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Article

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ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

Corporate governance on intellectual capital disclosure and market capitalization

Jacobus Widiatmoko^{1*}, Maria Goreti Kentris Indarti² and Imang Dapit Pamungkas³

Abstract: Intellectual capital (IC) has been widely recognized as an important resource in creating value and competitive advantage for companies. This study therefore examined the effect of corporate governance on intellectual capital disclosure and market capitalization through the use of the companies listed in the Indonesian Corporate Governance Forum (FCGI) during 2015–2018 as a case study. A path analysis was conducted and the results showed corporate governance practices have a positive influence on intellectual capital disclosure which has a consequent effect on market capitalization. This research was able to show the direct and indirect relationships of corporate governance and market capitalization through the use of intellectual capital disclosure as a mediating variable.

Subjects: Accounting; Corporate Governance & Business Ethics

Keywords: corporate governance; intellectual capital disclosure; market capitalization

Subjects: E44; G32; M14; M40.

1. Introduction

The current era of globalization in the field of new economics is a shift in the economy based on the knowledge economy, which is the competitiveness and sustainability of companies increasingly dependent on knowledge-based resources (Sudibyo & Basuki, 2017). The dramatic shift from material sources to knowledge, then, from hardware to software is actually experienced by

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PUBLIC INTEREST STATEMENT

This study contributes to the discourse on intellectual capital disclosure in several ways. It examined how it is affected by corporate governance and its subsequent effect on market capitalization through the use of companies listed in the Indonesian Corporate Governance Forum during 2015–2018. Moreover, the direct and indirect relationships of corporate governance and market capitalization through the use of intellectual capital disclosure as a mediating variable were reported. This research provides a methodological basis for comparison with future studies conducted using panel data analysis approach to investigate the determinants of intellectual capital disclosure, particularly in developing countries. However, previous studies have researched the relationship between intellectual capital disclosure and governance in developing countries such as Indonesia and compared with the results obtained from those conducted in Europe.

companies around the world. Their main economic resources are no longer natural resources or physical capital, but knowledge itself. The transition from a manufacturing based economy to a knowledge based economy makes continuous improvement of IC very important in the process of creating corporate value. By reporting the intellectual capital of a company's intangible assets is a substantial way to connect information gaps that may exist between owners and managers (Ulum et al., 2019). There have been many previous studies relating to IC and even they have taken similar variables, but the empirical results vary and some studies have conflicting results. This condition is likely to occur because until now there is still no regulation or IC information reporting standards in annual reports. In the case of Indonesia, the regulation on the components of Intellectual Capital is stated in The Indonesian Financial Accounting Standards (PSAK) 19. However, its scope is very limited only to intellectual property that can be included in traditional financial statements. The list of IC items that must be reported in the company's annual report is still not regulated.

Market capitalization in a company refers to the number of shares outstanding multiplied by the market price per share (Abdelkarim & Almumani, 2018). In general, the benchmark to measure the value of a company is market capitalization or more generally, wealth is created by a company that represents the collective value of a company or stock. Now, market capitalization has become a universally accepted indicator of business valuation (Abdelkarim & Almumani, 2018). It represents the aggregate value of the company or stock. Capital formation is an integral part of economic growth and development and plays an important role in economic theory of production and distribution (Abraham & Ofosu, 2018). Capital accumulation is assumed to facilitate faster economic growth. Stock market growth is measured by market capitalization.

Market capitalization is the value of a company traded on the stock market and this makes it one of the factors considered by investors in making investment decisions. There are, however, several variables influencing the high or low market capitalization and an example is the information published concerning the implementation of corporate governance. The basic framework to predict the reaction of the stock market to this information is explained through the use of signaling theory (Woudstra et al., 2017). Several existing studies have confirmed that stock market rewards companies with more comprehensive corporate governance with high values but there are limited studies on the reasons for this action (Pae & Choi, 2011).

The important role of corporate governance in determining market capitalization and firm value has encouraged researchers to examine the relationship between the three concepts. Several studies have found the positive influence of corporate governance on market capitalization (Ahmed Haji & Mubaraq, 2015) and firm value (Chen & Huang, 2009; Staubus, 2005). While, some others showed contrary results as observed in Abbasi et al. (2012). Moreover, stronger corporate governance was associated with higher corporate valuations (Core & Guay, 1999; Li et al., 2015; Pamungkas et al., 2018). It is, however, important to note that most of these studies were focused on specific aspects such as ownership or board structure while some parts of the literature combined individual corporate governance attributes with the index (Akben-Selcuk & Sener, 2019). These inconclusive results, therefore, provided room for further studies.

The results of most of these studies showed a better corporate governance increases the awareness of companies in expressing intellectual capital and this consequently means the disclosure becomes wider (Abeysekera, 2010; Ahmed Haji & Mubaraq, 2015; Akben-Selcuk & Sener, 2019; Taliyang & Jusop, 2011) but a contrasting finding was reported by Yan (2017). Meanwhile, mixed results were recorded by Appuhami and Bhuyan (2015); Baldini and Liberatore (2016) and this was suggested to be due to the variables used in measuring corporate governance since there were no universally agreed measures (Akben-Selcuk & Sener, 2019). Many researchers such as Appuhami and Bhuyan (2015), Baldini and Liberatore (2016), and Haji (2015) only used some proxies such as audit committees, commissioners, and ownership but they were observed to

be clearly weak because the practices of good governance practices cover several aspects. Moreover, some studies have found a positive relationship between intellectual capital disclosure, firm value, and market capitalization (Anam et al., 2011 ; Orens et al., 2009). However, Abeysekera (2011) found a significant positive effect of intellectual capital disclosure on market capitalization during the ceasefire period but no influence was observed during the period of civil war.

The phenomena and research gaps detected from previous research led to the development of an integrated theoretical model to overcome the controversy on the influence of corporate governance on market capitalization using intellectual capital disclosure as a mediating variable. This study made use of several approaches to fill the observed existing research gap. First, the intellectual capital disclosure was included as a mediating variable to the relationship between corporate governance and market capitalization. Second, the corporate governance index was implemented. Third, intellectual capital disclosure was measured using the international disclosure index constructed by Guthrie and Petty (2000) after the modification and development of the index proposed by (Bukh et al., 2001).

The provision of limited accounting standards regarding intellectual capital has led to the creation of different models to measure and report the concept and, for the purpose of this study, the disclosure was measured based on the international disclosure index constructed by IFAC (1998) and Guthrie and Petty (2000) developed from the one proposed by Sveiby (1997) and adjusted to the Decree of the head of the Capital Market and Financial Institution Supervisory Agency (Bapepam-LK) Number: Kep 431/BL/2012 concerning Submission of Annual Reports of Issuers or Public Companies in Indonesia.

2. Intellectual capital disclosure

Intellectual capital (IC) has been widely recognized as an important resource in creating value and providing a competitive advantage for companies (Mention & Bontis, 2013), and due to its dynamically changing nature, it is the main mechanism used in winning over competitors (Jordão, 2017). However, the empirical evidence of its contribution to company performance is scarce in certain sectors and geographical areas (Soukhakian & Khodakarami, 2019). This could be associated with the measurement problem related to construction which cannot be directly observed and identified even though it is the most theoretically interesting aspect. The concept of intellectual capital has been developed and applied in different scientific disciplines and is increasingly becoming an interdisciplinary field (Scafarto et al., 2016). Unfortunately, its importance in companies is not in line with the level of disclosure and this means information about intellectual capital is lacking (Morariu, 2013). The research conducted in Indonesia showed companies are not complying with the regulations involving disclosure (Ulum et al., 2019). This has, therefore, caused an increase in asymmetric information from companies and users of financial statements and has the possibility of leading to inappropriate decision making process for stakeholders.

Based on these arguments, it is necessary to investigate the factors influencing intellectual capital disclosure such as size, leverage, provocation ability, type of industry, and ownership structure (Ahmed Haji, 2015; Ferreira et al., 2012; Ibrani et al., 2019; Morariu, 2013). However, most of the previous research conducted focused on developed countries with only a few on developing ones (Abeysekera, 2011). Moreover, the scope of most of these studies covers only company characteristics including company size, profitability, leverage, type of industry, and age of the company (Whiting & Woodcock, 2011). However, in the present times, corporate governance has become prominent in determining intellectual capital disclosure (Yan, 2017).

Human resources is one of the main components of intellectual capital owned by the company (Pasban & Nojededh, 2016). So far, the evaluation of company performance uses more physical resources. In measuring company performance from a financial perspective it is very accurate but actually the basis for driving the value of finance is human resources with all the knowledge, ideas

and innovations they have. Intellectual capital is an intangible asset in the form of information and knowledge resources that function to improve competitiveness and can improve company performance (Pasban & Nojehdeh, 2016). This is different from human resources because intellectual capital is a factor that consists of human resources, social capital and organizational capital. There are diverse opinions concerning the definition of intellectual capital and this has led to the identification of the main three elements involved (Mention & Bontis, 2013; Morariu, 2013), and these include human, structural or organizational, and relational or customer capitals. Moreover, the disclosure of the intellectual capital in an annual report showed existing and potential investors the intangible assets owned by a company (Woudstra et al., 2017) and the prediction of the market reaction to the information disclosed can be explained by the signaling theory (Anam et al., 2011).

3. Empirical literature review and hypotheses development

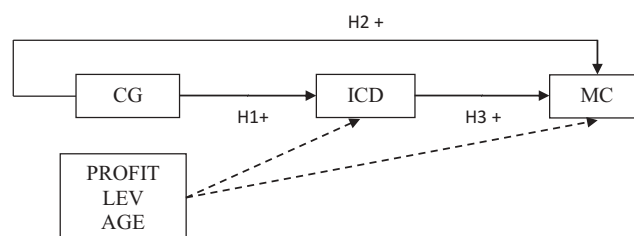
3.1. Previous studies

This research differs from previous studies in several aspects based on its contributions. First, most of the previous ones only examined the direct relationship between corporate governance and intellectual capital disclosure (Abeysekera, 2010; Ahmed Haji, 2015; Baldini & Liberatore, 2016; Ferreira et al., 2012) as well as firm value (Mubarak & Mousa Hamdan, 2016; Pae & Choi, 2011; Reiche et al., 2009). Some others focused on the relationship between intellectual capital disclosure and firm value (Abdolmohammadi, 2005; Abeysekera, 2011; Anam et al., 2011; Mondal & Ghosh, 2014; Nimtrakoon, 2014). Moreover, a partial test on the effect of corporate governance on intellectual capital disclosure has been reported to be beneficial to investors in assessing the economic conditions of a company. It is, however, less useful for the management due to its inability to show the internal effect of disclosure on the company. Meanwhile, examining the effect of intellectual capital disclosure on market capitalization is also of little use to investors because they do not know what motivations drive companies to express their intellectual capital. This study, therefore, investigated the effect of corporate governance on market capitalization, by conducting a direct and indirect test using the intellectual capital disclosure as the mediator to provide a comprehensive understanding of the relationship between the three concepts. Empirical models in this study are presented in Figure 1.

Secondly, corporate governance variables were measured partially in most of the previous studies and this involved the use of some independent commissioners, audit committees, and share ownership. This study used the Corporate Governance Perception Index (CGPI) which is the ranking system implemented by the Indonesia Institute for Corporate Governance (IICG) in collaboration with SWA magazine and it involves the assessment of 12 indicators including commitment, transparency, accountability, responsibility, independence, fairness, leadership, strategy, ethics, risk, organizational capability, and value creation. The CGPI assessment system is in four stages including self-assessment, documentation system, paper assessment, and observation and the results are grouped based on 3 norms, most trusted, trusted, and fairly trusted with the writing provided in alphabetical order.

Figure 1. Empirical model.

Information:
 MC: Market Capitalization
 ICD: Intellectual Capital Disclosure
 CG: Corporate Governance
 PROFIT: Profitability
 LEV: Leverage
 AGE: Age



3.2. Hypothesis development

One tool used to control agency costs is corporate governance due to its ability to establish a framework for efficiency and honesty, as well as company transparency and accountability. It assures suppliers of corporate financing a return of their investments (Rostoker, 1984). Moreover, companies with better corporate governance have been reported to have the better tendencies of disclosing more information (Riyadh et al., 2019) in order to minimize agency problems and information asymmetry (Osma & Guillamón-Saorín, 2011). According to the findings of the previous literature, corporate governance was assumed to be the main factor influencing intellectual capital disclosure. This is associated with its ability to function as a system to direct and controls a company with the aim of achieving a balance between the required power and authority.

The purpose of corporate governance is to ensure the continuity of the company and accountability to stakeholders (Akben-Selcuk & Sener, 2019). This relates to the rules of the authority of owners, directors, managers, shareholders, etc. Corporate governance is a framework of legal, institutional and cultural factors shaping the pattern of stakeholders' influence in managerial decision making (Appuhami & Bhuyan, 2015; Asogwa et al., 2019). According to the Agency Theory, there are differences in interests between owners or principals and management or agents. In an effort to align these differing interests, corporate governance is needed to control the activities of the company (Osma & Guillamón-Saorín, 2011). The findings of (Abeysekera, 2011; Ahmed Haji, 2015) also support this statement.

H1: Corporate Governance has a significant impact on Intellectual Capital Disclosure

Corporate governance ensures suppliers of corporate finance obtain returns for their investments (Rostoker, 1984) and the effective implementation of this concept has several positive effects such as reduction of business risks, an increase in share trading volume, and improvement of the value of the company's stock market capitalization. It also facilitates an efficient monitoring process that helps companies exploit their own resources wisely and prevent manipulation, distortion, and fraud causing information asymmetry. Moreover, its effectiveness is reflected in the value of implied share prices (Mubarak & Mousa Hamdan, 2016) and has also been reported to have the ability to improve the quality of corporate leadership and the offerings of a business organization in terms of products and services. In addition, it supports transparency and also increases the trust and credibility of financial statements (Mubarak & Mousa Hamdan, 2016).

Good corporate governance has the ability to influence market valuations of companies through the important role of financial analysts. This mean business organizations with quality corporate governance attracts a higher number of analysts, tend to disclose higher quality information, ensure direct monitor of their managers to align their interests with those of shareholders, and to reduce agency problems associated with the separation of ownership. They have also been reported to have a better future economic viability (Mouselli et al., 2012). Meanwhile, market capitalization is a business term that refers to the overall price of a company's stock or the total amount money to be paid in order to acquire the entire company (Bansal & Sharma, 2016; Idris & Bala, 2015). Haji (2015) found a strong and positive relationship between corporate governance and firm value, while Mubarak and Mousa Hamdan (2016) reported corporate governance measured by ownership structure and characteristics of the board of directors to have a positive relationship with market capitalization. These findings, therefore, led to the formulation of the following hypothesis.

H2: Corporate Governance has a significant impact on Market Capitalization

The theory of signaling frameworks explains the reaction of the market to the information provided by companies (Woudstra et al., 2017). It also showed high-quality companies demonstrate their superiority in the market through disclosure (Gerayli et al., 2011). Therefore, intellectual capital reporting is important for capital markets and external stakeholders in increasing their

understanding of the company's competitive position based on the argument that the activities related to this concept contribute significantly to the value of a business organization. Meanwhile, these values are disclosed to explain their effects on market capitalization (Anam et al., 2011). The research conducted by Orens et al. (2009) showed the positive effect of intellectual capital disclosure on firm value and several others including Abdolmohammadi (2005), Abeysekera (2011), Anam et al. (2011), Mondal and Ghosh (2014), and Ulum et al. (2019) have reported its influence on market capitalization. Therefore, the following hypothesis was developed.

H3: Intellectual Capital Disclosure has a significant impact on Market Capitalization

Good corporate governance practices affect firm value and market capitalization in two ways (Bansal & Sharma, 2016). First, it doubles share prices due to the anticipation of diversion of less cash flow and expectation of more profits in the form of interest or dividends by the investors (Jensen & Meckling, 1976). Second, it reduces the expected return on equity based on the decrease in the costs of monitoring and auditing shareholders which further leads to lower capital costs (Taufik et al., 2017).

Intellectual capital disclosure has a very important role in the company. According to Mubarak and Mousa Hamdan (2016), non-disclosure of some important information on intellectual capital has the ability to cause some losses for a company in the capital market. Some of these include sharing of information to only large investors without considering smaller shareholders, trading internally, greater intangible disclosure leading to increase in market liquidity and stock demand, investors misjudge of risk level of the company, increase in the cost of capital, reduction in the wrong valuation of the company's stock price, and increased market value (Anam et al., 2011). It is, therefore, necessary for companies to report more firm value in the intellectual capital disclosure and its effects on market capitalization (Anam et al., 2011). This is important to reduce information asymmetry and capital costs as well as to increase transparency, accountability, share prices (Brüggen et al., 2009a; Guthrie & Petty, 2000; Mention & Bontis, 2013; Williams, 2001), and trust and loyalty of employees and other stakeholders (Brüggen et al., 2009b). This, therefore, led to the formulation of the following hypothesis.

H4: Intellectual Capital Disclosure Mediates the Relationship between Corporate Governance on Market Capitalization

Signaling theory was developed to find a solution to the problem of information asymmetry in the market through the provision of more information (Morris, 1987). Even though the theory was originally developed in the context of the labor market, it is a general phenomenon applicable to all types of markets facing these challenges. Meanwhile, effective corporate governance also facilitates an efficient monitoring process helping companies exploit their own resources wisely and prevent manipulation, distortion, and fraud causing information asymmetry.

4. Research design

This research was conducted in 2020 using data The companies listed in the Indonesian Corporate Governance Forum (FCGI) in 2015–2018 were used as the study population while those that have published complete data in their annual report between the same period were selected as samples using the purposive sampling technique. Moreover, the Corporate Governance Index developed by the Indonesian Institute for Corporate Governance (IICG) in collaboration with SWA Magazine was also used in this study while Market Capitalization (MCap) was calculated by multiplying the share price by the total number of outstanding shares (Anam et al.,). The formula used was (closing price of shares at the end of March of year $t + 1$) \times (number of shares outstanding). Furthermore, the intellectual capital disclosure was measured using the 36 items developed in Table 1. by Ulum et al. (2019) based on the modification of those proposed by Guthrie and Petty (2000) and adjusted to the Indonesian regulations. It was calculated, mathematically, using the Total disclosure score/cumulative score (Ulum et al., 2019).

Profitability, leverage, and age of the company were used as the control variables based on the argument that the results of research conducted on these three variables are relatively well

Table 1. 36 items to measure intellectual capital disclosure

No.	Disclosure Items	Category	Scale	Cumulative Score
1.	Number of Employees (M)	Human Capital	0-2	2
2.	Educational level	Human Capital	0-2	4
3.	Employee Qualifications	Human Capital	0-2	6
4.	Employee Knowledge	Human Capital	0-1	7
5.	Employee Competency	Human Capital	0-1	8
6.	Education and Training (M)	Human Capital	0-2	10
7.	Related Training Type (M)	Human Capital	0-2	12
8.	Employee Turnover (M)	Human Capital	0-2	14
9.	Vision and Mission (M)	Structural Capital	0-2	16
10.	Code of Ethics (M)	Structural Capital	0-1	17
11.	Patent	Structural Capital	0-2	19
12.	Copyright	Structural Capital	0-2	21
13.	Trademarks	Structural Capital	0-2	23
14.	Management Philosophy	Structural Capital	0-1	24
15.	Organizational culture	Structural Capital	0-1	25
16.	Management Process	Structural Capital	0-1	26
17.	Information System	Structural Capital	0-2	28
18.	Network System	Structural Capital	0-2	30
19.	Corporate Governance (M)	Structural Capital	0-2	32
20.	Violation Reporting System (M)	Relational Capital	0-1	33
21.	Comprehensive Financial Performance Analysis (M)	Relational Capital	0-3	36
22.	Debt Paying Ability (M)	Relational Capital	0-3	39
23.	Capital Structure (M)	Relational Capital	0-3	42
24.	Brand	Relational Capital	0-1	43
25.	Customer	Relational Capital	0-2	45
26.	Customer loyalty	Relational Capital	0-1	46
27.	Company name	Relational Capital	0-1	47
28.	Distribution Network	Relational Capital	0-2	49
29.	Business Collaboration	Relational Capital	0-1	50
30.	License Agreement	Relational Capital	0-3	53
31.	Favorable contracts	Relational Capital	0-3	56
32.	Franchise Agreement	Relational Capital	0-2	58
33.	Award (M)	Relational Capital	0-2	60
34.	Certification (M)	Relational Capital	0-1	61
35.	Magnification Strategy (M)	Relational Capital	0-1	62
36.	Market Share (M)	Relational Capital	0-2	64

Source: Ulum et al. (2019)

established. Profitability was measured using ROA, which is the ratio between net income and total assets (Ferreira et al., 2012); (Mondal & Ghosh, 2014). Leverage is the ratio of total debt to total equity (Anam et al., 2011; Williams, 2001), while Company age is the difference between the year the research was conducted and the year the company was established. In addition, a multiple linear regression analysis technique with path analysis was applied in this study and equation used is as follows:

$$M\text{Cap} = \alpha + \beta_1 CG + \beta_2 ICD + \beta_3 ROA + \beta_4 LEV + \beta_5 AGE + e \quad (1)$$

$$ICD = \alpha + \beta_1 CG + \beta_2 ROA + \beta_3 LEV + \beta_4 AGE + e \quad (2)$$

Information:

Mcap: Market Capitalization

ICD: Intellectual Capital Disclosure

CG: Corporate governance

ROA: Return on Asset

LEV: Leverage

AGE: Age

e: error

5. Empirical result and discussion

The descriptive statistics of the variables in Table 2. showed market capitalization value (MCap) had a fairly high value of 27.9926654 while intellectual capital disclosure (ICD) had a relatively low value of 0.5558308. Moreover, corporate governance (CGPI) was recorded to be 82.2150 and this means the sampled companies have good governance while return on assets (ROA) was 0.0436702, indicating relatively low financial performance. The level of debt (LEV) was also discovered to be fairly high with 0.24546487 and most of the companies were fairly old as observed with the mean value of 43.26 years obtained for the AGE variable. However, the standard deviation shows a lower number for all the variables in comparison with the average and this means the results are normally distributed. Furthermore, two research models were used and the results are presented in Table 3.

The results of Model 1 show corporate governance variable has a beta coefficient of 0.208 at a significance level of 1% and this means it has a positive effect on market capitalization. Meanwhile, the intellectual capital disclosure variable (ICD) was recorded to have a beta coefficient of 44,091 at a significance level of 1% and this indicates it also positively influences market capitalization. Model 2 illustrates the effect of corporate governance on disclosure of intellectual capital and the results show the corporate governance measured by CGPI has a beta coefficient of 0.010 at a significance level of 1% and this means there is a positive relationship between the variables.

5.1. Corporate governance on market capitalization

Table 4. shows the Sobel test and the results indicate the direct and total effect of corporate governance (CG) on market capitalization (MCap) was 0.5144 and on intellectual capital disclosure (ICD) was 0.0090. Moreover, the direct and total effect of intellectual capital disclosure (ICD) on market capitalization (MCap) through the use of corporate governance (CG) as the controlling variable was found to be 30.9146 while corporate governance (CG) variables on market capitalization (MCap) using intellectual capital disclosure (ICD) as the mediator was 0.2364. In the indirect effect, corporate governance (CG) on market capitalization (MCap) through intellectual capital disclosure (ICD) was recorded to be 2.8659. Given the relatively small sample in this study, bootstrapping was performed 1000 times and the results remained significant. The VAF value of 0.5615 indicates the intellectual capital disclosure (ICD) acted as a partial mediation in the relationship between corporate governance (CG) and market capitalization (MCap). It is, however, important to note that all the values were at a significance level of 1%.

Table 2. Descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std.Deviation
ICD	62	0.3759	0.70492	0.5558308	0.08264627
CGPI	62	65.94	92.88	82.2150	7.14860
ROA	62	-0.34675	0.28972	0.0436702	0.09200948
LEVERAGE	62	0.21818	1.1850	0.6514771	0.24546487
AGE	62	3	117	43.26	23.323
MCap	62	18.05579	33.41371	27.9926654	4.71715702

Source: The Processed Secondary Data (2020)

Table 3. The Level of Sustainability Reporting Readiness

	Dependent Variable			
	Model 1 (MCap)	1	Model 2 (ICD)	
Description	Coefficient	Sig	Coefficient	Sig
CGPI	0.208	0.004***	0.010	0.000***
ICD	34.091	0.000***	-	-
ROA	3.543	0.469	-0.154	-0.106
LEVERAGE	5.577	0.040**	-0.018	0.638
AGE	-0.340	0.028**	0.000	0.753
ICD				
Adj. R-square	0.618 25.697 0.000***	0.727 35.647 0.000***		
CGPI	0.208	0.004***	0.010	0.000***
ICD	34.091	0.000***	-	-
ROA	3.543	0.469	-0.154	-0.106
LEVERAGE	5.577	0.040**	-0.018	0.638

Notes: *** significant at the level of 1%

**significant at the level of 5%

Source: The Processed Secondary Data (2020)

Model 1 show corporate governance has a positive effect on market capitalization. This means companies with the awareness to express their intellectual capital are respected by investors and this is further reflected in the increase in their share capitalization value. This finding is in line with the results of Mubarak and Mousa Hamdan (2016) and also complies with the submission that good governance has the ability to reduce business risk and increase stock trading and firm value. Moreover, Pamungkas et al. (2018) also attached several benefits to corporate and these include the smaller cost of implementation compared to benefits as well as the generation of higher cash flow for investors and lower capital costs for companies. Therefore, from a company perspective, this concept is an opportunity rather than an ordinary obligation and cost.

Good corporate governance practices affect firm value and market capitalization in two ways (Bansal & Sharma, 2016). First, it doubles share prices due to the anticipation of diversion of less cash flow and expectation of more profits in the form of interest or dividends by the investors (Jensen & Meckling, 1976). Second, it reduces the expected return on equity based on the decrease in the costs of monitoring and auditing shareholders which further leads to lower capital costs (Taufik et al., 2017).

5.2. Intellectual capital disclosure on market capitalization

This research has proven the positive influence of intellectual capital disclosure on market capitalization and also supports the provisions of the signaling theory. Therefore, the managerial

Table 4. Sobel test results

Model	Direct and Total Effect	Indirect Effect
CG → MCap	.5144***	0.3759
CG → ICD	.0090***	65.94
ICD → MCap by controlling CG variable	30.9146***	−0.34675
CG → MCap by controlling ICD variable	.2364***	0.21818
CG → MCap, through ICD variable		.2780***

Bootstrap results for indirect effect 2.8659***

Variance accounted (VAF) for by indirect effect: .5615

Notes: ***p < 0.01. Variance accounted (VAF): > 80% full mediation, 20% ≤ VAF ≤ 80% Partial Mediation, VAF < 20% No mediation.

Source: The Processed Secondary Data (2020)

implication is that it is possible for companies to increase the value of their stock market capitalization by comprehensively reporting their intellectual capital. The results of this study are the same as the results of the study (Abraham & Ofosu, 2018) which states the positive significant effect of intellectual capital disclosure on market capitalization. This is in line with the results of Abdolmohammadi (2005) that the intellectual capital disclosure in annual reports by companies in the United States has a positive influence on market capitalization. Similar results were also shown by Abeysekera (2010), Anam et al. (2011), and Orens et al. (2009). This empirical evidence is expected to help companies understand and consciously choose the level of disclosure needed to inform investors on the future income of intellectual capital resources and current equity market value in the annual report (Abeysekera, 2010). Another explanation is that there are large benefits in increasing the company's market value and this can be achieved through the adequate disclosure of information on intellectual capital, especially some hidden values not measured in BVALUE (Anam et al., 2011). This, therefore, means companies with better disclosure have the possibility of benefitting more economically (Orens et al., 2009). This study examines the effect of intellectual capital disclosure on market capitalization, however it does not test with experimental methods such as Sudibyo and Basuki (2017) research because the results of the study indicate that there are no significant differences in the practice of intellectual capital disclosure between companies in high and low profile industries.

Model 2 showed the positive effect of corporate governance on intellectual capital disclosure. It has been previously reported that corporate governance establishes a framework for efficiency, honesty, transparency, and accountability and these attributes aid the return of appropriate profits and dividends for the investments made by the suppliers of corporate finance (Drover et al., 2017). This finding agrees with the agency theory which states that voluntary disclosure through intellectual capital disclosure can be used to reduce information asymmetry between management and school principals. It is also in line with the results of previous research conducted by Abeysekera (2010); Haji (2015) that corporate governance positively influences intellectual capital disclosure. This, therefore, means companies with good practices of governance are more aware of the disclosure of intellectual capital and express comprehensive information about this concept to their stakeholders. Meanwhile, the three control variables tested have no influence on intellectual capital disclosure while only leverage and age affect market capitalization.

6. Summary and conclusion

The results showed corporate governance positively influences intellectual capital disclosure which also significantly affects market capitalization. The results of this study prove that the first hypothesis which states that corporate governance has a significant impact on intellectual capital disclosure is accepted. Furthermore, the second and third hypotheses namely corporate governance and intellectual capital disclosure have a significant impact on market capitalization are

accepted. Moreover, the direct and indirect relationship of corporate governance and market capitalization using intellectual capital disclosure as a mediating variable was also found to be positive. Thus the fourth hypothesis stating intellectual capital disclosure mediates the relationship between corporate governance on market capitalization is also accepted. This research was able to show the direct and indirect relationships of corporate governance and market capitalization through the use of intellectual capital disclosure as a mediating variable. This research can provide a methodological basis for comparison with future studies to be conducted using a panel data analysis approach in investigating the determinants of intellectual capital disclosure, particularly in developing countries.

This study contributes to the discourse on intellectual capital disclosure in several ways. It examined the effect of corporate governance on the concept and its subsequent effect on market capitalization. This was necessary because the few studies conducted on the relationship between ICD and corporate governance were focused on the developed countries. This study has several limitations and they include a small number of companies sampled because only a few met the criteria used which involve being listed in The Indonesian Corporate Governance Forum (FCGI) and must have published financial and annual reports within the study period. To overcome this limitation, researchers can develop a proxy for corporate governance.

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