

OWNERSHIP COMPOSITION AND DISCLOSURE OF INTELLECTUAL CAPITAL: INDONESIA AS A CASE STUDY

by Author Author

Submission date: 08-Apr-2021 10:44AM (UTC+0700)

Submission ID: 1553364020

File name: Manuscript_Rizky_FINAL.docx (53.53K)

Word count: 5200

Character count: 32406

OWNERSHIP COMPOSITION AND DISCLOSURE OF INTELLECTUAL CAPITAL: INDONESIA AS A CASE STUDY

Abstract

This research explores whether ownership structure (comprising ownership concentration, foreign, managerial, and institutional) affects intellectual capital disclosure (ICD) in Southeast Asia's largest stock market and the emerging economy of Indonesia. The samples are 323 publicly listed firms on Indonesia Stock Exchanges (IDX) from seven industries between 2008–2017, or 2,634 firm-year observations. Data were analyzed using the ordinary least squares (OLS) regression with robust standard errors. The results show that ICD is positively related to ownership concentration. A negative and substantial connection was discovered regarding both foreign and managerial, while institutional ownership variable produced a negative and insignificant impact. Overall, the results show robust findings with regards to impact of the ownership structure on ICD. This investigations' findings can be taken into consideration by capital market authorities such as the Indonesia Stock Exchanges (IDX) to create awareness of intellectual capital and improve ICD practices.

Keywords: Ownership Concentration, Managerial Ownership, Foreign Ownership, Institutional Ownership, Intellectual Capital Disclosure, Indonesia.

JEL Classification: E44, M13, O34

INTRODUCTION

The transition from physical capital to knowledge economy has resulted in significant changes in the nature, structure, and operations of companies. Most companies have started to focus on intangible assets or intellectual capital (IC) rather than tangible assets. IC is gradually replacing fixed assets as the most important matter for a company. IC is also considered important because competition does not only focus on tangible assets, but also on the company's innovation, its information systems, organizational management, and the company's human resources. Therefore, the ability and knowledge become one of the focuses of the company at this time though the focus of increasing the company's intellectual capital must also be related to increasing disclosure of intellectual capital (ICD).

Disclosure of information by the company provides a signal that describes the quality of the company toward the stakeholders. The information disclosed is in the form of mandatory disclosure and voluntary disclosure. Disclosure of information considers costs and benefits, which are relatively difficult to measure, especially the measurement of benefits. How extensive the information is disclosed needs attention so that the information presented is not too much which can cause noise and not too little that can mislead users. Hence, it is important to carefully manage the information that sufficient to influence stakeholders' judgments and decisions.

The objective of managing disclosure of information is not limited to what can be stated in a financial statement. Financial reporting also includes the provision of information that must be

revealed in accordance with policies or laws by authorities as well as information which management considers beneficial for external parties to be disclosed voluntarily. Hence, the company does not only focus on increasing intellectual capital, but also provides the required intellectual capital information. This is an important factor in the company as a strategy in achieving corporate goals as a supplementary communication.

In Indonesia, officials have regulated the disclosure of information such as Act 14 of 2008 on Public Information (KIP), Financial Services Authority Regulation No.60/POJK.04/2015 on the Transparency of Information of Particular Shareholders, Financial Authority Services Regulation Number 29 / POJK.04 / 2016 concerning Annual Report of Issuer or Public Company, and most recently the Financial Authority Services Regulation Number 43. /POJK.04/2020 covering obligations of information disclosure and corporate governance for public corporations or listed issuers falling into the issuer-class owning small or medium scale resources. However, many companies' increases in intellectual capital are not in line with the level of intellectual capital disclosure (ICD). This can lead to an increase of information asymmetry and stakeholders can become difficult in decision making.

1. LITERATURE REVIEW

The division of administration from ownership in a company causes clashing interest between shareholders and directors. Furthermore, this is supported by the agency theory reiterating a clash caused by division of control from ownership in contemporary corporations (Jensen and Meckling, 1976). Oliveira et al., (2006) posit there is a greater motivation in corporations with stronger ownership decentralization to reveal information freely and lessen expenses. Therefore, spread ownership influences the way news is disclosed (Eng and Mak, 2003). In fact, information disclosure is likely larger in companies owned broadly, therefore owners of capital can effectively monitor the management, and their economic interests can be optimized (Hidalgo et al., 2011). Craswell and Taylor (1992) showed that the higher agency cost for non-disclosure and the cost of ownership for disclosure are the two factors that determine the manager's disclosure decision. Mckinnon and Dalimunthe, (1993) stated that ownership diffusion as a factor the manager's disclosure decision in Australia.

Earlier investigations however discovered conflicting findings to show diffused ownership concentration caused little extent of disclosure. This is because the average shareholder has a low percentage of ownership. Due to low percentage of each shareholder, they cannot make decisions in the company (Barako et al., 2006). Ferreira et al., (2012) also stated that different interest in contracting parties caused high agency conflicts in companies with low ownership concentrations. This was because such companies have more directly involved shareholders and dominant actors have access to management information (Prencipe, 2004). García-Meca and Sánchez-Ballesta (2010) displayed the connection between deliberate disclosure and ownership concentration through meta-analysis. The findings indicate there is support for lesser disclosure among firms possessing strong degrees of concentrated ownership.

Focus on disclosure of intellectual capital, Martins et al., (2016) and Alfraih (2018) opined a straight association between ownership concentration and ICD. The findings further indicated a positive connection between the two themes and therefore signifies a reinforcement for managers

to boost intellectual capital disclosure. Oliveira et al., (2006), Li et al., (2008) and Tejedo-Romero, et al., (2017) however discovered a contradictory result while Hidalgo, et al., (2011) found there was no connection.

Agency theory explains that there is information asymmetry between principal and agent due to differences in interests. Therefore, high managerial ownership makes the management tend to disclose low of information, because the company does not have an intensive relationship with external parties. Jensen and Meckling (1976) stated that high share ownership by management over the company's capital could reduce agency problems. Meanwhile, managers who are company owners will be incentivized in disclosing information to increase the liquidity of shares and adhere to constraints insider trading regulations require. Therefore, where there is strong administrative ownership in the capital organization, disclosure is encouraged and agency expenses are capable of being lessened. Moreover, with a quantum for ownership share agency expenses are also lessened since shareholders' and directors' interests become unified (Jensen and Meckling, 1976). However, Fama and Jensen (1983) claimed there was a negative influence of large managerial ownership on capitalization of offered identity value by the managers and members in self-profit.

There was earlier research discovering managerial ownership negatively affected the level of voluntary disclosure (Eng and Mak, 2003; Barros et al., 2013). Nonetheless, Li and Qi (2008) found a positive and significant association between the two while Manegena and Pike (2005) found none. Also, Hidalgo et al., (2011) analyzed the disclosure of intellectual capital in Mexican corporations and reported a negative but significant connection between managerial ownership and ICD.

According to Brown et al. (2004), access to finance, market knowledge, improved technology and management skills amongst foreign owners significantly affect productivity. Furthermore, foreign investors pay attention to management evaluation appraisals and keep high standard of information disclosure (Boubakri et al. 2005). According to Naser et al. (2002), due to more regional and international market experience, foreign investors demand high disclosure standards. Haniffa and Coke (2002) discovered for Malaysian listed corporations, foreign financiers significantly and positively voluntary disclosure. Similarly, Barako, et al., (2006) focus on firm in the Nairobi Stock Exchange (NSE), found that foreign shareholding positively and significantly influenced voluntary disclosure. Al Akra et al. (2010) also found a positive relationship exists between foreign investors and voluntary disclosure in listed Jordanian companies. Similarly, Khan et al. (2013) focus on the extent of corporate social responsibility (CSR) disclosures in Bangladesh, found foreign ownership significantly influenced voluntary CSR disclosure. However, Cheng and Courtenay (2006) found no relationship in SGX Listed Companies. A study which is relevant to intellectual capital disclosure was conducted by Muttakin et al. (2015). The results indicated higher foreign ownership correlated with a larger quantum of ICD.

Jensen and Meckling (1976) posit institutional shareholders are crucial in reducing agency conflicts likely to arise between shareholders and managers. The presence of these shareholders in the company is considered capable of being effective supervisors in every strategic decision and action taken by company managers. Shleifer and Vishny (1986) confirmed the position and approved the experience of institutional investors and supervisory capability concerning corporate

management cost contributes to governance and ICD. Lakhal (2005) found institutional ownership positively and significantly impacts voluntary disclosure of France's firms. Barako et al., (2006) focus on Kenyan Companies, documented that voluntary disclosure has higher possibility with greater institutional ownership existing. Mangena and Pike (2005) stated that institutional ownership positively influences voluntary disclosure, while Hannifa and Cooke, (2012) found no relationship between the two variables. Focus on disclosure of intellectual capital, Hidalgo et al., (2011) established that institutional ownership negatively impacts influenced disclosure.

2. HYPOTHESES DEVELOPMENT

The research hypotheses were stemmed from a combination of the theoretical background of voluntary disclosure and experimental investigations. Diverse determining variables exist for intellectual capital disclosure, with a major element being ownership structure. The ICD theoretical outline indicates ownership composition affects whether intellectual capital is disclosed. In light of this discussion, we explored the relationship between ownership structures and ICD. Taken together, we propose the following hypotheses:

H1: *Ownership concentration influences intellectual capital disclosure positively.*

H2: *Managerial ownership influences intellectual capital disclosure negatively.*

H3: *Foreign ownership influences intellectual capital disclosure positively.*

H4: *Institutional ownership influences intellectual capital disclosure positively.*

3. METHODOLOGY

The samples consisted of publicly listed firms on Indonesia Stock Exchanges (IDX). Seven industries classifications were used as a guideline to classify firms into the following: Agriculture, Mining, Basic Industry and Chemicals, Miscellaneous, Consumer Goods Industry, Property, Real Estate and Building Construction, Trade Services, and Investment. For each of the sample firms, annual reports were used as the source of necessary data. This study spanned from 2008–2017 which allowed an investigation of ICD reporting trends in Indonesia. There were 422 companies listed on the stock exchanges (IDX) as at 31st December 2017, but only 323 met the criteria as demonstrated in Table 1.

Table 1: Sample Firm by Industry

Industry	N	Percent
Agriculture	15	4.6
Mining	33	10.2
Basic Industry & Chemicals	55	17.0
Miscellaneous Industry	34	10.5
Consumer Goods Industry	25	7.7

43	Property Real Estate & Building Construction	48	14.9
	Trade Services & Investment	113	35.0
	Total	323	100.0

Source: IDX, author's calculation.

The three variables comprise independent, dependent, and control. The dependent is ICD and is classified into three groups (see, Table 2), which include Internal Capital Category (ICC), External Capital Category (ECC) and Human Capital Category (HCC). The method of measuring the ICD was by using the disclosure index developed with a modified methodology by Muttakin et al (2015), Vergauven and Alem (2005).

14
Table 2: Intellectual capital disclosure checklist

Internal Capital Categories (ICC)	External Capital Categories (ECC)	Human Capital Categories (HCC)
Management philosophy	Customer satisfaction and loyalty	Know-how
Corporate culture	Quality standards	Vocational qualifications
Processes	Company image/reputation	Employee training
Systems	37 durable contract	Employee education
Networking	Business collaborations	Work related knowledge
Financial relations	Licensing agreements	Entrepreneurial spirit, innovativeness
	Franchising agreements	Union activity
	Distribution channels	6 employee thanked
	Market share	Employee involvement in the community
		Employee share and option scheme
		Employee benefits
		Profit sharing
		Health and safety
		Equity issues

Source: Muttakin et al (2015) and Vergauven & Alem (2005)

35
According to Cerbioni and Parbonetti (2007), Abeysekera, (2010) and Muttakin et al. (2015), ICD measurements use content analysis. The analysis was conducted using an unweighted dichotomous procedure. Following the content analysis process, the score is 1 when the annual report contains the item disclosure. Conversely, the score is 0 when the yearly report displays absence of any item disclosure. The disclosure score indicator is structured as follows:

$$ICD_j = \frac{\sum_{t=1}^{n_j} X_{t,j}}{m}$$

with n_j as the firm j 's overall precise disclosure score, and m as the maximum relevant disclosure items (32 items).

This research employs the ownership structure as the independent variable comprising foreign, managerial, concentration, and institutional. Furthermore, the control variables include 22 Firms Size, Leverage, Profitability, Age of Firm, and Board Meeting. Following, Brügger et al., (2009), Hidalgo, et al., (2011) 9 Martins et al., (2016), Tejedo-Romero, et al. (2017), Muttakin, et al. (2015) and Nadeem (2020), several control variables were used, such as SIZE, LEV, ROA, AGE and MEET. The bigger the company (SIZE), the more the tendency to disclose information. In addition, those with a higher leverage ratio (LEV) will disclose more information, especially about

intellectual capital because of the high level of financial risk. Moreover, there is higher possibility of corporations revealing more information when their financial statements show good performance (ROA). Those with an older age (AGE) disclose more information, and those that have a high frequency of meeting activity (MEET) like to share information with the public.

Regression analysis method is employed in this research to assess whether ownership structure variables affect ICD levels. The equation for regression is as follows:

$$ICD_{i,t} = \alpha_{i,t} + \beta_1 CON_{i,t} + \beta_2 MEN_{i,t} + \beta_3 FORG_{i,t} + \beta_4 INST_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 LEV_{i,t} + \beta_7 ROA_{i,t} + \beta_8 AGE_{i,t} + \beta_9 MEET_{i,t} + \varepsilon_{i,t}$$

Where ICD = Intellectual Capital Disclosure, CON = Ownership of shares possessed by one or more individuals 5%, MEN = Shares percentage the managers owned, FORG = Shares percentage foreign financiers owned, INST = Shares percentage institutional financiers owned, SIZE = The overall assets natural logarithm, LEV = Proportion of overall debt to overall equity, ROA = The proportion of net gains to overall asset, AGE = The company's age since the incorporation date, MEET = Overall amount of yearly board meetings..

Furthermore, the research employed ordinary least squares (OLS) . However, there were several assumptions in the regression analysis that needed to be Best Linear Unbiased Estimator (BLUE) in estimating with OLS. Therefore, to deal with Heteroscedasticity and autocorrelation issues, HAC (heteroscedasticity and autocorrelation) robust standard errors was used in the panel data (Wooldridge, 2009).

4. EMPIRICAL RESULTS AND DISCUSSION

The descriptive data on the variables employed in analyzing the whole sample is displayed in Table 3. Average ICD in the sample is 0.5196 and a standard deviation of 0.1641. These results show that the average ICD for the sample is more than half of the total actual disclosure of the total items (32 items). Overall, the average of the variables is greater ³⁶ in the standard deviation. Therefore, it can be a good representation except for the managerial, foreign, and institutional ownership as well as leverage variables.

In ¹⁰ the multivariate regression analysis, the degree of correlation between the explanatory variables is shown in Table 4. The correlation matrix was not found to be highly correlated with the explanatory variables, justifying that multicollinearity is not an issue. According to Kennedy (2008), multicollinearity is not a problem in a data when the correlation is above 0.70. In this case, there is no issue.

The relationship between ICD and explanatory variables was estimated using OLS with heteroscedasticity and autocorrelation (HAC) robust standard errors. To specify the range of correlation, control variables were included in a hypothesized study determining the impact of ownership structures. Seemingly, distributed ownership concentration positively influenced disclosure through management behavior monitoring as presented in Table 5. Generally, a company improved ICD by achieving high ownership concentration thereby supporting H1. This

is in line with Haniffa and Cooke (2002), Eng and Mak (2003), Martins et al., (2016) and Alfraih (2018) which stated that information disclosure directly influence ownership concentration.

High managerial ownership makes management tend to disclose low intellectual capital, because the company does not have an intensive relationship with external parties, and the majority shareholder of the company have obtained more information than those contained in the annual report. Therefore, this research outcome corroborate H2 and indicate a negative statistical effect of managerial ownership on ICD. This is in support of earlier research by Eng and Mak (2003), Barros et al., (2013) and Hidalgo et al., (2011), documenting negative and significant relationship between managerial ownership and ICD.

Table 3. Descriptive Statistics

Variables	Symbol	Definition and measure	Obs.	Mean	Std. Dev
Intellectual Capital Disclosure	IC	Intellectual Capital Disclosure Score/Indices	2634	0.5196	0.1641
Ownership Concentration	CON	Ownership of shares possessed by one or more individuals 5%	2634	51.8967	21.0388
Managerial Ownership	MEN	Shares percentage the managers owned	2634	2.9701	10.4632
Foreign Ownership	FORG	Shares percentage foreign financiers owned	2634	19.3571	28.7394
Institutional Ownership	INST	Shares percentage institutional financiers owned	2634	9.5009	20.7802
Firms Size	SIZE	The overall assets natural logarithm	2634	23.2408	5.0853
Leverage	LEV	The proportion of overall debt to overall equity	2634	1.6614	6.0520
Profitability	ROA	The portion of net gains to overall asset	2634	0.4118	1.8849
Age of Firm	AGE	The age of firm from the date of its establishment	2634	31.6894	17.5349
Board Meeting	MEET	Total number of board meetings held per year	2634	6.9605	6.3774

Table 4. Correlation Matrix

Variables	CON	MEN	FORG	INST	SIZE	LEV	ROA	AGE	MEET
CON	1.0000								
MEN	-0.0844	1.0000							
FORG	0.0028	-0.0154	1.0000						
INST	-0.0796	-0.0217	0.0531	1.0000					
SIZE	-0.1318	-0.0039	-0.0999	0.0822	1.0000				
LEV	-0.0688	-0.0145	0.0156	-0.0085	0.0199	1.0000			
ROA	-0.0468	0.0818	-0.0187	0.0353	-0.0751	-0.0167	1.0000		
AGE	0.1345	0.0488	0.1375	-0.0664	-0.1029	-0.0115	-0.0082	1.0000	
MEET	0.0400	0.0283	-0.1194	0.0433	0.1007	-0.0165	-0.0189	0.1311	1.0000

This research analyzed whether foreign ownership (FORG) affected the ICD level and discovered a negatively substantial effect, meaning a large ratio caused lower ICD levels. Therefore, H3 is not supported. These findings conflict with Haniffa and Coke (2002), Barako, et al., (2006), Muttakin et al. (2015), Khan et al. (2013) and Al Akra et al. (2010), observation of foreign ownership positively and substantially influenced revealing of information.. This outcome indicates foreign financiers analyze public data better than local financiers in developing economies and are likely entangled in speculative trading.

Table 5. Impact of Ownership Structure on Intellectual Capital Disclosure

Explanatory Variable	Dependent Variable: ICD					
	(1)	(2)	(3)	(4)	(5)	(6)
CON	0.00098*** (0.00015)				0.00096*** (0.00015)	0.00087*** (0.00015)
MEN		-0.00077** (0.00032)			-0.00065** (0.00032)	-0.00064** (0.00031)
FORG			-0.00029** (0.00011)		-0.00031*** (0.00011)	-0.00030** (0.00010)
INST				-0.00006 (0.00016)	0.00001 (0.00016)	-1.36e-06 (0.00016)
SIZE						-0.00010 (0.00064)
LEV						0.00044 (0.00041)
ROA						-0.00095 (0.00016)
AGE						0.00060*** (0.00016)
MEET						0.00224*** (0.00051)
Constant	0.45962*** (0.04783)	0.51155*** (0.01837)	0.51609*** (0.01842)	0.51093*** (0.01828)	0.46797*** (0.01930)	0.44097*** (0.02560)
Industry Dummy	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes
R Squared (within)	0.0803	0.0671	0.0671	0.0648	0.0844	0.0975
F-Statistic	13.30	11.53	11.34	11.28	11.78	11.65
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observation	2634	2634	2634	2634	2634	2634

Notes: *Levels of significance at 10%, **Levels of significance at 5%, and ***Levels of significance at 1%. ICD = Intellectual Capital Disclosure, CON = Ownership of shares possessed by one or more individuals 5%, MEN = Shares percentage the managers owned, FORG = Shares percentage the foreign financiers owned, INST = Shares percentage the institutional financiers owned, SIZE = The overall assets natural logarithm, LEV = The proportion of overall debt to overall equity, ROA = The proportion of net gains to overall asset, AGE = The company's age since the incorporation date, MEET = Overall amount of yearly board meetings.

Regarding institutional ownership (INST), the association institutional ownership had with ICD level was analyzed. The findings from earlier investigations conflict between either a positive or negative, and not statistically significant relationship. This study found no statistically significant institutional ownership (INST). The implication is the level of sample corporations ICD is not impacted by INST, and therefore, H4 is unsupported. These findings are corroborated by Hannifa and Cooke (2002) report which discovered absence of connection between institutional ownership and voluntary disclosure. A possible reason for such finding could be due to the low average institutional ownership in companies, which results in weak investors in encouraging increased voluntary disclosure. Turning to the control variables, Age of Firm (AGE) and Board Meeting (MEET) are discovered to influence the level of ICD positively and significantly. This confirms expectations, and supports the report of earlier investigations by Barros et al., (2013) and Muttakin, et al. (2015).

This section tested the strength of the central findings using two methods. First following Nadeem (2020), we separated our sample into two groups, high ICD and low ICD firm to check robustness of the main results. The findings from this analysis also suggested that the relationship between the ownerships structure and the ICD is consistent with the main results, especially in high ICD firms as presented in Table 6. Secondly, according to Muttakin et al. (2015), this study also employed the extent of ICD for the following different categories of intellectual capital: Internal

Capital Categories (ICC), External Capital Categories (ECC) and Human Capital Categories (HCC). Table 7 shows the estimated results by employing different categories of intellectual capital. As expected, the results of these robustness tests further validated the main findings to confirm ownership structure significantly impacts ICD.

Table 6. Impact of Ownership Structure on Intellectual Capital Disclosure; High vs Low

Explanatory Variable	Sub-Samples	
	High (1)	Low (2)
CON	0.00052*** (0.00019)	0.00013 (0.00014)
MEN	-0.00106*** (0.00037)	-0.00022 (0.00036)
FORG	-0.00003* (0.00013)	0.00017 (0.00011)
INST	-0.00001 (0.00018)	-0.00034** (0.00015)
SIZE	-0.00154** (0.00068)	-0.00039 (0.00068)
LEV	0.00361*** (0.00083)	-0.00017 (0.00033)
ROA	0.00579 (0.00467)	0.00217** (0.00088)
AGE	-0.00020 (0.00016)	0.00025 (0.00022)
MEET	0.00208*** (0.00060)	0.00103** (0.00040)
Constant	0.56416*** (0.02941)	0.32258*** (0.02480)
Industry Dummy	Yes	Yes
Year Dummy	Yes	Yes
R Squared	0.1647	0.1185
F-Statistic	9.60	7.10
Prob > F	0.0000	0.0000
Observations	1306	1328

Notes: *Levels of significance at 10%, **Levels of significance at 5%, and ***Levels of significance at 1%. ICD = Intellectual Capital Disclosure, CON = Share ownership held by one person or more 5%, MEN = Percentage of shares owned by the management, FORG = Percentage of shares owned by the foreign investors, INST = Percentage of shares owned by institutional investors, SIZE = The natural logarithm of total assets, LEV = The ratio of debt to total equity, ROA = The ratio of net profit to total asset, AGE = The age of firm from the date of establishment, MEET = Total number of board meetings held per year.

Table 7. Impact of Ownership Structure on Different Categories of Intellectual Capital Disclosure

Explanatory Variable	ICC	ECC	HCC
	(1)	(2)	(3)
CON	0.00120*** (0.0002)	0.00093*** (0.00020)	0.00069*** (0.00018)
MEN	0.00015*** (0.00054)	0.00047 (0.00034)	-0.00094** (0.00045)
FORG	-0.00024 (0.00016)	-0.00036** (0.00016)	-0.00025* (0.00013)
INST	-0.00068*** (0.00021)	0.00012 (0.00024)	0.00025 (0.00019)
SIZE	0.00186**	-0.00025	-0.00081

	(0.00088)	(0.00084)	(0.00078)
LEV	0.00092** (0.00043)	-0.00033 (0.00054)	0.00026 (0.00050)
ROA	0.00119 (0.00159)	-0.00136 (0.00142)	0.00169 (0.00157)
AGE	0.00039* (0.00022)	0.00084*** (0.00023)	0.00049** (0.00020)
MEET	0.00009 (0.00073)	0.00340*** (0.00060)	0.00245*** (0.00065)
Constant	0.61607*** (0.2338)	0.29086*** (0.03322)	0.47151*** (0.03178)
Industry Dummy	Yes	Yes	Yes
Year Dummy	Yes	Yes	Yes
R Squared	0.0869	0.0599	0.0781
F-Statistic	9.34	7.10	9.29
Prob > F	0.0000	0.0000	0.0000
Observation	2634	2634	434

Notes: *Levels of significance at 10%, **Levels of significance at 5%, and ***Levels of significance at 1%. ICC= Internal Capital Categories, ECC = Internal Capital Categories, HCC = Human Capital Categories, CON = Share ownership held by one person or more 5%, MEN = Percentage of shares owned by the manager, FORG = Percentage of shares owned by the foreign investors, INST = Percentage of shares owned by institutional investors, SIZE = The natural logarithm of total assets, LEV = The ratio of debt to total equity, ROA = The ratio of net profit to total asset, AGE = The age of firm from the date of establishment, MEET = Total number of board meetings held per year.

5. CONCLUSION AND RECOMMENDATIONS

Research involving voluntary information disclosure is comparatively novel, with diverse explanations as to why companies disclose information voluntarily, including intellectual capital disclosure (ICD). This study determines the influence of concentration, managerial, foreign, and institutional ownership on ICD. To determine the relationship, 323 public firms listed on Indonesia stock exchanges (IDX) were analyzed. The results showed that ownership concentration positively influenced ICD. Furthermore, managerial, and foreign ownership impacted ICD negatively. Finally, institutional ownership (INST) did not influence the extent of sample companies ICD. Additionally, the results passed a series of robustness checks, including alternative measures of ICD with different categories and alternative sub samples.

The general discovery in this research offer empirical proof to affirm ownerships structure are significant elements of intellectual capital disclosure (ICD) in Indonesia as developing countries. These findings can be taken into consideration by capital market authorities such as the Indonesia Stock Exchanges (IDX) to help create awareness of intellectual capital and improve ICD practices by considering ownership regulations. Moreover, the research discovered foreign ownership positively and substantially influenced ICD. The foreign ownership variable needs to be specified, such as foreign institutional ownership or individual foreign ownership, may be included in future studies. Therefore, having data available in such area could lead to stronger claims on the causality between foreign ownership and ICD.

AUTHOR CONTRIBUTIONS

Conceptualization: Yana Ulfah
Data curation: Rizky Yudaruddin, Yanzil Azizil Yudaruddin
Formal analysis: Yana Ulfah, Rizky Yudaruddin
Funding acquisition: Yana Ulfah
Investigation: Yana Ulfah
Methodology: Yana Ulfah, Rizky Yudaruddin, Yanzil Azizil Yudaruddin
Project administration: Yana Ulfah
Resources: Rizky Yudaruddin, Yanzil Azizil Yudaruddin
Software: Rizky Yudaruddin, Yanzil Azizil Yudaruddin
Supervision: Yana Ulfah
Validation: Yana Ulfah
Visualization: Rizky Yudaruddin, Yanzil Azizil Yudaruddin
Writing – original draft: Yana Ulfah, Rizky Yudaruddin, Yanzil Azizil Yudaruddin
Writing – review & editing: Yana Ulfah

ACKNOWLEDGMENT

The researchers are grateful for the valuable responses from two unnamed reviewers and discussion respondents at Mulawarman University. We also thank the Indonesia Stock Exchanges (IDX) and The Indonesia Capital Market Institute for providing the annual report.

REFERENCES

1. Abeysekera, I. (2010). The Influence of Board Size on Intellectual Capital Disclosure by Kenyan Listed Firms. *Journal of Intellectual Capital*, 11(4), 504–518. doi:10.1108/14691931011085650
2. Al-Akra, M., I. A. Eddie & M. J. Ali. (2010). The Influence of The Introduction of Accounting Disclosure Regulation on Mandatory disclosure Compliance: Evidence from Jordan. *The British Accounting Review*, 42(3), 170–186. doi:10.1016/j.bar.2010.04.001
3. Alfraih, M.M. (2018). The role of corporate governance in intellectual capital disclosure. *International Journal of Ethics and Systems*, 34(1),101-121. doi:10.1108/IJOES-02-2017-0026
4. Barako, D. G., Hancock, P., & Izan, H. Y. (2006). Factors Influencing Voluntary Corporate Disclosure By Kenyan Companies. *Corporate Governance An International Review*, 14(2), 107–125. doi:10.1111/j.1467-8683.2006.00491.x
5. Barros, Carlos P. Boubaker, Sabri. & Hamrouni. (2013). Corporate Governance and Voluntary Disclosure in France. *The Journal of Applied Business Research*, 29(2), 561–77. doi:10.19030/jabr.v29i2.7657
6. Boubakri, N., Cosset, J.C. & Guedhami, O. (2005). Liberalization, corporate governance and the performance of privatized firms in developing countries. *Journal of Corporate Finance*, 11(5), 767-790. doi:10.1016/j.jcorpfin.2004.05.001
7. Brown, J. David., Earle, John S. & Telegdy, Almos, (2004). Does Privatization Raise Productivity? Evidence from Comprehensive Panel Data on Manufacturing Firms in Hungary, Romania, Russia, and Ukraine (November 2004). *W.E. Upjohn Institute Staff Working Paper No. 04-107*. <http://dx.doi.org/10.2139/ssrn.634081>
8. Brügggen, A., Vergauwen, P., & Dao, M. (2009). Determinants of Intellectual Capital Disclosure: Evidence From Australia. *Management Decision*, 47, (2), 233–245. doi:10.1108/00251740910938894
9. Cerbioni, F., & Parbonetti, A. (2007). Exploring the Effects of Corporate Governance on Intellectual

- Capital Disclosure: An Analysis of European Biotechnology Companies. *European Accounting Review*, 16(4), 791–826. doi:10.1080/09638180701707011
10. Cheng, E. C. M., & Courtenay, S. M. (2006). Board Composition, Regulatory Regime and Voluntary Disclosure. *The International Journal of Accounting*, 41(3), 262–289. doi:10.1016/J.Intacc.2006.07.001
 11. Craswell, A., & Taylor, S. (1992). Discretionary Disclosure of Reserves by Oil and Gas Companies: An Economic Analysis. *Journal of Business Finance and Accounting*, 19(2), 295–308. doi:10.1111/j.1468-5957.1992.tb00626.x
 12. Eng, L. L., & Mak, Y. T. (2003). Corporate Governance and Voluntary Disclosure. *Journal of Accounting and Public Policy*, 22, (4), 325–45. doi:10.1016/S0278-4254(03)00037-1
 13. Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *The Journal of Law and Economics*, 26, (2), 301–325.
 14. Ferreira, A. L., Branco, M. C., & Moreira, J. A. (2012). Factors Influencing Intellectual Capital Disclosure by Portuguese Companies. *International Journal of Accounting and Financial Reporting*, 2, (2), 278
 15. García-Meca, E., & Sánchez-Ballesta, J. P. (2010). The Association of Board Independence and Ownership Concentration with Voluntary Disclosure: A Meta-Analysis. *European Accounting Review*, 19(32), 603–627. doi:10.1080/09638180.2010.496979
 16. Haniffa, R. M., & Cooke, T. E. (2002). Culture, Corporate Governance and Disclosure in Malaysian Corporations, *ABACUS*, 38(3), 317–349. doi:10.1111/1467-6281.00112
 17. Hidalgo, R. L., Garcia-Meca, E., & Martinez, I. (2011). Corporate Governance and Intellectual Capital Disclosure. *Journal of Business Ethics*, 100(3), 483–495. doi:10.1007/S10551-010-0692-x
 18. Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360. doi:10.1016/0304-405X(76)90026-X
 19. Kennedy P (2008). *A Guide to Econometrics*. Malden, Massachusetts: Blackwell Publishing.
 20. Khan, A., Muttakin, M.B. & Siddiqui, J. (2013) Corporate Governance and Corporate Social Responsibility Disclosures: Evidence from an Emerging Economy. *Journal of Business Ethics*, 114, 207-223. doi:10.1007/s10551-012-1336-0
 21. Lakhali, F. (2005). Voluntary Earnings Disclosures and Corporate Governance: Evidence from France. *Review of Accounting and Finance*, 4(3), 64-85. doi:10.1108/eb043431
 22. Li, Hongxia. & Qi, Ainian. (2008). Impact of Corporate Governance on Voluntary Disclosure in Chinese Listed Companies. *Corporate Ownership and Control*, 5(2), 360-366. doi:10.22495/cocv5i2c3p5
 23. Li, J., Pike, R., & Haniffa, R. (2008). Intellectual Capital Disclosure and Corporate Governance Structure in UK Firms. *Accounting and Business Research*, 38(2), 37–41. doi:10.1080/00014788.2008.9663326
 24. Mangena, M. & R. Pike. (2005). The Effect of Audit Committee Shareholding, Financial Expertise and Size on Interim Financial Disclosures. *Accounting and Business Research* 35(4), 327–349. doi:10.1080/00014788.2005.9729998
 25. Martins, M. M., Morais, A. I., Isidro, H., & Laureano, R. (2016). Intellectual Capital Disclosure: The Portuguese Case. *Journal of The Knowledge Economy*, 9(41), 1224–1245. doi:10.1007/S13132-016-0412-6
 26. Mckinnon, J. L., & Dalimunthe, L. (1993). Voluntary Disclosure of Segment Information by Australian Divesified Companies. *Accounting and Finance*, 33(1), 33–50. doi:10.1111/j.1467-629X.1993.tb00192.x
 27. Muttakin, M. B., Khan, A., & Belal, A. R. (2015). Intellectual Capital Disclosures and Corporate Governance: An Empirical Examination. *Advances in Accounting*, 31(2), 219–227. doi:10.1016/j.adia.2015.09.002
 28. Nadeem, Muhammad (2020). Does board gender diversity influence voluntary disclosure of intellectual capital in initial public offering prospectuses? Evidence from China. *Corporate Governance: An International Review*, 28(2), 100-118. doi:10.1111/corg.12304

29. Naser, K., Al-Khatib, K. & Karbhari, Y. (2002). Empirical evidence on the depth of corporate information disclosure in developing countries. *International Journal of Commerce and Management*, 12(3/4): 122-155. doi:10.1108/eb047456
30. Oliveira, L., Lima Rodrigues, L., & Craig, R. (2006). Firm-specific Determinants of Intangibles Reporting: Evidence from the Portuguese Stock Market. *Journal of Human Resource Costing and Accounting*, 10(1), 11–33. doi:10.1108/14013380610672657
31. Prencipe, A. (2004). Proprietary Costs and Determinants of Voluntary Segment Disclosure: Evidence from Italian Listed Companies. *European Accounting Review*, 13(2), 319–340. doi:10.1080/0963818042000204742
32. Shleifer, A. & R. Vishny. (1986). Large Shareholders and Corporate Control. *Journal of Political Economy*, 94(3), 458–461. doi:10.2307/1833044
33. Tejedo-Romero, F., Rodrigues, L. L., & Craig, R. (2017). Women directors and disclosure of intellectual capital information. *European Research on Management and Business Economics*, 23(3), 9, 123-131. doi:10.1016/j.iemeen.2017.06.003
34. Vergauwen, P. G. M. C., & Van Alem, F. J. C. (2005). Annual Report IC Disclosures in The Netherlands, France And Germany. *Journal of Intellectual Capital*, 6(1), 89–104. doi:10.1108/14691930510574681
35. Wooldridge, J.M. (2009). *Introductory Econometrics: A Modern Approach. 5th Edition*, South-Western Cengage Learning, Mason.

OWNERSHIP COMPOSITION AND DISCLOSURE OF INTELLECTUAL CAPITAL: INDONESIA AS A CASE STUDY

ORIGINALITY REPORT



PRIMARY SOURCES

1	Sustainability Accounting, Management and Policy Journal, Volume 6, Issue 2 (2015) Publication	1%
2	Mohammad Badrul Muttakin, Arifur Khan, Aatur Rahman Belal. "Intellectual capital disclosures and corporate governance: An empirical examination", Advances in Accounting, 2015 Publication	1%
3	pdfs.semanticscholar.org Internet Source	1%
4	www.emeraldinsight.com Internet Source	1%
5	uwe-repository.worktribe.com Internet Source	1%
6	publications.aston.ac.uk Internet Source	1%
7	Mondher Kouki, Mariem Bouchareb, Abderrazek El Khaldi. "Internal corporate governance	1%

mechanisms and intellectual capital disclosure:
evidence from Tunisia", International Journal of
Entrepreneurship and Small Business, 2020

Publication

8	clok.uclan.ac.uk Internet Source	1%
9	etheses.dur.ac.uk Internet Source	<1%
10	journals.sagepub.com Internet Source	<1%
11	islamicmarkets.com Internet Source	<1%
12	Ruth L. Hidalgo, Emma García-Meca, Isabel Martínez. "Corporate Governance and Intellectual Capital Disclosure", Journal of Business Ethics, 2010 Publication	<1%
13	Submitted to Universitas Diponegoro Student Paper	<1%
14	Mishari M. Alfraih. "Intellectual capital reporting and its relation to market and financial performance", International Journal of Ethics and Systems, 2018 Publication	<1%
15	staff.uny.ac.id Internet Source	<1%

16 www.tandfonline.com <1 %
Internet Source

17 scholarworks.uaeu.ac.ae <1 %
Internet Source

18 repo.unand.ac.id <1 %
Internet Source

19 eprints.bbk.ac.uk <1 %
Internet Source

20 Mohd Shukor Harun, Khaled Hussainey, Khairul Ayuni Mohd Kharuddin, Omar Al Farooque. "CSR Disclosure, Corporate Governance and Firm Value: a study on GCC Islamic Banks", International Journal of Accounting & Information Management, 2020
Publication <1 %

21 Submitted to University of Glasgow <1 %
Student Paper

22 eprints.uwe.ac.uk <1 %
Internet Source

23 open.library.ubc.ca <1 %
Internet Source

24 Submitted to University of Wales, Bangor <1 %
Student Paper

25 espace.library.curtin.edu.au

Internet Source

<1%

26

www.diva-portal.org

Internet Source

<1%

27

www.tifafinance.co.id

Internet Source

<1%

28

"Developments in Chinese Entrepreneurship",
Springer Science and Business Media LLC,
2015

Publication

<1%

29

Gbenga Ekundayo, Ndubuisi Jeffery Jamani,
Festus Odhigu. "Environmental Disclosure
Modelling in a Developing Economy: Does
Corporate Governance Matter? A Double Hurdle
Regression Approach", International Journal of
Financial Research, 2021

Publication

<1%

30

Giuseppe Nicolò, Natalia Aversano, Giuseppe
Sannino, Paolo Tartaglia Polcini. "ICD corporate
communication and its determinants: evidence
from Italian listed companies' websites",
Meditari Accountancy Research, 2020

Publication

<1%

31

Journal of Intellectual Capital, Volume 13, Issue
3 (2012-07-21)

Publication

<1%

32

centaur.reading.ac.uk

Internet Source

<1%

33

eprints.hud.ac.uk

Internet Source

<1%

34

www.virtusinterpress.org

Internet Source

<1%

35

Asian Review of Accounting, Volume 21, Issue 1 (2013-05-27)

Publication

<1%

36

Mine Aksoy, Mustafa K. Yilmaz, Ekrem Tatoglu, Merve Basar. "Antecedents of corporate sustainability performance in Turkey: The effects of ownership structure and board attributes on non-financial companies", Journal of Cleaner Production, 2020

Publication

<1%

37

Mkumbuzi, Walter P.. "Influence of Intellectual Capital Investment, Risk, Industry Membership and Corporate Governance Mechanisms on the Voluntary Disclosure of Intellectual Capital by UK Listed Companies", Asian Social Science, 2015.

Publication

<1%

38

digibug.ugr.es

Internet Source

<1%

39

etheses.whiterose.ac.uk

Internet Source

<1%

40

ideas.repec.org

Internet Source

<1%

41

link.springer.com

Internet Source

<1%

42

researcharchive.vuw.ac.nz

Internet Source

<1%

43

www.idnfinancials.com

Internet Source

<1%

44

Nguyen Thuy Anh, Hue Ly Tran. "The determinants of corporate social responsibility disclosure: evidence from Vietnam's listed companies in chemical industry", Journal of International Economics and Management, 2020

Publication

<1%

45

Ping-Chang Lee, Hsin-Hong Kang. "The Role of Management Ownership in Bank Governance: Evidence from Taiwan", Accounting and Finance Research, 2017

Publication

<1%

46

eprints.mdx.ac.uk

Internet Source

<1%

47

steconomiceuoradea.ro

<1%

48

Inès Kateb. "The Determinants of Intellectual Capital Disclosure: Evidence from French stock exchange", International Journal of Accounting and Financial Reporting, 2015

Publication

<1%

49

Luigi Lepore, Sabrina Pisano, Gabriella D'Amore, Carmela Di Guida. "Board independence and voluntary financial disclosure: The moderating role of ownership structure", New challenges in corporate governance: Theory and practice, 2019

Publication

<1%

50

R. Atan, A. Rahim. "Corporate reporting of intellectual capital: Evidence from Ace Market of Bursa Malaysia", 2012 IEEE Symposium on Humanities, Science and Engineering Research, 2012

Publication

<1%

Exclude quotes On

Exclude matches < 2 words

Exclude bibliography On