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Intellectual Capital Disclosure and Firm Governance: Malaysian Evidence

Rokiah Ishak, Robiah Abu Bakar and Hasnah Kamardin
School of Accountancy, Universiti Utara Malaysia, 06010 Sintok, Kedah, Changlun, Malaysia

Abstract: The study aims to provide evidence on the extent of Intellectual Capital (IC) disclosure by Malaysian companies and to investigate the influence of firm governance on IC disclosure. Based on data of 110 companies listed in Bursa Malaysia in both 2006 and 2011 finding of this study reveal that large board size and government ownership have a significant positive association with IC disclosure. In contrast, family-owned firms are less likely to disclose their IC information. The existence of outside members on boards does not have a significant influence on IC disclosure. Evidence from this study will help both regulator and standard setter to indicate the type of IC information that need to be disclosed in the financial statements in order to increase transparency and provide more information to the decision maker.

Key words: Intellectual capital disclosure, board size, board composition, family ownership, government ownership

INTRODUCTION

The shift to information technology has made businesses rely more on expertise and technical ability and lesser on manual labour and physical capital (Brinker, 2000; Sullivan and Sullivan, 2000). In this knowledge based economy, Intellectual Capital (IC) become a major part of companie's value and the success of business entities is increasing the function of leveraging the IC in those entities (Keenan and Aggestam, 2001). On the other hand the disclosure of IC will increase company value and burst its growth and performance.

In Malaysia, the introduction of Malaysian Financial Reporting Standards (MFRS) 138 Intangible Assets which had come into effect for reporting periods beginning 1 January, 2006 provided some guidelines to report the IC related items. However, the effective date was later extended to 1 January 2012. Although, MFRS 138 provides guidelines for disclosure of some intangible assets elements in the annual report, it does not address specific treatment on IC resources. Furthermore, internally generated intangible assets such as internally generated brands, mastheads, publishing titles, human capital development and some items similar in substance shall not be recognized as intangible assets. Thus, the absence of standards and guidelines results in many companies failed to recognize IC information in the financial statements. This statement is supported by a study conducted by Tan (2000). The author claimed that only 0.2% of total assets that disclosed in Malaysian public listed companies are categorized as intangible assets and the number of companies that present their intangible assets on the face of their financial statement was insignificant.

As the standard has conflicting on the disclosure of IC elements and due to the demand for more useful and comprehensive non-financial information about the companies, Malaysian companies should take a step further to voluntarily disclose intellectual capital in their annual reports. To enhance the comprehensive disclosure of IC, the firm governance needs to be strengthen. It is expected that the introduction of Malaysian Code of Corporate Governance in 2000 can strengthen the board practice and reduce the ownership concentration which leads to enhancement of IC disclosure. Thus this study is conducted on a basis to examine the effect of firm governance and ownership structure on the extent of Intellectual Capital (IC) disclosure. Findings of the study are expected to provide some empirical evidence on the extent of IC disclosure and the impact of firm governance on IC disclosure.

The rest of the study is organized as follows: A review of literature and hypotheses development will be presented in the next section, followed by a discussion on research method. Results will be presented in the following section. Finally, this study ends with a conclusion study.

Theoretical framework and hypotheses development:

Underpining theory: The main theory used for the determinant of IC disclosure is legitimacy theory. The important idea of legitimacy theory is that the

Corresponding Author: Rokiah Ishak, School of Accountancy, Universiti Utara Malaysia, 06010 Sintok, Kedah, Changlun, Malaysia

organization will operate within the boundaries and norms that are perceived as legitimate by their stakeholders (Guthrie *et al*., 2004). Since, IC information is considered important, companies will provide voluntary disclosure for this type of emerging information so that companie's activities are perceived as legitimate by their stakeholders. The hypothesis development for the association between IC disclosure and corporate governance is based on agency theory which posits that management will disclose more to reduce information asymmetry and therefore, reducing monitoring expenses and this could enhance their own reputation. To reduce the possibility of shareholder-corporate management conflicts, agency theorists stress the importance of mechanisms designed to monitor the behaviour of corporate management (Frankforter *et al*., 2000). One of the mechanisms is transparency, where voluntary disclosure is a key component and is viewed as a major form of monitoring activity (Firer and William, 2005; Ho and Wong, 2001; Jensen and Meckling 1976). Voluntary IC disclosure also provides managers with an avenue to demonstrate that they are acting in the best interest of the owners and hence reducing agency conflicts with the owners (Craswell and Taylor, 1992).

Intellectual capital disclosure: Given that IC is increasingly important as well as the key tools of the new value creation of wealth, it is important to understand the issue better. Most researchers agreed that defining IC is problematic and there is still no consensus over the concept and no clarity about IC definition (Brennan and Connell 2000; Guthrie *et al*. 2006). Bontis *et al*. (1999) viewed IC as resources that will contribute to the value-creating process in the organization. Meanwhile, the OECD (1999) defined IC as an economic value of two categories of intangible assets of a company: organisational (structural) capital and human capital. In other words, IC is applied to non-physical sources of future economic benefits that may or may not appear in corporate financial reports. Brennan and Connell (2000) identify three components of IC: external structure which concerns customer and supplier relations; internal structure which consists of patent, concepts, computer, administrative system and corporate culture and human capital which relates to people's capacity to act in situations and it includes skills, education, experience, values and motivation.

In Malaysia a study by Huang *et al*. (2007) has made an attempt in grouping IC items based on manager's responses about the availability of IC information inside their companies. This empirical grouping of IC is derived by using factor analysis by comparing the manager's responses about the availability of IC information in their companies with a priori groupings constructed from various IC literatures. In this study human capital has been separated into employee capabilities, employee development and retention and employee behaviour. In the meantime, structural capital has been split into two which are development of products ideas and organizational infrastructure. Finally, customer capital has been broken down into three sub-groupings, i.e. market perspectives, data on customer as well as customer service and relationship.

Corporate governance characteristics and extent of ic disclosure: The need for corporate governance arises to resolve the agency problem. Good corporate governance practices are essential to instill confidence and trust in companies and market. Thus, it is believed that good corporate governance can enhance the value of the firm by reducing the agency cost associated with separation of ownership and control (Jensen and Meckling, 1976; Fama and Jensen, 1983).

Board size and IC disclosure: Board size refers to the number of directors who serves on the board and the size of a board may be increased due to the increase in shareholders activism, consolidation in banking industries and increase in firm size. Nevertheless, it has been suggested that large boards are more superior to the small ones because big groups have more capabilities and resources to solve group tasks including environmental uncertainties. Hidalgo *et al*. (2011) support the statement as their study find that board size has a significant influence on IC disclosure. They explain that an increase in the number of members of the board has a beneficial effect on IC disclosure. However, as the number of the board member has increased >15 the effect inverts and become adverse as the capacity of supervision and control in the decision making process regarding IC disclosure become incongruent. As 15 members is cut-off point of effective board monitoring and due to average of Malaysian companie's board size of 9 members which can be considered as large board size this study hypothesized that:

- H_1: There is a positive association between board size and the level of voluntary IC disclosure

Board independence and IC disclosure: Non-executive directors are expected to play a monitoring role and to give pressure for the management to comply with the companie's rules and regulations. They are expected to monitor and control performance, enhance the

responsiveness of managers to investors and enforce corporate compliance with disclosure requirement (Fama and Jensen 1983). This monitoring activity will depend on their ability to represent the shareholders by exercising their role on firm activities and controlling the behaviour of firm managers (White *et al.* 2007). Evidences of the relationship between the proportion of non-executive directors on board and corporate disclosure are mixed. As Chen and Janggi (2000) observed a positive relationship between the dominance of non-executive directors on board and comprehensiveness of financial disclosures (mandatory and voluntary disclosure). Cerbioni and Parbonetti (2007), Li *et al.* (2007) and White *et al.* (2007) also accounted a positive relationship between the dominance of non-executive directors on board and IC disclosure. However, Barako *et al.* (2006) and Eng and Mak (2003) pointed a significant negative relationship with voluntary disclosure. Study by Talliyang and Jusop (2011) based on Malaysian environment fail to find any significant relationship between board independence and IC disclosure. Following the monitoring role of non-executive directors it is hypothesized that:

- H_2: There is a positive association between non-executive directors on the board and the level of IC voluntary disclosure

Family ownership and IC disclosure: Haniffa and Hudaib (2006) stated that many Malaysian companies have substantial family shareholding and it is a common practice for them to elect their family members to sit on the boards. Such practice leads to less disclosure since the information can be accessed internally. Chen and Jaggi (2000) argued that with family ownership and control structure, the appointment of non-executive directors in family-control firms itself is likely be influenced by their close relationship with the management. Therefore, it is most likely that they will support whatever the management decides. Hence, the independence of non-executive directors in family-control firms may become impaired together with their influence on comprehensive disclosure may also be affected.

Previous studies revealed that there is a negative relationship between family ownership and company disclosure. Ho and Wong (2001) supported the view that having family members on board relates to a lower extent of total disclosure. Meanwhile, Chen and Jaggi (2000) and White *et al.* (2007) found that the association between independent directors in family control firms and total financial disclosure is weaker than for independent directors in non-family control firms. Chau and Gray (2002) and Haniffa and Hudaib (2006) also documented the same result where their studies revealed significantly negative relationship between family member on board and voluntary disclosure. They explained that insider and family relationship cause companies to be less motivated to disclose information in excess of mandatory requirements. This is because the demand for such information has been reduced, mainly because owners now have better access to internal information. Similarly, study by Saleh *et al.* (2009) based on Malaysian companies also provide an evidence of negative relationship between IC disclosure and family ownership. Thus, the next hypothesis is:

- H_3: There is a negative association between family ownership and the level of IC voluntary disclosure

GLCS and IC disclosure: With the interest of Malaysian government in IC related information, especially towards human capital issues, it is important to determine if government ownership could be a significant determinant for IC disclosure. Using signaling theory, Firer and Williams (2005) argued that corporate managers of GLCs might feel that there is a greater need to disclose such information as a signal to government and society at large that they have followed the government's social well-being objectives. Eng and Mak (2003) stated that with government ownership, there may be conflicting objectives between firms and government. Therefore, GLCs need to communicate with other shareholders about this matter and this can be done through greater disclosure which will in turn reduce the agency costs and strengthen the corporate governance. One of the conflicts might be in terms of profit goal, where the government will consider goals related to the overall nation rather than just for the company itself.

Government is also expected to be a long-term investor in GLCs and that there are not likely to face takeover threats. With the removal of takeover threats, corporate managers of GLCs may have less fear of disclosing information that could be used by competitors (Firer and William 2005; Eng and Mak 2003). Therefore, government ownership in a company could lead to greater voluntary IC disclosure. Firer and Williams (2005) noted that there is a significant positive relationship between IC disclosure and firms having the government ownership on the Singapore publicly traded firms. A study by Eng and Mak (2003) also gave evidence that government ownership has been associated with voluntary disclosure. A recent study by Haddad *et al.* (2015) on

57 non-financial Jordanian companies shows that the extent of voluntary disclosure is positively associated with government ownership and negatively associated with the proportion of shares held by management. The following testable hypothesis is thus formed:

- H_4: There is a positive association between GLCs and the level of voluntary IC disclosure

MATERIALS AND METHODS

The first objective of this study is to examine the extent of IC disclosure practices in the annual reports of 55 biggest Malaysian companies listed in Bursa Malaysia, based on market capitalization in year 2006 and 2011. Data were gathered using content analysis method. This study used IC items/framework proposed by Huang *et al*. (2007). The research model is:

$$ICD = \alpha + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 FOWN_{it} + \beta_4 GLC_{it} + \beta_5 FSIZE_{it} + \beta_6 LEV_{it} + \varepsilon_{it}$$

Where:

ICD = Intellectual capital disclosure of company i
BSIZE = Number of members on board
BIND = The ratio of outside directors to board size
FOWN = Number of family member on board
GLC = Equal '1' for GLCs company and '0' otherwise
FSIZE = Natural logarithm of market capitalization
FLEV = Total debt/total assets

RESULTS AND DISCUSSION

Descriptive statistics for the amount of IC disclosure are shown in Table 1. On average the total intellectual capital disclosure is about 585 items per companies with the minimum score 60 and maximum score of 1,820 items. Based on the components of IC disclosure, the average disclosure for Human Capital (HC) disclosure is 278 items with the minimum and maximum score of 57 and 763, respectively. Whilst, the average for Structural Capital (SC) disclosure is 102 items, the minimum disclosure is 1 and the maximum is 594. The third component of IC, Relational Capital (RC), the average disclosure is 204 items, minimum 2 and maximum 353. As compared between year 2006 and 2011, the result shows that there is insignificant decrement of total IC disclosure as the average of IC items disclose in 2006 is 508 items while in 2011 the number of items disclose is 503 items. Both human capital and structural capital disclosure increase by 7 items and 9 items, respectively.

Descriptive statistics for the independent variables in Table 2 explain that the average of board size of Malaysian company is 9 members and 41 % of board member are outside directors. Family-controlled firms is about 48 percent of sample size while Government-Owned (GLCs) is 15%. On average, the market capitalization of the company is 11333 and the leverage level is around 46%.

Results in Table 3 reveal the correlation coefficient among the study variables. It shows a positive correlation between board size, board composition and IC disclosure which indicates that large board size and high proposition of outside member on boards do contribute to higher IC disclosure. A positive correlation of government ownership explain that a significant positive influence of government of IC disclosure. Large firm with high leverage also contribute to the increment of IC disclosure. None of the variables have a correlation of >0.7, thus it could be concluded that multicollinearity is not a problem in this study.

Result of regression analysis in Table 4 explain that there is a significant positive relationship between board size and total IC disclosure which indicate that large board size encourages voluntary disclosure in order to create a good image of the company. This finding is similar to Hidalgo *et al.* (2011). In the same vein, government controlled firms also exhibits a positive and significant relationship with IC disclosure. This result may due to the objective of the government to pursue public interest and social being. This finding supports statements by Eng and Mak (2003) and Firer and William (2005) as they mentioned government-owned firms need to communicate with other shareholders about this matter and this can be done through greater disclosure; which will in turn reduce the agency costs and strengthen the corporate governance. One of the conflicts might be in terms of profit goal where the government will consider goals related to the overall nation rather than just for the company itself.

As expected family controlled firms are less likely to disclose their IC information. The reason is may be due to company environment as the insider and family relationship cause companies to be less motivated to disclose information in excess of mandatory requirements. This is because the demand for such information has been reduced, mainly because owners have better access to internal information (Haniffa and Hudaib, 2006; Chau and Gray 2002; Saleh *et al*., 2009). Large firm size and firm with high leverage also have tendency to disclose their IC to portray a good image to the public and also to the creditor.

Table 1: Descriptive statistics-trend of IC disclosure

	Overall (N = 110)			2006 (N = 55)			2011 (N = 55)		
Variables	Mean	Min.	Max.	Mean	Min.	Max.	Mean	Min.	Max.
ICD	585	60	1820	508	209	1421	502	60	1820
HC	278	57	763	275	109	763	282	57	597
SC	102	1	594	97	11	4888	106	1	594
RC	204	2	715	215	19	717	193	2	715

Table 2: Descriptive statistic

Variables	Mean	Median	SD	Min.	Max.
BSIZE	8.85	9.00	2.20	5.00	15.00
BIND	0.41	0.21	0.36	0.20	1.00
FOWN	0.48	0.00	0.12	0.00	0.61
GLC	0.15	0.00	0.36	0.00	1.00
FSIZE	11333	3977	29560	19	295390
FLEV	0.46	0.42	0.26	0.02	1.00

Table 3: Correlation analysis

Variables	1	2	3	4	5	6	7
ICD	1						
BSIZE	0.361**	1					
BIND	0.525**	0.391**	1				
FOWN	-0.192	0.180	-0.270*	1			
GOWN	0.483**	0.050	0.226	-0.171	1		
FSIZE	0.477**	0.230	0.314	0.013	0.009	1	
FLEV	0.361**	0.194	0.191	0.111	-0.042	0.285*	1

**significant at 1% level (2-tailed). * significant at 5% level

Table 4: Regression analysis

Variables	Coefficient	t-value	p-value
Constant		-3.092	0.003**
BSIZE	0.294	0.384	0.000***
BIND	0.030	3.921	0.702
FOWN	-0.137	-1.749	0.083*
GOWN	0.348	4.549	0.000***
FSIZE	0.259	3.384	0.001***
FLEV	0.244	3.219	0.002**

Adjusted R^2 = 0.423; F-value = 14.332; *,**,***Significant at 1, 5; 10%

CONCLUSION

The disclosure of a variety of IC items by Malaysian companies demonstrates that these companies are aware of the importance of these ICs items as an attempt to signal positive information to investors. It shows that the element of IC disclosure is still under management consent as both of 2006 and 2011 annual reports display information related to IC items even though the trend of IC disclosure is not much difference in both years. This evidence shows that Malaysian companies use annual reports to create social images through the annual report mechanism which support the legitimacy theory perspective.

This study finds that somehow corporate governance influences IC disclosure. Firm that have large board size and controlled by government are more likely to disclose IC items. In contrast, family controlled firms are less likely to share their internal information with the outsiders. Findings of the study are expected to provide some empirical evidence on the motive of companies reporting IC in their annual reports. Providing evidence of the extent, nature and form of IC information disclosure made by Malaysian companies will also enhance understanding of voluntary IC disclosure. Such evidence could be of interest to regulators and standard-setting bodies to indicate possibilities for IC information to be included in the financial statement. In addition to that, standard setters who have interests in formulating the guidelines for IC information can also gain insight from the findings of this study. The major limitation of this study is the small sample size. Future studies may extend the sample size that cover all companies listed in Bursa Malaysia and may include more corporate governance elements so that the result can be generalized.

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