|---|---|---|
| | **Rank** | **IC attributes** | **Mean** | **Rank** | **IC attributes** | **Mean** |
| | 1 | Financial dealings | 1.68 | 1 | Financial dealings | 1.69 |
| | 2 | Research and development | 1.63 | 13 | Research and development | 0.92 |
| | 3 | Technology | 1.34 | 6 | Technology | 1.08 |
| | *Malaysia* | | | *Indonesia* | | |
| *SCD* | **Rank** | **IC attributes** | **Mean** | **Rank** | **IC attributes** | **Mean** |
| | 1 | Financial dealings | 1.68 | 1.68 | Financial dealings | 1.69 |
| | 9 | Organisation structure | 1.00 | 1.00 | Organisation structure | 1.38 |
| | 7 | Distribution network | 1.13 | 1.13 | Distribution network | 1.38 |

The comparison of top three RCD attributes is presented in Table 4. There are major differences in the extent of disclosure, especially for customers attribute. The mean score for Indonesia is 1.92 but Malaysia's mean score is 0.76 and ranked at number 19. Interestingly, even though business collaboration between the two countries ranked at number 2, the mean score for Indonesia is higher than the mean score of Malaysia by 0.35. Likewise, for customer relationship, even though Indonesia ranked at 8 and Malaysia ranked this item at number 3, the mean score for Indonesia is higher by 0.15. This indicates that the Indonesian companies disclosed more quantitative information about RCD categories. Business collaboration tends to be an important attribute in both countries showing that the company is continually looking for new ways to be more efficient, deliver new products and services to the market faster and be more competitive. As companies seek new ways to collaborate and share information with business peers, they also see ways that the same technology can be leveraged to their advantage in the same workplace. Hence, the companies put greater emphasis in disclosing this matter in their annual reports.

275

**Table 4: Comparison of Top Three RCD**
**Attributes Disclosed by Both Countries**

| IC categories | *Malaysia* | | | *Indonesia* | | |
| --- | --- | --- | --- | --- | --- | --- |
| | Rank | IC attributes | Mean | Rank | IC attributes | Mean |
| *RCD* | 1 | Relationship with suppliers | 1.79 | 7 | Relationship with suppliers | 1.38 |
| | 2 | Business collaboration | 1.34 | 2 | Business collaboration | 1.69 |
| | 3 | Customer relationships | 1.16 | 8 | Customer relationships | 1.31 |
| | *Malaysia* | | | *Indonesia* | | |
| | Rank | IC attributes | Mean | Rank | IC attributes | Mean |
| | 19 | Customers | 0.76 | 1 | Customers | 1.92 |
| | 2 | Business collaboration | 1.34 | 2 | Business collaboration | 1.69 |
| | 6 | Market presence | 1.13 | 3 | Market presence | 1.62 |

## IC Disclosure and Company Performance

Table 5 provides the descriptive analysis of the dependent, independent and control variables based on the data collected for the year 2012 of the agricultural companies in Malaysia and Indonesia. As shown in the Table 5, CC is the control variable, coded by 1= Malaysia and 2= Indonesia. MCAP is the dependent variable with mean scores of 8.9139. For the independent variables, the mean score for each IC category are provided as HCD=22.4902, SCD=18.3333 and RCD=21.6275. Therefore, the results show that the HCD with a disclosure range from 11.00 to 32.00 is the most reported item, followed by RCD with a disclosure range from 15.00 to 29.00 and SCD is the least reported on a disclosure range from 7.00 to 15.00.

276

**Table 5: Descriptive Statistics of Control,
Dependent and Independent Variables**

| Variables | Minimum Statistic | Maximum Statistic | Mean Statistic | Std. Deviation Statistic |
|---|---|---|---|---|
| CC | 1 | 2 | 1.25 | 0.440 |
| MCAP_LG | 6.56 | 10.52 | 8.9139 | 0.72500 |
| HCD | 11.00 | 32.00 | 22.4902 | 4.55795 |
| SCD | 7.00 | 25.00 | 18.3333 | 3.25372 |
| RCD | 15.00 | 29.00 | 21.6275 | 2.97967 |
| ICD | 44.00 | 80.00 | 62.4510 | 7.53476 |

*Notes:* CC= country code, MCAP_LG=log of market capitalization, HCD=human capital disclosure, SCD=structural capital disclosure, RCD=relational capital disclosure, ICD=Sum of HCD+SCD+RCD

Table 6 summarises the results for the relationship between IC disclosure (HCD, SCD, RCD and ICD) and companies' MCAP. As shown in the Table 6, the results indicate that there is a significant positive correlation between MCAP with HCD, SCD and ICD but not significant to RCD. The correlation coefficients are 0.293, 0.422 and 0.458 respectively. SCD and ICD are significant at the level $p<0.01$, while HCD significant at $p<0.05$. The control variable, CC shows a significant positive correlation at the level $p<0.05$ with RCD. The correlation coefficient is 0.364. Moreover, correlation coefficient values confirmed that there is no multicollinearity between the independent variables as the highest correlation can be observed between HCD and SCD at 0.385. These findings suggest that there is a positive significant correlation between the extent of overall IC disclosure with company' performance. That is company performance increases as the extent of the disclosure increases.

**Table 6: Correlations of IC Disclosure and Companies Performance**

| | CC | MCAP_LG | HCD | SCD | RCD | ICD |
|---|---|---|---|---|---|---|
| CC | 1 | | | | | |
| MCAP_LG | 0.146 | 1 | | | | |
| HCD | -0.093 | 0.293[*] | 1 | | | |
| SCD | -0.033 | 0.422[**] | 0.385[**] | 1 | | |
| RCD | 0.364[**] | 0.250 | 0.055 | 0.186 | 1 | |
| ICD | 0.073 | 0.458[**] | 0.793[**] | 0.739[**] | 0.509[**] | 1 |

To provide empirical evidence for H$^2$, regression analysis was used. The results are shown in Table 7. From Table 7, the ICD explains 19% of the variance, where (adjusted R2= 0.190, F= 6.864, Sig.F=0.002).The value of R2 indicates that 19% of the variance in MCAP can be explained by ICD. The results show that ICD is positively significant at the .001 level (*p<0.05) and can be considered as a predictor of MCAP.*

**Table 7: Model 1- Regression Results of ICD (overall) Against MCAP**

| Variables | R | R$^2$ | Adjusted R$^2$ | F-Value | Sig.F |
|---|---|---|---|---|---|
| ICD | .472 | .222 | .190 | 6.864 | 0.002** |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | t | Sig. |
| (Constant) | 5.978 | 0.798 | | 7.494 | 0.000 |
| CC | 0.187 | 0.210 | 0.113 | 0.887 | 0.379 |
| ICD | 0.043 | 0.012 | 0.450 | 3.523 | 0.001*** |

***.significant at the 0.001 level
**.significant at the 0.01 level
*Notes:*CC=country code, ICD=Sum of HCD+SCD+RCD

The findings are consistent with previous studies (Abdolmohammadi, 2005; Taliyang et al., 2014) that found ICD to be statistically significant with MCAP. The significant positive coefficient of ICD indicates that the more a company disclosed information on IC in its annual report, the higher the MCAP would be. Therefore, based on the results, it can be concluded that the ICD in the annual reports of Malaysian and Indonesian agriculture companies has an effect on MCAP, thus hypothesis H$^2$, that IC disclosure would have a positive impact on MCAP, is supported. In addition, country code (*p>0.05) is not a significant predictor in explaining the relationship of overall IC disclosure and MCAP. Such a result provides further support to the finding of H*1, whereby there are no significant differences in the extent of IC disclosure practices between Malaysia and Indonesia at the overall level of disclosure.

A regression model was also employed to examine the effect of IC disclosure at the category level with MCAP in order to identify which categories of IC have a significant effect on company performance. As shown in Table 8, it is concluded that there is no significant effect of the

HCD on the companies' MCAP, where ($\beta$=0.027, sig.=0.237). Since (t=1. 197, *p>0.05), therefore hypothesis H*3a is rejected. This indicates that HCD does not have a significant effect on companies' MCAP. The findings provide inconsistent results with Aledwan (2014) that found that HCD has a significant effect on the bank's market value. As for the SCD, it is concluded that there is a significant effect of SCD on the companies' MCAP, where ($\beta$=0.075, sig.=0.022). Since (t=2.377, *p<0.05), therefore hypothesis H*3b is accepted, indicating that the extent of disclosure of SCD attributes does have a positive significant relationship with MCAP. Meanwhile, the results show no significant effect of the RCD on the companies' MCAP, where ($\beta$=0.032, sig.=0.353). Since (t=0.938, *p>0.05), indicating that the hypothesis H*3c could not been supported. This indicates that RCD does not have a significant effect on companies' MCAP and supports Aledwan's (2014) findings.

**Table 8: Model 3- Regression Results of IC Categories Against MCAP**

| Variables | R | $R^2$ | Adjusted $R^2$ | F-Value | Sig.F |
|---|---|---|---|---|---|
| HCD, SCD, RCD, CC | 0.492 | 0.242 | 0.176 | 3.677 | 0.011[*] |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | **B** | **Std. Error** | **Beta** | **T** | **Sig.** |
| (Constant) | 5.986 | 0.849 | | 7.048 | 0.000 |
| CC | 0.205 | 0.229 | 0.125 | 0.896 | 0.375 |
| HCD | 0.027 | 0.022 | 0.167 | 1.197 | 0.237 |
| SCD | 0.075 | 0.032 | 0.337 | 2.377 | 0.022[*] |
| RCD | 0.032 | 0.034 | 0.132 | 0.938 | 0.353 |

[*].significant at the 0.05 level
*Notes*:CC=country code, HCD=human capital disclosure, SCD=structural capital disclosure, RCD=relational capital disclosure

## CONCLUSION

The objectives of this study were to examine the extent of IC disclosure practices of Malaysian and Indonesian listed companies in the agricultural industry. Using content analysis techniques, this study examined the annual reports of 39 Malaysian agricultural companies and 14 Indonesian agricultural companies listed on the stock exchange in the year 2012. The results indicate that there are no significant differences in the extent of IC

279

disclosure of Malaysian and Indonesian agriculture companies. In addition, Malaysian companies disclosed more on HC categories, whilst Indonesia disclosed more on RC. SC shows a less popular reported category for both countries. In terms of performance, the results show a significant positive relationship between overall IC disclosure and companies' MCAP. Such results indicate that when a company disclosed more IC information in its annual report, the company's performance, in particular MCAP will increase and thus, supported $H^2$. However, at the category level, the results show that only SCD has positive significant effect to the MCAP. Overall, the results convey that the integrated information about IC (human, structural and relational) influences the companies' performance but not at category level.

This study has few limitations. The most important is that its sample size is limited to 53 agricultural companies in both countries with one year of data only. The small sample and one-off basis-based study will not comprehensively or accurately illustrate the real situation of IC disclosure in the agricultural industry. The data collected also was limited to the information that has been disclosed in the corporate annual report. Additionally, the study focussed only on one measurement of companies' performance which is MCAP.

This study extends the understanding of the role of IC and its interaction in generating competitive edge from the perspective of a developing nation such as Malaysia and Indonesia. The findings in this study contribute to the IC literature particularly, on IC disclosure in the agricultural industry. This study alleviates the gap in the IC literature related to comparative of cross-national study. Finally, this study provides an understanding of the current reporting practices of IC and the link between the extent of IC disclosure with company performance.

## REFERENCES

Abdolmohammadi, M.J. (2005). 'Intellectual capital disclosure and market capitalization'. *Journal of Intellectual Capital,* Vol. 6(3), pp.397-416.

Abeysekera, I. (2007) 'Intellectual capital reporting between a developing and developed nation'. *Journal of Intellectual Capital,* Vol.8(2), pp.329-345.

Aledwan, D. B. (2014) 'The Impact Of Basic Components Of Intellectual Capital On The Profitability Of Jordanian Commercial Banks (2007-2012'). *European Scientific Journal,* Vol.10(28), pp.336-347.

Barth, M.E., Kasznik, R. and McNichols, M.F. (2001). Analyst coverage and intangible assets. *Journal of Accounting Research,* Vol.39(1), pp.1-34.

Beattie, V. and Thomson, S.J. (2007) 'Lifting the lid on the use of content analysis to investigate intellectual capital disclosures'. *Accounting Forum,* Vol.31(2), pp.129-163.

Bini, L., Dainelli, F. and Giunta, F. (2016), 'Business model disclosure in the strategic report: entangling intellectual capital in value creation process', *Journal of Intellectual Capital*, Vol. 17, (1), pp. 83-10'

Boujelbene, M. A. and Affes, H. (2013). 'The impact of intellectual capital disclosure on cost of equity capital: A case of French firms'. *Journal of Economic, Finance and Adminstrative Science,* Vol.18(34), pp.45-53.

Bozzolan, S., O'Regan, P. and Ricceri, F. (2006) 'Intellectual capital disclosure (ICD): A comparison of Italy and the UK'. *Journal of Human Resource Costing & Accounting,* Vol.10(2), pp.92-113.

Bukh, P. N., Nielsen, C., Gormsen, P. and Mouritsen, J. (2005). 'Disclosure of information on intellectual capital in Danish IPO prospectuses'. *Accounting, Auditing & Accountability Journal,* Vol. 18(6), 713-732.

Canibano L., Garcia-Ayuso., M. and Sanchez P. (2002), *Chaminade C.: Guidelines for managing and reporting on intangibles (Intellectual Capital Report).* Airtel-Vodafone Foundation, Madrid.

Chiucchi, M.S and Dumay, J. (2105), 'Unlocking intellectual capital', *Journal of Intellectual Capital*, Vol. 16 (2), pp. 305-330.

Clarke, M., Seng, D. and Whiting, R.H. (2011) 'Intellectual capital and firm performance in Australia'. *Journal of Intellectual Capital,* Vol.12(4), pp.505-530.

Cordazzo, M. and Vergauwen, P.G.M.C. (2012) 'Intellectual capital disclosure in the UK biotechnology IPO prospectuses'. *Journal of Human Resource Costing & Accounting,* Vol.16(1), pp.4-19.

Cuozzo, B, Dumay, J., Palmaccio, M and Lombardi, R. (2017) "Intellectual capital disclosure: a structured literature review", *Journal of Intellectual Capital,* Vol. 18 (1), pp.9-28,

Driffield, N., Mahambar, V. and Pal, S. (2007). 'How does ownership structure affect capital structure and firm value'. *Economics of Transition,* Vol.15(3), pp.535-573.

Fadzilah, W.W.Y. and Lim, W.L. (2011) 'IC Reporting in Traditional Sectors of Malaysian Public Listed Firms'. *Journal of Modern Accounting and Auditing,* Vol.7(9), pp.952-959.

Ferreira, A.L. and Moreira, J.A. (2012). 'Factors influencing intellectual capital disclosure by Portuguese companies'. *International Journal of Accounting and Financial Reporting,* Vol.2(2), pp.278-298.

Foong, S.Y., Loo, S.C. and Balaraman, R. (2009) 'Intellectual Capital Reporting and Corporate Characteristics of Public-Listed Companies in Malaysia'. *Journal of Financial Reporting & Accounting,* Vol.7(1), pp.17-35.

Guthrie, J., Petty, R. and Ricceri, F. (2006). 'The voluntary reporting of intellectual capital: Comparing evidence from Hong Kong and Australia'. *Journal of Intellectual Capital,* Vol.7(2), pp.254-271.

Guthrie, J., Ricceri, F. and Dumay, J. (2012) 'Reflections and projections: A decade of Intellectual Capital Accounting Research'. *The British Accounting Review,* Vol.44(2), pp.68-82.

Haji, A. A. and Ghazali, N.A.M. (2012). 'Intellectual capital disclosure trends: some Malaysian evidence'. *Journal of Intellectual Capital,* Vol. 13(3), pp.377-397.

Holland, J. (2009). Looking behind veil: Invisible corporate intangibles, stories, structure and the contextual information content of disclosure. *Qualitative Research in financial market, 1*(3), 152-187.

Hope, H.K. (2003). 'Firm level disclosures and relative roles of culture and legal origin'. *Journal of International Financial Management and Accounting,* Vol.14(3), pp.218-248.

Huang, C.C., Luther, R., Tayles, M. and Haniffa, R. (2013) 'Human capital disclosures in developing countries: figureheads and value creators'. *Journal of Applied Accounting Research,* Vol.14(2), pp.180-196.

Itami, H. and Roehl, T. (1987) *Mobilizing invisible assets.* Harvard Business School Press, Cambridge, MA.

Kamath, G. B. (2008) 'Intellectual capital and corporate performance in Indian pharmaceutical industry'. *Journal of Intellectual Capital,* Vol.9(4), pp.684-704.

Lang, M. and Lundholm, R. (1996) 'Corporate disclosure policy and analyst behavior'. *The Accounting Review,* Vol.71(4), pp.467-492.

Li, J., Pike, R. and Haniffa, R. (2008) 'Intellectual capital disclosure and corporate governance structure in UK firms'. *Accounting and Business Research,* Vol. 38(2), pp.137-159.

Mehralian, G., Rajabzadeh, A., Sadeh, M. R. and Rasekh, H. R. (2012). 'Intellectual capital and corporate performance in Iranian pharmaceutical industry'. *Journal of Intellectual Capital,* Vol. 13(1), pp.138-158.

Gaia Melloni, (2015) 'Intellectual capital disclosure in integrated reporting: an impression management analysis', Journal of Intellectual Capital, Vol. 6 (3), pp.661-680,

283

Orens, R., Aerts, W. and Lybaert, N. (2009) 'Intellectual capital disclosure, cost of finance and firm value'. *Management Decision,* Vol.47(10), pp.1536-1554.

Ousama, A. A., Fatima, A.-H. and Hafiz-Majdi, A.R. (2012). 'Determinants of intellectual capital reporting: Evidence from annual reports of Malaysian listed companies'. *Journal of Accounting in Emerging Economies,* Vol.2(2), pp.119-139.

Rylander, A., Jacobsen, K. and Roos, G. (2000). 'Towards improved disclosure on intellectual capital'. *International Journal of Technology Management Accounting Research,* Vol.20(5/6/7/8), pp.715-741.

Sihotang, P. and Winata, A. (2008) 'The intellectual capital disclosures of technology-driven companies: evidence from Indonesia'. *International Journal of Learning and Intellectual Capital,* Vol.5(1), pp.63-82.

Singh, I. and Van der Zahn, J.L.M. (2007). 'Does intellectual capital disclosure reduce an IPO's cost of capital?: The case of underpricing'. *Journal of Intellectual Capital,* Vol.8(3), pp.494-516.

Striukova, L., Unerman, J. and Guthrie, J. (2008). 'Corporate reporting of intellectual capital: Evidence from UK companies'. *The British Accounting Review,* Vol.40(4), pp.297-313.

Sumon, B., Swadip, B. and Shimul, C. (2014)'Intellectual capital disclosure in the annual report: Content analysis approach of "teck" companies in Bangladesh'. *ABAC Journal,* Vol.34(1), pp.29-44.

Taliyang, S.M., Jaffar, R., Mustafa, H.N.H. and Mansor, M. (2014). 'Intellectual Capital Disclosure and Market Capitalization'. *International Journal of Business and Social Science,* Vol.5(10), pp.96-102.

Vergauwen, P.G. and Alem, F.J. (2005). 'Annual Report IC disclosures in The Netherlands, France and Germany'. *Journal of Intellectual Capital,* Vol. 6(1), pp.80-104.

Wijana, A. P., Sutrisno, M. A. and Wirakusuma. A (2013) 'The Voluntary Disclosure of Intellectual Capital: A Longitudinal Study from Public Firms in Indonesia'. *Research Journal of Finance and Accounting,* Vol. 4(12), pp.38-46.

285