Board Indicators, Managerial Ownership, Intellectual Capital and Earnings Quality in Consumer Goods of Indonesia and Malaysia

Saarce Elsy Hatane*, Natalia Ivana Halim, Josua Tarigan

ABSTRACT
This paper studies the influence of the board of director with earnings quality, using intellectual capital as a mediating variable. Also, it takes account of concomitant variables such as firm size and leverage. The subject of the study focuses on companies in the consumer goods sector listed in the stock exchange of Indonesia and Malaysia is 2011-201. Board of director (BOD) is found to have a negative impact on earnings quality (EQ) in Indonesia, whereas it has no impact on earnings quality in Malaysia companies. On contrary, the board of director has a positive influence on intellectual capital (IC) in Indonesia. The opposite influence has been found in Malaysia where BOD is negatively correlated to IC. IC has a significant influence towards EQ in both countries. IC has a positive impact on EQ in Indonesia, but the effect is found to be negative in Malaysian firms. In both cases, IC has failed to become a mediation variable towards the impact of BOD to EQ. Therefore, the optimization of BOD is crucial in enhancing EQ in Indonesia. At the same time, IC has prominence in influencing EQ in Indonesia and Malaysia thus raising the importance of its optimization.

Keywords: Board of directors, managerial ownership, intellectual capital, earnings quality

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INTRODUCTION

Accounting earnings are inferred as one of the most valuable information to the shareholders (Saihi, 2015; Peni & Vahamaa, 2010). These earnings are affected by accounting rules and standards which may rely on management’s judgment such as in the cases for accruals (Weil, 2009). Earnings management can act as a tool to maximize executive’s personal wealth at the expense of shareholders (Peni & Vahamaa, 2010). This practice of earnings management can result in a false presentation of the company’s financial condition thus lowering earnings quality (Kieso, Weygant, & Warfield, 2011). In addition to that, accounting scandals due to aggressive accounting practices have proven that earnings management to be detrimental at some point.

At the same time, intellectual capital has been increasingly discussed as a firm’s strategic asset which enables them to perform numerous function (Iazzolino & Laise, 2013). Intellectual capital drives the knowledge economy (The Economist, 2015). Pulic (2008) argues that intellectual capital lies in the knowledge workers of a company who will transform knowledge into value-added products or services using innovations which is made possible through an effective recognition, management and utilization of knowledge (Bhatti & Zaheer, 2014). Pulic model (2008), VAIC, is a measure of value added intellectual capital which incorporates all resources that the company has. A company that maximizes the full potential of value creation would obtain a higher VAIC value.

Accounting scandals emphasized the need for firms to enhance practices of corporate governance (Hashim & Devi, 2015). One of the roles of corporate governance is to improve transparency of information presented by companies, in other words enhancing earnings quality (Yang, Lai, & Tan, 2008). Moreover, corporate governance plays a role in maximizing company’s value-added intellectual capital. It helps to ensure that managerial decisions are made to maximize shareholders’ wealth by optimizing the use of IC (Appuhami & Bhuyan, 2015).

This paper will be focused on the board of directors as a part of internal mechanism as they hold the highest control over the company’s management team (Fama & Jensen, 1983; Hashim & Devi, 2015). Previous studies have included board of director for its impact to intellectual capital and earnings quality (Swastika, 2013; Yang, Lai, & Tan, 2008; Hashim & Devi, 2015; Peni & Vahamaa, 2010; Appuhami & Bhuyan, 2015; Swartz & Firer, 2005; Bohdanowicz, 2014; Ho & Williams, 2003). A high earning quality reflects the true condition of a firm (Mojtahedi, 2013). Therefore, it can be inferred that earnings quality is a product of the intellectual capital that a company has. Noting that in the knowledge-based business setting, knowledge holds an important role in business growth and success, it also has an impact on the earnings quality of the company. Studies have found a positive correlation between VAIC and earnings quality (Darabi, Rad, & Ghadiri, 2012; Mojtahedi, 2013).

In this paper, a comparison is going to be made between two member countries of ASEAN, Indonesia and Malaysia. The two countries are developing the economy in the same region (Amran, et al., 2017). The sector being studied is the consumer goods sector. The consumer goods and retail sector in Asia is expected to experience high growth over the next five years, surpassing global average growth and currently in a flourishing stage (Price Waterhouse Coopers, 2015). Indonesia and Malaysia are similar in terms of religion where the majority of citizens are Muslim (Amran, et al., 2017). The two countries are also similar in terms of national culture measured by the Hofstede cultural dimension. Both countries have high power distance, value collectivism, low uncertainty avoidance and are feminine. These
can show similarities in how the organization is run (Steenkamp, 2001) as well as decision-making tendencies.

The previous studies have studied the relationship of the board of director to intellectual capital and earnings quality separately. Also, there are not many studies that try to find the correlation between VAIC and earnings quality itself (Darabi, Rad, & Ghadiri, 2012). Therefore, this research will try to fill in the gap by combining the correlations in one study using board of director as the independent variable, intellectual capital (VAIC) as the mediating variable and earnings quality (indicated by absolute discretionary accruals) as the dependent variable. This paper will also take account of concomitant variables such as firm size and leverage. The study will focus on companies in the consumer goods sector listed in the stock exchange of two ASEAN countries which are Indonesia and Malaysia over the period of 2011-2015 (5 years).

Corporate governance involves relationships between company’s stakeholders, providing structure in which company’s goal is measured, attained and monitored, rewarding board and management with proper incentives, and facilitating effective monitoring (BPP Learning Media, 2015). These components aim to encourage firms to use the available resources at the best interest of the company and shareholders (International Finance Corporation, 2014). There are some theories relating to corporate governance. Agency relationship is a contract between one person, regarded as the principal, and another person, known as the agent (Jensen & Meckling, 1976). An issue may arise when the agent, having their own self-interest, behave in a way not in accordance or not in the best interest of the principal (Roberts, 2015). Roberts (2015) mentioned that in order to solve the agency problems within corporate governance, shareholders need to accept certain agency costs by creating incentives to align the interests of the two. Stewardship theory is the opposite of agency theory (Donaldson & Davis, 1991). It believes that managers are stewards who put organizational interest first and have high collectivistic behaviours. The human capital theory believes that human capital can be improved by making investments towards it (Kwon, 2009). Firms with more stakeholders oriented corporate governance have been found to invest more heavily on firm-specific human capital (Odaki & Kodama, 2010).

In order to ensure good corporate governance in an organization, internal and external mechanisms which can be implemented. This paper will be focused on board of director as an internal mechanism of corporate governance (Altuner, Tuna, & Can Güleç, 2015). The board of directors holds an important role in the company as they own the highest control over the company’s management team. They have the right to monitor the decisions made by the management as well as to approve new or changes in company policies (Fama & Jensen, 1983). Board of director is also established with the aim of protecting the interest of the owners (shareholders) (Haji & Ghazali, 2013).

Board size refers to the number of people sitting at the board member. Numerous studies have included board size as one of the indicators of the internal mechanism of corporate governance (Jensen, 1993; Bushman, Chen, Engel, & Smith, 2004; Taktak & Mbarki, 2014). Jensen (1993) and Bushman, et.al (2004) stated that a large number of people sitting at the board of directors can hinder effective coordination and communication. As a result, it is difficult to achieve consensus and make decisions. When this happens, managers could exploit this opportunity to dominate the directors and utilize managerial discretion for their own self-interest. Therefore, as Jensen (1993) mentioned, smaller board size is more effective in its monitoring and oversight duties. On the contrary, large board size can pool different expertise, knowledge and experiences which the organization can benefit from (Xie, et.al, 2003). Larger
boards also have an increased monitoring capacity in handling organizational activities (Haji & Ghazali, 2013).

Board independence refers to the proportion of independent directors in the board of director. Independent directors have a major role in ensuring that the rights of the shareholders are protected by preventing agency problems and opportunistic behaviours, including prevention of discretionary practices that reduces earnings quality (Haji & Ghazali, 2013; Taktak & Mbarki, 2014). In other words, the independent director helps the board to effectively do its role. This is also supported by the knowledge and expertise owned by independent directors. Independent directors also are more likely to suppress discretionary practices in companies as they exercise discipline more effectively than the non-independent ones (Taktak & Mbarki, 2014).

Managerial ownership refers to the number of shares owned by the director, relative to the number of total outstanding shares. As an attempt to overcome agency problems, executives or members of board of directors own a part of the company’s shares. The rationale behind this incentive is that the interests of managers and external shareholders can be aligned when managers own a stake at the company’s shareholding (Yang, Lai, & Tan, 2008). When job performance translates to a maximized company performance, the executives will benefit as well through the ownership of shares (Haji & Ghazali, 2013). Despite that, managerial ownership should be done in moderation. As they have more stake in the company, managers may take on aggressive decisions in order to maximize personal benefit, for instance adopting accounting policies to window-dress financial performance (Jung & Kwon, 2002). This is also known as the entrenchment effect. Through the high ownership of shares, managers can guarantee their own future employment benefits thus can deviate from an effective alignment of interest between the shareholders and the executives (Hashim & Devi, 2015).

Board gender diversity refers to the proportion of female directors on the board of director. Female directors may present different attitudes towards risk in the company. Compared to male directors, Spencer Stuart survey reported that women directors placed higher concerns over risk which can lead to less aggressive decision making (Spencer Stuart, 2016). Several studies have included board gender diversity as a part of indicators of corporate governance internal mechanism (Abdullah & Ismail, 2016; Buniamin, Johari, Rahman, & Rauf, 2012; Gavious, Segev, & Yosef, 2012; Hashim & Devi, 2015; Gavious, Segev, & Yosef, 2012; Peni & Vahamaa, 2010). Peni & Vahamaa (2010) stated that men and women may have different attitudes and practices in their management behaviours. This can lead to different attitudes and practices on the quality of financial reporting (Peni & Vahamaa, 2010).

Indonesia Financial Services Authority (OJK) and the International Financial Corporation Advisory services created a corporate governance manual to provide a robust framework for good practices of corporate governance for corporations (International Finance Corporation, 2014). Indonesia follows the two-tier board structure. This two-tier board structure means that companies are required to separate the role of CEO and the Chair of the Board (Organization for Economic Co-operation and Development, 2017). These two roles are separated in the creation of the board of commissioners and board of directors. Board of commissioner act as a superintendent of the company. It holds a strategic role in overseeing the policy and implementation of those policies by the management running the company, also advising the board of directors. On the contrary, board of director has full responsibility on the day-to-day management of the company. It acts as the agents in the company and has a role in supervising the assets of the company and utilizing the resources of the company in order to benefit the company.
The 2012 version of the Malaysian Code of Corporate Governance (MCCG) focused on strengthening the board structure and composition which recognized the director’s role as active fiduciaries. Not only are directors responsible for optimizing firm performance, but also for ensuring compliance with laws and ethical values as well as maintaining an effective structure of management of risk and internal control (Securities Commissions Malaysia, 2012).

Unlike Indonesia, Malaysia follows the one-tier board structure with a minimum of 2 directors on the board (Organization for Economic Co-operation and Development, 2017). In a unitary (one-tier) board structure, the board represents the highest element of a company’s internal corporate governance system. The members of this board of directors are appointed by the shareholders. A CEO usually sits on the board together with other directors, thus emphasizing the need for independent directors to ensure effective monitoring in the company management. In a unitary board structure also, the issue of board structure and diversity is more crucial as a lot of times its composition is biased towards a particular gender, age or ethnicity (Abdullah & Ismail, 2013).

Intellectual capital can be described as a pool of the company’s intangible asset which allows them to perform numerous functions (Iazzolino & Laise, 2013). Intellectual capital may refer to knowledge in the form of implicit or explicit information. It can also be a process of transformation by using means of research, development and organization learning. Intellectual capital can also be explained in the concept of knowledge products such as patents or trademark (Brooking, 1996). Intellectual capital can be used as a strategic asset which relates to specific and valuable knowledge to the organization. In the setting of growing complexity of technology and where knowledge plays a big role in the business setting, the efficient management of intellectual capital becomes more crucial (Iazzolino & Laise, 2013).

Ante Pulic (1998) developed a model in order to measure intellectual capital, called the Value Added Intellectual Coefficient (VAIC). Different research studying the relation between corporate governance, intellectual capital and earnings quality have also used this model (Mojtahedi, 2013; Darabi, Rad, & Ghadiri, 2012; Appuhami & Bhuyan, 2015; Bohdanowicz, 2014; Saleh, Rahman, & Hassan, 2009). The rationale behind this model is that it is important to be able to measure productivity even for knowledge workers. Thus, a methodology is needed to measure the efficiency of this intellectual work just as how physical work efficiency is similarly measured (Pulic, 2008).

The VAIC model is calculated based on two types of capital efficiency which are intellectual capital efficiency (ICE) and capital employed efficiency (CEE). Breaking it down, ICE is influenced by human capital efficiency (HCE) and structural capital efficiency (SCE). Human capital efficiency refers to how much value added can be created from investments on the employee, i.e. employee costs, are included in human capital efficiency. Structural capital efficiency can be influenced by knowledge management, organization culture, as well as organization process efficiency (Mohammadi, Sherafati, & Ismail, 2014). In order to maximize value creation, financial capital is also needed. Therefore, the value creation of intellectual capital should take account the capital employed efficiency (CEE), which is the financial resources needed to support the value creation. Capital employed can also refer to the investment made in terms of its physical assets (Darabi, Rad, & Ghadiri, 2012). There are some steps in VAIC calculation:

1. Value Added (VA)

\[ VA = P + A + D + EC \]

\[ P=\text{operating profit}; \ A=\text{total amortization}; \ D=\text{total depreciation}; \ EC=\text{employee expenses} \]
2. Human Capital Efficiency (HCE)

\[ HCE = \frac{VA}{HC} \]  

HC = total salaries and wages.

3. Structural Capital Efficiency (SCE)

\[ SCE = VA - HC \]

VA = Value Added; HC = Total salaries and wages; SC = Structural Capital

4. Intellectual Capital Efficiency (ICE)

\[ ICE = HCE + SCE \]

5. Capital Employed Efficiency (CEE)

\[ CEE = VA \]

CE = capital employed or book value of net assets.

6. Value Added Intellectual Coefficient (VAIC)

\[ VAIC = ICE + CEE \]

A high coefficient of VAIC represents a higher creation of value by making use of all of its resources namely its financial, physical and also intellectual capital.

Earnings quality

Earnings quality refers to the correlation between a company’s economic income and its income reported by accounting (Schoroeder & Clark, 2009). High quality of earning is crucial for analysts as it represents full and transparent information which will not confuse or mislead the users of the financial reports and important for investment decisions (Weygandt, Kimmel, & Kieso, 2013; McKinsey & Company, 2002). Earning management can prove to be detrimental to earnings quality when it distorts information in a way that decreases its usefulness to predict future cash flow and income. This can destroy the market’s trust where this bond between the shareholders and company should have been kept strong (Kieso, Weygant, & Warfield, 2011). Earnings management occurs when there is an opportunity to make accounting decisions that change the reported income of a firm and management exploits those opportunities (Weil, 2009). This issue of earnings quality has raised an issue in which management is too busy managing income instead of the actual business (Weygandt, Kimmel, & Kieso, 2013).

Previous studies have used the Modified Jones model in order to measure earnings management (Al-Thuneibat, Al-Angari, & Al-Saad, 2016; Swastika, 2013; Yang, Lai, & Tan, 2008; Saleem & Alzoubi, 2016; Hashim & Devi, 2015). Modified Jones model is effective at modelling the time-series process (Yang, Lai, & Tan, 2008). It has also been mentioned as a powerful model that can detect earnings management by measuring unexpected accruals better compared to other models (Dechow, Sloan, & Sweeney, 1995). A higher value of absolute discretionary indicates a higher effort of earning management, thus implying a lower earnings quality (Hashim & Devi, 2015; Mojtahedi, 2013). There are some steps in calculating discretionary accruals:

1. Calculate total accruals

\[ TAt = Net \ income \ before \ extraordinary \ items - Cash \ flow \ from \ operations \ for \ the \ period \]

2. Find coefficients

\[ \frac{TAt}{\alpha_{i, t-1}} = \alpha_1 \left( \frac{1}{\alpha_{i, t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i, t} - \Delta REC_{i, t}}{\alpha_{i, t-1}} \right) + \alpha_3 \left( \frac{PPE_{i, t}}{\alpha_{i, t-1}} \right) + \varepsilon \]  

……………………………..(7)
3. Substitute coefficients and compute values of discretionary accruals

\[
\frac{NA_{it}}{A_{it-1}} = \alpha_1 \left( \frac{1}{A_{it-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} \right) + \alpha_3 \left( \frac{PPE_{it}}{A_{it-1}} \right)
\]

\[
DA_{it} = TA_{it} - NDA_{it}
\]

\(TA_{it}\) = Total accruals for the year; \(A_{it-1}\) = Total asset for the previous year, i.e. time \(t-1\); \(\Delta REV_{it}\) = Difference of revenue in the current period and the previous period; \(\Delta AR_{it}\) = Difference of accounts receivable in the current period and the previous period; \(PPE_{it}\) = Non-current asset for the period; \(NA_{it}\) = Non-discretionary accruals for the current period; \(DA_{it}\) = Discretionary accruals for the current period

**H1: Board of director has an impact on earning quality**

**H2: Board of director has an impact on intellectual capital**

**H3: Intellectual capital has a positive impact on earnings quality**

### RESEARCH METHOD

The paper conducts analysis of variables as follows board of director as an independent variable with indicators of board size, board independence, managerial ownership and board gender diversity, intellectual capital as mediating variable with the indicator of HCE, SCE and CEE, absolute discretionary accruals as the dependent variable used to indicate earnings quality, Firm size (natural log of total asset) and leverage (total debt relative to total assets) as indicators of concomitant variable, firm characteristics.

This study uses secondary data obtained from annual reports of the companies and Bloomberg. The population in this research include 37 companies listed on the stock exchange of Indonesia and 122 Malaysian companies in the consumer goods sector during the financial year 2011-2015. Purposive sampling is used with the criteria of 1) Listed in consumer goods in IDX or Bursa Malaysia, 2) Have initial public offering before 2010, 3) Publish complete annual report 2010-2015. In total there are 24 Indonesian companies and 101 Malaysian companies which fit the criteria which in total results to a total sample of 120 reports and 505 reports. However, after data trimming for improving model fit, the number of the sample left is 110 reports for Indonesian companies and 421 reports for Malaysian companies.

### RESULTS AND DISCUSSION

**Results**

Using WarpPLS version 5.0 software, the model analysis is:

![Figure 1. Model analysis](image-url)
\[ \text{ABSDA} = \alpha + \beta_1 \text{BOD} + \beta_2 \text{VAIC} + \beta_3 \text{FC} + \epsilon \]

\[ \text{VAIC} = \alpha + \beta_1 \text{BOD} + \beta_2 \text{FC} + \epsilon \]

Where:
- \( \text{BOD} \) = Board of director
- \( \text{VAIC} \) = Intellectual Capital
- \( \text{ABSDA} \) = Absolute discretionary accruals
- \( \text{FC} \) = Firm Characteristics

For Indonesia, the calculation for each board of director indicator is separated between the board of director and board of commissioners.

Overall, consumer goods companies in Indonesia and Malaysia have done more than expected compared to the suggested good corporate governance practice. However, some companies do not follow these suggestions as well. Companies in Indonesia and Malaysia still have space in improving their board of director effectiveness as well as gender diversity balance compared to the global average of 18% and Asia average of 14% (Spencer Stuart; Women Corporate Directors Foundation, 2016).

### Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Country</th>
<th>Indicators</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev</th>
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</table>

Source: Author’s compilation

Malaysia has higher ICE compared to Indonesia indicating that it is more rapid in innovation. This explains Malaysia’s position (35) in Global innovation index ranking, which is significantly higher than Indonesia at rank 88 (Cornell University; INSEAD, WIPO, 2016).

Indonesia has a similar absolute DA with Malaysia indicating a similar earnings quality level. This supports the Hofstede dimension which shows that both score highly in terms of power distance which influence tendencies to perform earnings management (78 and 100 respectively) (Hofstede, 2017).
Goodness-of-fit test
The AARC in Indonesia model is higher than Malaysia, at 17.4% as compared to 11.2% which indicates that this model has a better explanatory power for Indonesia consumer goods companies than Malaysia’s. The values of AVIF and AFVIF for both Indonesia and Malaysia is below the ideal criteria 3.3 which means that there is no multicollinearity problem in the model. Indonesia GoF index stands at 0.337 and Malaysia GoF index is 0.261 which are considered as the medium. For both Indonesia and Malaysia, the SPR, RSCR and SSR indices show the value of 1 which means they are free from Simpson’s paradox instances, do not have any problem with negative R-squared contributions and of ideal value. The acceptable value of NLBCDR is 0.7 where Indonesia and Malaysia has an index of 0.8. Overall, both models have passed the goodness-of-fit test which means they are acceptable to use for the research.

Indonesia and Malaysia board size is the most important indicator of the BOD variable. In Indonesia, board size has a positive coefficient which means that the larger board size the more effective board of director is. An advantage of having a large board size is that it can pool different expertise, knowledge and experiences which the organization can benefit from (Taktak & Mbarki, 2014) and have an increased monitoring capacity in handling organizational activities (Haji & Ghazali, 2013). On the other hand, Malaysia weight indicator of board size shows a negative sign which means that the larger the board size, the less effective it is in conducting their roles. A large number of people sitting at the board of directors can hinder effective coordination and communication (Bushman, Chen, Engel, & Smith, 2004; Jensen, 1993).

SCE is the most important indicator of the intellectual capital variable. Structural capital deals with business intellects that are derived from structure and information within the company, and it is actually dependent on the human capital (Chen, Cheng, & Hwang, 2005). SC received much attention for being the supporting backbone for human capital as it enables achievement of sustainable competitiveness, that is the aim of effective intellectual capital management (Nedbank Limited, 2005).

Table 2. Indicator

<table>
<thead>
<tr>
<th>Country</th>
<th>Board of Director Indicator</th>
<th>Weight Indicator</th>
<th>Intellectual Capital Indicator</th>
<th>Weight Indicator</th>
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<td>-0.616</td>
<td>HCE</td>
<td>0.616</td>
</tr>
<tr>
<td></td>
<td>X1_BIND</td>
<td>0.577</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X1_MOWN</td>
<td>0.152</td>
<td>SCE</td>
<td>0.638</td>
</tr>
<tr>
<td></td>
<td>X1_GEND</td>
<td>-0.052</td>
<td>CEE</td>
<td>0.111</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypothesis testing

Table 2. Direct Effect Result

<table>
<thead>
<tr>
<th></th>
<th>BOD</th>
<th>VAIC</th>
<th>FIRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAIC</td>
<td>0.381*</td>
<td>(&lt;0.001)</td>
<td>0.254*</td>
</tr>
<tr>
<td>ABSDA</td>
<td>0.128**</td>
<td>(0.083)</td>
<td>-0.154*</td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAIC</td>
<td>-0.067**</td>
<td>(0.083)</td>
<td>0.114*</td>
</tr>
<tr>
<td>ABSDA</td>
<td>0.033</td>
<td>(0.251)</td>
<td>0.454*</td>
</tr>
</tbody>
</table>

Source: Author’s compilation

The numbers show the path coefficient of the direct effect, whereas number in parenthesis show the p-values. Coefficients with (*) shows significance at 5% level while (**) shows significance at 10% level.

As seen in table 4 for indirect effects in the model, it can be seen that VAIC has failed to become a mediating variable in the relationship of the board of directors and earnings quality for both Indonesia and Malaysia listed consumer goods companies due to the insignificance of P-values. In the context of Indonesia, the board of director has a significant direct negative impact towards earnings quality even without the VAIC variable. On the other hand, the board of director itself has a positive influence on VAIC while VAIC has a positive impact on earnings quality. It can be seen that there is a contradiction in the direction of the impact which means that VAIC cannot mediate the relation between the board of director and earnings quality.

Table 3. Indirect Effect Result

<table>
<thead>
<tr>
<th></th>
<th>BOD</th>
<th>FIRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>-0.059</td>
<td>-0.039</td>
</tr>
<tr>
<td></td>
<td>(0.190)</td>
<td>(0.280)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>-0.030</td>
<td>0.052</td>
</tr>
<tr>
<td></td>
<td>(0.188)</td>
<td>(0.066)</td>
</tr>
</tbody>
</table>

The numbers show the path coefficient of the indirect effect, whereas the number in parenthesis shows the p-values. In the context of Malaysia, BOD has a positive insignificant direct impact on earnings quality. However, it was found that BOD has a significant negative relation with VAIC and VAIC has a negative impact on earnings quality. Logically, the higher BOD value will lower VAIC, which in turn will increase earnings quality. However, VAIC here is not fit to become a mediating variable statistically. Instead, it can act as a predictor in this research model.

DISCUSSION

Board of director has an impact to earnings quality

In Indonesia, the impact of board of director to absolute discretionary accrual shows a path coefficient of 0.128 and p-value of 0.083. As p-value is less than 10. Therefore, H1 is accepted where board of director has a significant positive impact on absolute discretionary accruals, which is a negative impact to earnings quality. This is in line with some previous studies (Buniamin, Johari, Rahman, & Rauf, 2012; Hashim & Devi, 2015; Swastika, 2013;
Mohammad, Wasiuzzaman, & Salleh, (2016) A large board size can result to a more difficult coordination therefore making consensus of decision tough to reach (Jensen, 1993; Bushman, Chen, Engel, & Smith, 2004). It can also result in more practices of earnings management being undetected or ineffectively tackled. The role of independent directors in Malaysia is unique due to ownership structure where it is a highly concentrated one and this is the same as Indonesia. Majority ownership is controlled by a small number of large family-owned groups in Indonesia (Organization for Economic Co-operation and Development, 2017). This gives evidence of the managerial hegemony theory which states that management has a greater role in decision making and independent directors are chosen because they are considered allies. As a result, they can become actively involved in supporting management’s decision making including increasing accrual practices and lowering earnings quality (Mohammad, Wasiuzzaman, & Salleh, 2016). There is an entrenchment effect in managerial ownership in Indonesia and disproves agency theory. A study by Yang, Lai & Tan (2008) on Taiwanese firms showed an inverted U-shaped relation between executive ownership and discretionary accruals. The low percentage of ownership in Indonesia suits the first half of the inverted U-shaped a in which earnings quality still decreases. The same result has also been found in previous studies where the presence of female executives on board has a significant positive influence on earnings management (Buniamin, Johari, Rahman, & Rauf, 2012; Peni & Vahamaa, 2010). Diversity can hinder the group’s ability in strategic decision making (Goodstein, Gautam, & Boeker, 1994). Conflicts can arise due to the difference in interests and the development of factions. For all these reasons, decisions making regarding earnings quality is not optimized.

Malaysia showed different result from Indonesia. The impact of board of director to absolute discretionary accrual shows a coefficient of 0.033 and p-value of 0.251. As a result, H1 for the Malaysian sample is rejected as board of director has no impact on earnings quality. Previous studies have also found no association between board size and EM (Chaharsoughi & Rahman, 2013; Al-Dhamari & Ismail, 2014; Taktak & Mbarki, 2014). This can be caused due to the board size that is not optimal. Malaysia’s board size is significantly higher than Indonesia’s board size. This large board size can result in ineffective coordination and communication (Jensen, 1993; Bushman, Chen, Engel, & Smith, 2004). Candidates for directors in Malaysia are also often searched by executive directors, major shareholders or family owners (Annuar & Rashid, 2015). This process of nomination can result in the appointment of directors which might be underqualified. As a result, a poor quality decision can be made, thus giving no impact to EQ (Al-Musalli & Ismail, 2012). Previous studies also found no correlation between board independence with earnings quality (Swastika, 2013; Hashim & Devi, 2015; Buniamin, Johari, Rahman, & Rauf, 2012; Chaharsoughi & Rahman, 2013). Independent directors may not have much influence or qualification to be able to influence earnings quality in the company (Hashim & Devi, 2015). Aside from that, there might be the ineffectiveness of the “independence” itself, especially in a highly concentrated ownership company (Park & Shin, 2004; Ianniello, 2015). The same case is present in Malaysia where the ownership structure is concentrated (Organization for Economic Co-operation and Development, 2017). A previous study by Hashim & Devi (2015) also found no relationship between managerial ownership and earnings quality. The weight indicator of managerial ownership towards board of director variable in Malaysia is 0.152 which is considered small in GoF index. Also, managerial ownership may not have a significant impact due to the fact that Malaysia is a highly-concentrated ownership country (Organization for Economic Co-operation and Development, 2017) which shifts decision making power to other parties such
as family or institutional owners. Next, the result has shown that there is no significant impact of board gender diversity on earnings quality, in line with a previous study (Abdullah & Ismail, 2016). This is possibly due to the little influence female directors have over the decision that influences earnings quality. In Malaysia, the mean of female representation shows a value of 11.44% lower than the global average of female representation on board of director (Spencer Stuart, 2016) and Asia’s average (18% and 14%) (Spencer Stuart; Women Corporate Directors Foundation, 2016). Therefore, the absence of impact can be influenced by the low female representation on the board of director.

Both countries have a high power distance which means they are more submissive towards people in authority and less likely to challenge decisions (Hofstede, 2017). This can explain why the board of director have a negative or no impact on earnings quality as they become less critical to these kinds of decisions due to the culture of high power distance.

**Board of director has an impact on intellectual capital**

In Indonesia, the impact of board of director to intellectual capital (VAIC) in Indonesia has a path coefficient of 0.381 and p <0.001. Thus, H2 is accepted. When the board of director improves, the intellectual capital increases as well. Large board size can pool different expertise, knowledge and experiences (Taktak & Mbarki, 2014). They become more capable of making sure that intellectual capital is managed optimally. This is in line with previous studies that found that board size is positively correlated to intellectual capital, arguing a better sharing of skills and ideas among the board member which contributes positively to the overall performance as a whole, including its intellectual capital performance (Abidin, Kamal, & Jusoff, 2009). The positive significant relation between board independence and VAIC has also been found in previous studies (Appuhami & Bhuyan, 2015; Ho & Williams, 2003; Abidin, Kamal, & Jusoff, 2009). Independent director can give positive impact by providing the organization with expertise, contacts and prestige needed to make decisions about resources such as intellectual capital (Appuhami & Bhuyan, 2015; Haniffa & Cooke, 2002). The increased proportion of independent director can also minimize management’s exploitation of company’s resources and better manage and monitor CEO’s actions (Ho & Williams, 2003; Abidin, Kamal, & Jusoff, 2009). Managerial ownership has a positive impact on intellectual capital (Ho & Williams, 2003). The more management owns a stake in the company’s share, the more incentive they have to create more value through effective management of intellectual capital. Directors play an important role in providing critical inputs to the company, thus aligning their interest to ensure a maximized benefit for the company is crucial (Ho & Williams, 2003). A share of ownership can also motivate directors to focus on the long-term performance of the company through improving product quality and innovation by the use of effective research and development spending. The result indicates that a higher proportion of female in the board of director can improve IC in Indonesia. This is in line with the previous study (Meressa, 2016). Female directors can appeal and converse with a wider scope of stakeholders in order to increase competitive advantages and make an improved decision of intellectual capital performance in the future without neglecting sensitivity towards concerns of the community. Women are also argued to have more detailed thoughts in decision making analysis (Meressa, 2016).

In Malaysia, the impact of BOD to VAIC shows a coefficient of -0.067 and p-value of 0.083, significant at α=10%. Therefore, H2 is accepted. The relationship shows a negative value which means higher BOD results to a lower VAIC which is the opposite of what is observed in Indonesia. Smaller board size is more beneficial towards the improvement of intellectual
capital. This relation has also been previously found (Al-Musalli & Ismail, 2012). Knowledge and skills of members are difficult to be utilized effectively due to coordination problems in contributions. A study in Malaysia has argued that some board of directors have been selected because they are considered allies, thus indicating that qualification may not always be the reason for choosing board of directors (Mohammad, Wasiuzzaman, & Salleh, 2016). The larger board are less cohesive, less involved in strategic decision making, difficult to manage and more likely to develop coalitions which can increase the occurrence of conflict that hinders effective management of IC (Goodstein, Gautam, & Boeker, 1994). A higher proportion of independent director results to a lower value added by intellectual capital. The previous study by Al-Musalli & Ismail (2012) has also found this correlation. This can be influenced by a strong influence of family owners in terms of the appointment of independent directors where ownership structure in Malaysia is typically concentrated (Organization for Economic Co-operation and Development, 2017). As a result, independent directors may be appointed based on the consideration that they would be less likely to challenge decisions which do not develop IC resources (Al-Musalli & Ismail, 2012). Managerial ownership has a negative impact towards intellectual capital in Malaysia. A study by Saleh, et.al (2009) also found a negative correlation between managerial ownership and VAIC value. Experience, commitment and educational background could be more impactful towards IC performance compared to ownership of shares (Saleh, Rahman, & Hassan, 2009). It is also possible, that directors in Malaysia are more motivated by special allowances from their position compared to ownership of shares in the company (Saleh, Rahman, & Hassan, 2009). Intellectual capital is benefitted by a lower proportion of gender diversity on the board of director. The result of this study is also found in the previous study where it found that the supervisory board can act rather passively. As a result, they are unable to influence company performance towards improvement (Bohdanowicz, 2014). Diversity can restrict the group’s ability to make strategic decisions, (Goodstein, Gautam, & Boeker, 1994).

The difference prevailed between the two countries can be influenced by the long term orientation of Indonesia and short term orientation of Malaysia (Hofstede, 2017). Intellectual capital is a strategic asset (Iazzolino & Laise, 2013) which needs to be supported by decisions favouring long term result by the board of directors. Indonesia, that favours long term orientation, can favour decisions that develop IC more than Malaysia.

**Intellectual capital has a positive impact on earnings quality**

In Indonesia, the impact of intellectual capital to absolute discretionary accruals shows a path coefficient of -0.154 and p-value of 0.048. Therefore, H₃, that intellectual capital has a positive impact on earnings quality, is accepted. The same result has been found in the study by Darabi, Rad & Ghadiri (2012) and Mojtabedi (2013). The higher knowledge and experience of the workers, the better they are in managing accruals which can lead to a better earnings quality (Mojthedi, 2013). Also, structural capital can also give a positive impact on earnings quality. It can be improved through technology which contributes to higher structural capital efficiency. This technology can provide information readily and quickly thus management rely less on earning management technique. (Mojtabedi, 2013). Capital employed focuses more on physical capital or the sum of equity and the company’s debt (Darabi, Rad, & Ghadiri, 2012). This ratio determines how efficient managers are in making use of shareholder’s equity. Management has a responsibility to effectively manage this financial and physical capital which can add shareholder’s value in the long term which can increase the EQ (Keenan & Aggestam, 2001).
In Malaysia, the impact of VAIC and absolute discretionary accruals (ABSDA) shows a coefficient of 0.454 and \( p < 0.001 \). The relationship shows that higher VAIC leads to higher ABSDA, which is a lower earnings quality (EQ). This infers a negative impact of VAIC on earnings quality which means \( H_3 \) is rejected. This result has contradicted previous studies (Darabi, Rad, & Ghadiri, 2012; Mojtahedi, 2013). CFO, the human capital of a firm, can rely on earnings management to maintain a reputation in delivering stable earnings to the market. (Mojtahedi, 2013). Moreover, another study has found that board tenure is positively related to earnings management (Xie, Davidson, & DaDalt, 2003). Human capital efficiency is expected to increase as well with the increasing experience and duration of work (Vafeas, 2005). It can be inferred that the more knowledge the company has, the better they can be in practising accruals thus lowering earnings quality. Aside from that, the longer the director works in a company, the less critical they become towards the quality of financial reporting (Xie, Davidson, & DaDalt, 2003). In another perspective, the decrease of earnings quality can be influenced by the increasing shift from manufacturing to creation of intangible assets, a part of structural capital, which is more difficult to value (Dechow & Schrand, 2004). Malaysia, in terms of an intangible asset, significantly better than Indonesia (Cornell University; INSEAD, WIPO, 2016). Therefore, higher structural capital can result in lower earnings quality. Capital employed refers to the total physical capital that a company, as well as the financial capital, injected into a company (Darabi, Rad, & Ghadiri, 2012). On the other hand, earlier views of economic, such as Adam Smith, argues that a company’s main focus is to produce goods using funds and resources of the investors. The measurement of the company growth, then, is revenue and profit explaining the short term orientation of the investors (Keenan & Aggestam, 2001). This gives a motivation to meet revenue expectation where earning management is practised and as a result decreasing its earnings quality.

Indonesia’s national culture of long term orientation (Hofstede, 2017) can explain the tendency of focusing the use of intellectual capital on investment decisions which can increase value in the long run. Thus, management is less focused on managing earnings. Oppositely, Malaysia’s short term orientation (Hofstede, 2017) can explain why the intellectual capital is used to gain short term wins by managing earnings.

**Impact of firm characteristics to earnings quality and intellectual capital**

In Indonesia, firm size is negatively correlated to earnings quality, in line with previous studies (Chaharsoughi & Rahman, 2013; Al-Dhamari & Ismail, 2014). Larger companies are more politically sensitive, increasing motivation to reduce fluctuations through earnings management. As they are subject to public scrutiny, they have more incentive to conduct accrual practices which can lower earnings quality (Chaharsoughi & Rahman, 2013; Panzer & Müller, 2015). Also, higher leverage leads to lower earnings quality is found in Darabi, Rad & Ghadiri (2012) and Abdullah & Ismail (2016). Companies in financial distress are more likely to engage in earnings management practices which can lower earnings quality (Gavious, Segev, & Yosef, 2012). It can also become a motivation to window-dress performance that is not doing well.

In Malaysia, firm characteristics have a significant negative impact on absolute discretionary accruals. A number of previous studies have also found a strong positive correlation between firm size and earnings quality where they argued that larger firms tend to have stronger governance structure and lower information asymmetries (Gavious, Segev, & Yosef, 2012; Mojtahedi, 2013; Darabi, Rad, & Ghadiri, 2012). Yang, Lai & Tan (2008) argued that larger firms also receive more scrutiny from financial analysts as well as investors thus...
likely to engage in earnings management practices which can enhance the earnings quality. Higher leverage can indicate higher earnings quality (Darabi, Rad, & Ghadiri, 2012). Companies with high leverage may be pressured to keep earnings quality high in order to maintain investor’s confidence and accommodating creditor’s scrutiny (Saleem & Alzoubi, 2016).

In both Indonesia and Malaysia, the firm characteristic is positively correlated to IC. Due to the stronger governance structure and lower information asymmetries, quality of decision makings regarding intellectual capital can also be enhanced thus explaining the significant positive influence (Darabi, Rad, & Ghadiri, 2012; Gavious, Segev, & Yosef, 2012; Abidin, Kamal, & Jusoff, 2009; Bohdanowicz, 2014). Increased leverage indicates a higher debt composition which can be associated with higher investments towards intellectual capital, explaining its positive correlation. Lenders are seen to be supportive when it comes to investments in intellectual capital thus debt financing is used to invest in intellectual capital, increasing the value of firms’ VAIC (Appuhami & Bhuyan, 2015; Abidin, Kamal, & Jusoff, 2009).

CONCLUSION

The result of the research has shown that despite the similarities that Indonesia and Malaysia have, the two have differing result in terms of the impact of board of director towards intellectual capital and earnings quality. It has been evident that agency theories are not always applicable in both countries but board size plays an important role in the effective running of the board of director. Intellectual capital efficiency (ICE) is also prominent in creating value added through IC in both and has an impact towards earnings quality.

Therefore, it can be suggested that for firms in Indonesia, there seems to be a trade-off between the improvement of intellectual capital and earnings quality regarding its relation to the board of director indicators. Board size, independence, managerial ownership and diversity should be small enough to accommodate communication and decision making but large enough to pool needed expertise. On the other hand, firms in Malaysia can consider different aspects of corporate governance which can enhance earnings quality. It has also been evident that it is better that Malaysia keep a lower size of board of director in order to improve IC.

Future research can include additional indicators or variables of the board of director, as well as a combination with another corporate governance mechanism in order to improve the model’s explanatory power. This can include board tenure, ethnic diversity, qualification, or other types of share ownership. A composite index to measure corporate governance can also be considered. In addition, future research can expand the sector to a more knowledge-intensive sector such as the service industries. It is hoped that a better comparison can be drawn up based on the difference of business nature and impact towards IC.

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