

THE IMPACT OF CORPORATE GOVERNANCE ON INTELLECTUAL CAPITAL AND FIRM VALUE: EVIDENCE FROM INDONESIA AND MALAYSIA CONSUMER GOODS

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ABSTRACT

The purpose of this research is to analyze the direct impact of corporate governance on firm value and its indirect impact using intellectual capital as the intervening variable and comparing the impact between Indonesia and Malaysia. Corporate governance is measured by managerial ownership, board size, and board composition. Intellectual capital is measured by value added intellectual coefficient. Firm value is measured by Tobin's Q . This research is conducted upon consumer goods sector in Indonesia Stock Exchange and *Bursa Malaysia* during 2010-2015, with the total of 25 companies or 150 firm-year (Indonesia) and 106 companies or 636 firm-year (Malaysia). Multiple regression analysis is used to examine the model. The findings demonstrate mixed results. Managerial ownership has a significant impact on intellectual capital and firm value in both countries, it is positive in Indonesia, but negative in Malaysia. Board size and board composition do not have any significant influence towards the intellectual capital in Indonesia, but it is significant in Malaysia. The impact of both variables is also significant on firm value for Indonesia, but only board size is significant in Malaysia. Intellectual capital shows no significant correlation with firm value in Indonesia while it is significant in Malaysia.

Keywords: Corporate Governance, Managerial Ownership, Board Size, Board Composition, Intellectual Capital, Firm Value, Consumer Goods Sector, Indonesia, Malaysia.

INTRODUCTION

In the aftermath of big corporation collapses, organizations around the world have been increasingly concerned about their corporate governance (CG) practice. In Asia, the interest in CG was triggered by the Asian financial crisis in 1997-1998, increasing the attention of Asian companies to reassess their weak CG practice (Cabalu, 2015). Although a number of initiatives have been taken, the reformation progress was uneven. In a survey conducted by the Asian Development Bank Institute (2004), 4 countries were identified as the worst victims of the crisis: Indonesia, Korea, Thailand, and Malaysia. However, after the crisis, Malaysia was ranked first as the country with the highest quality of CG while the other 3 countries had similar scores. Along with more recent survey that found similar results (ADB, 2016), it indicates that Malaysia has developed a much stronger CG practice than Indonesia. Generally, CG serves as a mechanism to monitor and control managers so that decisions are made for the best interest of the shareholders (Siagian *et al.*, 2013). Accordingly, it is claimed that companies with

better CG practice will have higher values (Arora & Sharma, 2016; Siagian *et al.*, 2013).

At the same time, with the rapid advancement of technology, the global economy has shifted from the traditional way of monitoring operations to the modern approach of value creation (Ting & Lean, 2009). Particularly, with the commencement of the ASEAN Economic Community (AEC), companies must be able to utilize their resources more effectively and efficiently in order to compete and create sustainable value (Pratama, 2016). Hence, the management of intellectual capital (IC) becomes critical in today's knowledge-based economy.

IC is the knowledge within an organization which is able to create value when it is utilized in line with the mission, vision, and goals of the organization (APICC, 2017). It is considered as a strategic resource that is vital in creating sustainable growth (Zeghal & Maaloul, 2010). According to Keenan and Aggestam (2001), CG is responsible for creating, developing, and leveraging IC. This paper focuses on the board of directors as it is the main organ of CG system that is capable of improving the performance of the company (Chahal & Kumari, 2013). The board's active involvement in setting objectives

and participation in strategic plans make it crucial to provide competitive advantages, create value, and serve as the sources of IC (Berezinets et al., 2016).

The consumer goods sector in the manufacturing industry has been chosen as the object of the study. The manufacturing industry of both Indonesia and Malaysia are among the largest contributors to their respective economy (BPS, 2017; DOSM, 2017).

LITERATURE REVIEW

Corporate Governance in Indonesia

The social, economic, and political environment in Indonesia were heavily damaged by the Asian financial crisis in 1997-1998. However, the event is a stepping stone for the CG initiatives in the country. A national committee on CG (NCG) was established in 1999 and they issued the first Indonesia's Code of CG in 2001 before it was revised in the latest 2006 version (International Finance Corporation Advisory Services in Indonesia, 2014). Limited liability companies in Indonesia adopt the two-tier board system where there is a supervisory board, called the board of commissioners (BOC), sitting between shareholders and the board of directors (BOD). BOC is responsible for overseeing and providing advice to BOD while the BOD is responsible for the day-to-day management of the company (International Finance Corporation Advisory Services in Indonesia, 2014).

Corporate Governance in Malaysia

Malaysia is more advanced in its corporate regulatory environment even before the Asian financial crisis hit them in 1997-1998. Among other regulations, listed companies are already required to have independent directors on their boards (Cabalu, 2015). However, CG attracted, even more, attention after the crisis. Malaysian companies adopt the unitary or one-tier board system where there is only one board, called the BOD, that is responsible for both management oversight and performance evaluation roles (Securities Commission Malaysia, 2012).

Managerial Ownership

According to agency theory, managerial ownership (BOWN) works as a direct incentive for managers to act in line with shareholders' interest (Kamardin & Haron, 2011). By holding portions of the company's ownership,

managers will put a focus on the long-term value of the company and make an investment that enhances the long-term value, such as IC investments (Saleh *et al.*, 2009). Therefore, a greater percentage of stocks owned by the managers will help align the interests of managers and that of the shareholders. Managerial ownership is measured by the ratio of shares owned by the board to total outstanding ordinary shares (Kamardin & Haron, 2011; Noradiva *et al.*, 2016; Saleh *et al.*, 2009).

Board Size (BS)

Agency theorists argue that smaller boards are more effective. The larger board has been said as having communication and coordination problems, hence, unable to properly control the management (Appuhami & Bhuyan, 2015). As the size increases, it may also be difficult to reach timely decisions because of slower proceedings (Kamardin & Haron, 2011). In contrast, other literature suggests that larger boards provide the company with more diversity and larger pool of expertise (Appuhami & Bhuyan, 2015). More people in the board means better allocation of responsibilities so that they can effectively monitor managers. In addition, a larger board provides more links to the external environment which improves the company's access to an array of resources, such as IC, that eventually improves its performance (Jackling & Johl, 2009).

Board Composition

Board composition (BCOMP) refers to the proportion of independent directors on the board. According to agency theory, independent directors help enhance the effectiveness of monitoring and control over management (Appuhami & Bhuyan, 2015). They also have diverse roles and a multitude of resources that help execute strategy and evaluate managers' decisions. In contrast, the stewardship theorists argue that greater proportion of independent directors is not preferable. It is the non-independent directors who influence the company's performance with a better understanding of the business and superior decisions (Gaur *et al.*, 2015).

Intellectual Capital (IC)

The resource-based theory explains that only resources which are valuable, rare, non-substitutable and hard-to-imitate would provide

a sustainable competitive advantage and superior performance to the company (Kozlenkova *et al.*, 2013). IC has been said as the only resource that corresponds to the resource-based theory as it is the core of value creation and competitive advantage (Pratama, 2016). Although IC definitions vary, all of them emphasize on its growing importance as knowledge-based capital and its link with value creation.

The Value Added Intellectual Capital (VAIC) model was first developed by Pulic in 1998. The concept of VAIC is in relation to the corporate intellectual ability that refers to the efficiency of total value creation created by two resources (IC and physical resources) that work simultaneously in a business environment (Pulic, 2004). VAIC offers a relatively simple quantitative approach based on financial statements which are publicly available and derived from an identifiable source. Below are the steps to calculate VAIC:

1. Value Added (VA) = $OP + EC + DP + A$
Where OP is operating profit, EC is total employee expense, DP is depreciation, A is amortization.
2. Human Capital Efficiency(HCE)= VA/HC
Where HC is human cost or total salaries and wages.
3. Structural Capital Efficiency (SCE) = SC/VA
Where SC is structural capital or value added minus human cost.
4. Intellectual Capital Efficiency (ICE) = $HCE+SCE$
5. Capital Employed Efficiency (CEE) = VA/CE
Where CE is capital employed.
6. Value Added Intellectual Coefficient (VAIC) = $ICE + CEE$

Firm Value

Due to the limitations of VAIC, the research attempts to link it the company's value. Firm value is a long-term measure of performance as it is reflected in the share price of the company in the market. Generally, high firm value provides confidence to investors regarding the current performance and future growth of the company. One measurement of firm value is Tobin's Q . Compared to accounting profit rate, Tobin's Q is a forward-looking tool that reflects investors' valuation for the corporate opportunity. It has been argued as a good indicator of firm value where higher Q value

represents the competitive advantage for the company. Below is the formula to calculate Tobin's Q (TBQ):

$$TBQ = \frac{MVE + PS + Debt}{TA}$$

Where MVE is the market value of equity or stock closing price at year end \times the number of outstanding shares, PS is preferred stock, TA is book value of total assets.

RESEARCH METHODOLOGY

The research will perform analysis on the independent (managerial ownership, board size, board composition as independent variables), intervening (IC), and dependent (Firm value) variables. Firm size, leverage, return on asset as control variables.

The data used in this research is secondary data retrieved mainly from annual reports, Bloomberg, and Yahoo Finance. The population are consumer goods companies in Indonesia Stock Exchange (IDX) and *Bursa Malaysia* in 2010-2015 with total of 38 and 123. Using purposive sampling, four criteria are established to determine the sample: 1) Listed in consumer goods in IDX or *Bursa Malaysia*, 2) Have initial public offering before 2010, 3) Publish complete annual report 2010-2015, 4) Have its share price in Yahoo Finance. After elimination, the companies are 25 (Indonesia) and 106 (Malaysia), hence, 150 firm-year and 636 firm-year. After data testing and trimming, the observations become 127 firm-year (Indonesia) and 328 firm-year (Malaysia).

Research Model

Multiple Linear Regression with intervening variable is conducted using the model below.

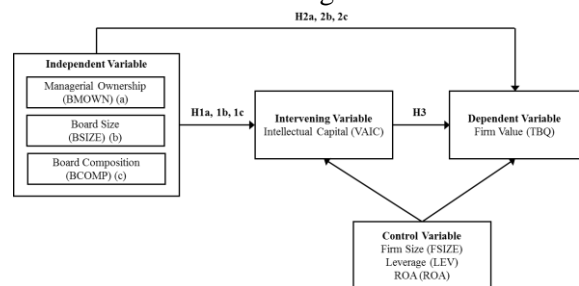


Figure 1. Model Analysis

$$VAIC = \alpha + \beta_1 BMOWN + \beta_2 BSIZE + \beta_3 BCOMP + \beta_4 FSIZE + \beta_5 LEV + \beta_6 ROA + \epsilon$$

$$TBQ = \alpha + \beta_1 BMOWN + \beta_2 BSIZE + \beta_3 BCOMP + \beta_4 VAIC + \beta_5 FSIZE + \beta_6 LEV + \beta_7 ROA + \epsilon$$

For Indonesia, the calculation for each CG variable is separated between the BOD and BOC (i.e. BMOWN is separated into BODMOWN and BOCMOWN).

RESULTS

The T-test results can be seen in Table 3. For the adjusted R², Table 1 shows that Indonesia are 66.9% and 87.3% while Malaysia are 62.3% and 31.5%. The F-test of both models in both sample is 0.000.

Table 1. Adjusted R² and F-test

Regression Model	ID	MY	ID	MY
	Adjusted R ²		Sig. F	
VAIC	0.669	0.623	0.000	0.000
TBQ	0.873	0.315	0.000	0.000

It can be seen in Table 3 that for Indonesia sample, VAIC fails as a mediator of the relationship between CG and TBQ as its significance level is 0.125. Table 2 depicts the direct and indirect impact for Malaysia. Since the indirect impact produces smaller number, VAIC is not effective as a mediator between BMOWN to TBQ. On the other hand, VAIC unable to mediate BSIZE to TBQ as the direct and indirect impact shows different direction (i.e. positive and negative).

Table 2. Direct and Indirect Impact

Relationship	Direct Impact	Indirect Impact (Through VAIC)
BMOWN --> TBQ	-0.216 (Sig)	-0.069 (Sig) × 0.340 (Sig) = -0.0235
BSIZE --> TBQ	0.298 (Sig)	-0.113 (Sig) × 0.340 (Sig) = -0.0384

Table 3. Descriptive Statistics

Variable	Indonesia: N = 127				Malaysia: N = 328			
	Min.	Max.	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.
BODMOWN	0.000	0.230	0.019	0.058				
BOCMOWN	0.000	0.130	0.006	0.025	0.000	0.450	0.124	0.131
BODSIZE	2.000	15.000	5.276	2.439				
BOCSIZE	2.000	8.000	4.221	1.527	3.000	11.000	7.220	1.690
BODCOMP	0.000	0.540	0.096	0.141				
BOCCOMP	0.200	0.800	0.391	0.103	0.270	0.750	0.441	0.114
VAIC	0.820	10.190	4.107	2.108	0.370	4.740	2.521	0.738
TBQ	0.240	15.690	2.877	3.183	0.230	1.120	0.651	0.198
FSIZE	10.940	13.800	12.222	0.693	7.440	10.260	8.346	0.482
LEV	0.000	0.560	0.180	0.160	0.000	0.650	0.189	0.155
ROA	0.000	0.460	0.114	0.117	-0.140	0.220	0.042	0.053

DISCUSSION

Based on the regression results in Table 4, below are each hypothesis explanation.

1. For Indonesia, H1a is accepted particularly for BOD as it is positive to VAIC. Although Indonesia directors generally

hold only less than 2% shareholdings (see Table 3), the result proves that it can be an incentive for directors to act in line with the shareholders' interests (Noradiva *et al.*, 2016) by taking long-term value-enhancing projects, such as investment in IC (Saleh *et al.*, 2009). On the other hand, although Malaysia directors hold larger ownerships (12.39%), it seems to not motivate them, hence, H1a is rejected. In Malaysia, board ownership is not the only factor that determines the board's competency. This is confirmed by Saleh *et al.* (2009) who said that Malaysia directors are more highly rewarded in the form of perquisites and allowances.

2. H1b is rejected for Indonesia and Malaysia as BODSIZE and BOCSIZE are not significant while BSIZE is negative to VAIC. Overall, the results do not support that larger boards should enable companies to secure IC resources. On average, Malaysia (7) has larger boards compared to Indonesia (5 and 4). However, due to the fact that candidates are often searched and recommended by the executive directors or major shareholders themselves (Annuar & Rashid, 2015), it explains why these directors, although many, are not necessarily fit nor add value, hence, makes communication and decision-making problem that results in decreased ability to make IC investments (Al-Musali & Ismail, 2012; Annuar & Rashid, 2015; Appuhami & Bhuyan, 2015). On the other hand, in Indonesia, board size seems to be merely the number of board members, and this might not have any correlation with the skills and ability to perform their jobs. A survey by OECD (2017) revealed that not all Indonesian companies are required to conduct a fit and proper test and continuous training for directors. This indicates that not all directors on the board have the necessary skills that enable the companies to manage IC effectively. H1c is rejected for Indonesia and Malaysia as BODCOMP and BOCCOMP are not significant while BCOMP is negative to VAIC. Overall, the results contradict with the agency theory. It seems that because independent directors do not work full-time, they have inadequate knowledge about the company and devote less time to improve its value through IC (Yamneesri & Herath, 2010). It was also

noted by some studies that Asian companies typically choose their independent directors base on kinship (Basyith, 2016; Yammeesri & Herath, 2010) due to the high influence of family-owned groups (OECD, 2017). Hence, they are not able to properly fulfill their responsibilities to manage IC effectively.

3. For Indonesia, H2a is accepted particularly for BOD as it is positive to TBQ. The result supports the agency theory where managerial ownership is able to increase the value of the company as managers have vested interest in the company. In contrast, for Malaysia, BMOWN has a negative β score and a significance level of 0.000 to TBQ. Thus, H2a is rejected. This might be due to the low average shareholdings held by the board (see Table 3). It is consistent with the findings of Amran and Ahmad (2013) in a study of Malaysian companies, who found an inverted U-shaped relationship where at ownership level < 27%, the correlation is negative as the boards have greater incentive to pursue personal benefits rather than maximizing the firm value.
4. H2b is accepted in Indonesia (particularly for BOD) and Malaysia. Overall, the results support the argument that larger boards can provide more expertise and wider links to external environment which are viewed as more effective by the market to manage the company's resources (Appuhami & Bhuyan, 2015; Jackling & Johl, 2009).
5. For Indonesia, H2c is accepted particularly for BOC as it is positive to TBQ. This result supports the agency theory which mentions that independent directors are necessary to mitigate agency problems (Appuhami & Bhuyan, 2015). Moreover, they help increase the transparency of the company's affairs and provide more assurance to investors (Kumar & Singh, 2012). On the other hand, for Malaysia, BCOMP is not significant to TBQ. Thus, H2c is rejected. Most independent directors in Malaysia are selected for political reasons and legitimate business activities (Haniffa & Hudaib, 2006). Consequently, the lack of awareness of their responsibilities unable them to bring any significant impact to improve the firm value (Arora & Sharma, 2016). In addition, Annuar and Rashid (2015) discovered that the role of independent

directors in Malaysia is more about steering the company forward, but it is the management who are responsible for making things happen.

6. For Indonesia, VAIC is not significant to TBQ, thus, H3 is rejected. For Malaysia, H3 is accepted as VAIC is positive to TBQ. In the case of Malaysia, IC is proven to be capable of enhancing the competitive advantage by governing knowledge, technique, and skills that help companies gain sustainable profits (Wang, 2008). Having superior IC will increase the investors' confidence, hence, increasing the firm value. However, IC in Indonesia does not influence the firm value. This might be because the innovation and competitiveness indexes in Indonesia are relatively lower compared to Malaysia (World Economic Forum, 2016). Hence, it may not form the best environment for the development of IC in the country (Maditinos *et al.*, 2011).

Table 4. Regression Results

Regression Model	Independent Variable	Dependent Variable	Indonesia's Results			Malaysia's Results		
			β	t	Sig. t	β	t	Sig. t
1	BODMOWN	VAIC	0.143	2.582	0.011*	-0.069	-1.941	0.053**
	BOCMOWN		-0.02	-0.211	0.834			
	BODSIZE		-0	-0.040	0.968	-0.113	-2.834	0.005*
	BOCSIZE		0.108	1.548	0.124			
	BODCOMP		-0.01	-0.118	0.906	-0.064	-1.736	0.083**
	BOCCOMP		0.036	0.545	0.587			
	FSIZE		0.281	3.458	0.001*	0.201	5.206	0.000*
	LEV		0.241	3.877	0.000*	0.217	5.593	0.000*
	ROA		0.701	9.815	0.000*	0.788	19.91	0.000*
2	BODMOWN	TBQ	0.079	2.253	0.026*	-0.216	-4.465	0.000*
	BOCMOWN		-0.17	-2.683	0.008*			
	BODSIZE		0.143	2.169	0.032*	0.298	5.477	0.000*
	BOCSIZE		-0.05	-1.179	0.241			
	BODCOMP		0.062	1.563	0.121	0.059	1.175	0.241
	BOCCOMP		0.107	2.609	0.010*			
	VAIC		-0.09	-1.546	0.125	0.340	4.541	0.000*
	FSIZE		0.059	1.112	0.268	0.019	0.351	0.726
	LEV		0.085	2.085	0.039*	-0.056	-1.028	0.305
	ROA		0.965	16.19	0.000*	-0.008	-0.105	0.916

Note: ** and * significant at the 0.1 and 0.05 respectively.

For the control variables, firm size, leverage, and ROA are all positive towards IC in both countries. However, all are not significant towards TBQ in the case of Malaysia while, in Indonesia, only firm size is not significant towards TBQ. It means that size is not a deciding factor for firm value. Leverage is irrelevant towards firm value in Malaysia because a company with good projects will thrive regardless of its capital structure (Osazuwa & Che-Ahmad, 2016). Lastly, ROA is irrelevant towards firm value in Malaysia as the investors are more interested in the

company's ability to generate cash and dividends in their investment decisions (Chong & Lai, 2011).

CONCLUSION AND SUGGESTIONS

From the analysis, it can be concluded that there are mixed results in relation to the relationship between selected CG indicators, IC, and firm value. Overall, managerial ownership (i.e. shares owned by board members) is a good incentive to improve IC and firm value in Indonesia while it is the opposite in Malaysia. Board size turns out to be not correlated with IC in Indonesia but negative in Malaysia. However, its impact on firm value is positive in both countries. Board composition shows no correlation with IC but significantly improves firm value in Indonesia. In Malaysia, board composition significantly decreases the IC but it shows no influence on firm value. Lastly, IC shows no influence on firm value in Indonesia but it significantly improves firm value in Malaysia.

Future research can consider including more sectors in the sample to give a bigger picture regarding the topic. Other CG indicators that gradually gain popularity and importance (such as board skills and diversity) could be also added. Finally, due to the limitations of VAIC, future research can utilize other measures of IC to generate more valuable conclusions.

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