Quality of Audit Committee as a Moderating Effect between Shareholding Structure and Intellectual Capital Disclosure in Indonesian Banking Companies

Maria Goreti Kentris Indarti[1,2,*], Faisal Faisal[3], Etna Nur Afri Yuyetta[3]

[1]Doctoral Program, Faculty of Economics and Business, Universitas Diponegoro, Indonesia
[2]Faculty of Economics and Business, Universitas Stikubank, Semarang, Indonesia
[3]Faculty of Economics and Business, Universitas Diponegoro, Indonesia
[*]Corresponding Author: kentris@edu.unisbank.ac.id

Abstract

Currently, competitive advantage has shifted from traditional to intellectual capital in the contemporary business world. Therefore, measuring, managing, and reporting intellectual capital are essential in business entities. Intellectual capital disclosure will help stakeholders to understand the company better. This research examines the nexus of shareholding structure on intellectual capital disclosure. Shareholding structure consist of management, institutions, government, and foreigners. Furthermore, tis research investigate the moderating role of audit committee quality in this relationship. this relationship. The population consists of banking firms listed on the Indonesian Stock Exchange in 2016-2020. Selection of samples employing purposive sampling method obtained 159 observations. The output of hypothesis testing using moderated regression analysis (MRA) show that managerial and institutional ownership negatively impacts disclosure of intellectual capital. Government and foreign ownerships have no impact on disclosure of intellectual capital. Meanwhile, empirical evidence shows that audit committee quality is a moderating variable. Our findings suggest that the share ownership structure in banking companies, which a quality audit committee supports, can promote management to disclose intellectual capital information more broadly. Based on these findings, the audit committee has an absolutely necessary in escalating the disclosure of the firm's intellectual capital.

Keywords: share ownership structure, intellectual capital disclosure, audit committee quality

Funding: This research supported by the Directorate of Research, Community Service and Publications, Universitas Stikubank, Semarang, Indonesia (Grant number: 013/UNISBANK/PN/XI/2022).

Competing Interests: The authors declare that they have no known competing interests.

1. Introduction

Several characteristics inherent in companies which operating in a competitive global environment. These characteristics include basing more on a knowledge-based economy (Olander et al., 2015); paying more attention to intangible resources (Corvino et al., 2019), social responsibility and corporate governance (Barrena-Martinez et al., 2019); facing increasing demand for information by the market, organizations, users, suppliers and other stakeholders (Abhayawansa, 2014; Corvino et al., 2019; Edvinsson, 2013; Tejedo-Romero & Araujo, 2021); and considering intellectual capital as an intangible resource that is essential to organizational success. Intellectual capital creates benefit and provides competing superiority for companies and considering intellectual capital as an intangible resource that is essential to organizational success. Intellectual capital creates benefit and provides competing superiority for companies (Maharani & Faisal, 2019; Mention & Bontis, 2013). Because of its dynamically changing essence, making intellectual capital as the main mechanism for companies to win the competition (Jordão & Almeida, 2017; Widiatmoko et al., 2020).

Intellectual capital can create corporate value via the power of information systems, mastery of technology, employee competence, customer loyalty, and other similar assets (Tejedo-Romero & Araujo, 2021). The intellectual capital of a company should be disclosed to stakeholders, since disclosure is an essential factor in an efficient bursa (Healy & Palepu, 2001). One of the advantages of companies disclosing intellectual capital information is reducing asymmetry (Johanson, 2003; Salvi et al., 2020). Separation of functions between management and principal results in an agency problem called information inequality (Mamun & Aktar, 2020). Therefore, the shareholders strive to obtain credible and timely information to make the right decisions and protect their interests. Regrettably, the urgency of this information is not followed by high disclosure of intellectual capital. Empirical evidence in developing countries shows that intellectual capital disclosure is below 50% (Haji & Ghazali, 2013; Mamun & Aktar, 2020). A previous study also showed that the quality of intellectual capital publication in Indonesian firms is relatively low (Ulum et al., 2019; Widiatmoko et al., 2020). This condition causes information inequality between the firm and stakeholders, resulting in inappropriate decision-making processes.

In general, corporate governance has been viewed as a critical driver of company disclosure. The attributes establish the framework for companies' efficiency, fairness, transparency, and accountability (Abeysekera, 2010). The shareholding structure increases intellectual capital through changes in management style to the arrangement and formation of relevant policies in protecting investors and other stakeholders, so being able to reduce agency problems (Al-Sartawi et al., 2017). Therefore, as part of the corporate governance mechanism, the shareholding composition explains variations in the extent of disclosed intellectual capital (Gan et al., 2013).

Ownership structure and its relationship with intellectual capital publication have been explored in many developed countries, but similar studies are still limited in developing countries (Al-Sartawi, 2018; Haji & Ghazali, 2013; Mamun & Aktar, 2020). Based on the agency perspective, management's shareholding can be a mechanism for aligning the relationship between management and shareholders (Jensen & Meckling, 1976). As a result, outside shareholders do not neet additional monitoring of manager behavior. Several studies have proven the negative influence of management's share ownership on intellectual capital disclosure (Al-Sartawi, 2018; Haji, 2015; Haji & Ghazali, 2013; Rahman et al., 2019; Ulfah et al., 2021). Meanwhile, an investigation conducted by Hidalgo et al. (2011), Juhmani (2013) and Alfraih (2018) showed that there is no relationship between management shareholding and disclosure of intellectual capital.

Institutional shareholders have the function of monitoring management, including disclosing intellectual capital policy. Institutional ownership promotes management to disclose intellectual capital as widely as possible. The high number of shares owned by the institution will result in higher disclosure of intellectual capital (Juhmani, 2013; Mukti & Istianingsih, 2018; Ulfah et al., 2021). However, the results do not always match this logic, as shown by Rahman et al. (2019), who reported that the more institutional share ownership would reduce the quantity of intellectual capital disclosed. Several studies also reported that institutional shareholding has no impact on intellectual capital disclosed (Haji & Ghazali, 2013; Ulfah et al., 2021).

The government as a shareholder monitors management in information transparency policies, including intellectual capital disclosure. Realizing that disclosures related to physical assets are deemed insufficient, the impetus of intangible assets increases. Therefore, share ownership by the government positively affects intellectual capital disclosure (Gan et al., 2013; Haji & Ghazali, 2013; Mukti & Istianingsih, 2018; Rahandika & Dewayanto, 2019). However, Juhmani (2013) did not find this effect. Al-Sartawi (2018) reported the opposite relationship between government shareholding and disclosure of intellectual capital.

Like share ownership by institutions and governments, foreigners' high number of shares will encourage information disclosure practices. The studies conducted by Kamat (2019) and Khafid & Alifia (2018) showed that foreign share ownership can increase the intellectual capital published. In spite of the research result by Al-Sartawi (2018) found the higher the foreign shareholding, the lower the disclosure of intellectual capital. Meanwhile, Ulfah et al. (2021), Muttakin et al. (2015), and Masum et al. (2020) argue that the number of foreign shares has no association with the disclosure of intellectual capital.

According to Baron & Kenny (1986), the inconsistent results of previous studies provide an opportunity to include moderating variables. This study consists of the audit committee quality variable as a moderator of the influence of share ownership structure on disclosure of intellectual capital. Furthermore, the audit committee has the main function of increasing the effectiveness of the board of commissioners in the management oversight process. Qualified audit committee can increase the transparency and quality of reporting presented by the management. Thus, it can minimize the information gap faced by stakeholders (Naimah & Mukti, 2019).

This study contributes both theoretically and practically. Theoretically, the results (1) reinforce agency theory, which suggests that shareholding composition can be a mechanism for implementing corporate governance, primarily when a qualified audit committee supports it. (2) This study uses the latest data with a relatively long observation period, namely 2016-2020, from a developing country capital market, the Indonesia Stock Exchange, to provide critical empirical insights and contribute to the concept of intellectual capital. Practically the findings contribute to (1) the Financial Services Authority, to regulate the duties and functions of the audit committee in companies. Therefore, it realizes transparency and information disclosure, as well as establishes strategies that will promote knowledge-based investment and disclosure in annual reports; (2) corporate management, to better appreciate the importance of managing and disclosing intellectual capital; (3) investors and shareholders, as the basis for making business decisions.

2. Literature Review

2.1. Agency Theory, Ownership Structure, and Intellectual Capital Disclosure

The agency theory underlies the influence of shareholding composition as a corporate governance tool toward intellectual capital disclosure. As a result, agents are given the delegated authority and responsibility to perform services on behalf of principals and make good decisions (Jensen & Meckling, 1976). The separation of functions between shareholders and management can result in a conflict of interest between the two parties (Naimah & Mukti, 2019).

Agency theory emphasizes the importance of mechanisms designed to monitor management behavior to minimize competing of interest between management and principal (Firer & Williams, 2005). Disclosure of intellectual capital is seen as an effective monitoring form to create transparency. Voluntary disclosure, including intellectual capital disclosure, is a monitoring mechanism the principal uses to make sure that management carry out tasks efficiently, to prevent the dilution of principal rights (Jensen & Meckling, 1976). Agency theory is a theoretical perspective that applies to corporate governance as well as disclosure practices in developing countries, counting Asia (Chu et al., 2013; Haji, 2015).

Intellectual capital comprises of three categories, that is 1) structural/organizational capital, 2) human capital, and relational/social capital. Organizational employees generate structural capital through intellectual efforts, corporate culture, policies, procedure, information, and work systems. Human capital consists of attitudes, commitments, knowledge, skills, talents, and creativity possessed by employees, which can improve through sustainable human resource development programs. Finally, relational capital includes brand, reputation, image, loyalty, the satisfaction of customers, suppliers, and relationships with other organizations and environmental activities (Mondal & Ghosh, 2021).

Intellectual capital has a dynamic nature, so it can be the primary means for companies to gain a competitive advantage that distinguishes them from their competitors (Jordão & Almeida, 2017). Therefore, intellectual capital needs to be disclosed for stakeholders to understand the company's value creation process. The disclosure has a significant role for companies, among others, can increase transparency and accountability, thereby minimizing information gap, increasing stock prices, and lowering the cost of equity capital. Disclosure can also increase the allegiance and trust of other parties (Bruggen et al., 2009). Mousavi & Takhtaei (2012) then stated that there are several disadvantages when the company does not disclose intellectual capital, namely: 1) there is a difference in information access between large and small shareholders which results in insider trading, 2) market liquidity and stock demand decrease, 3) the wrong valuation of the company so that the company is considered high risk, 4) the cost of capital increases. On the other hand, from the company's point of view, disclosure of intellectual capital information is a means to improve reputation and create trust with other parties. This trust is essential and has a long-term impact, which supports the company maintain a competitive advantage (Al-Sartawi, 2018).

2.2. Shareholding Structure and Intellectual Capital Disclosure

Agency theory explains that higher managerial ownership will result in lower principal-agent conflict. This is since managers have a stronger drive to optimize performance and align their interests with the principal (Jensen & Meckling, 1976; Sarhan & Ntim, 2019). Companies managed by management and owners are usually more closed because management can obtain information more easily through information channels (Branco et al., 2010). Consistent with the logic upon, research by Haji & Ghazali (2013) found that the number of shares owned by management has a negative impact on the amount of intellectual capital disclosed. These findings are in line with the research results by Al-Sartawi (2018), which was conducted on companies at the Cooperation Council for the Arab States of Gulf Companies, and Rahman et al. (2019) in Bangladesh. The same finding was reported by Ulfah et al. (2021) in Indonesia. Managers as company owners have complete access to company information, including intellectual capital information, since there is no incentive to disclose it. The hypothesis needed to be tested is:

H1: There is a negative influence between managerial shareholding and disclosure of intellectual capital.

Institutional shareholders authorize management to manage the company from agency relations. Furthermore, institutional shareholders will monitor management to act in their interests. In particular, they use additional disclosures, including intellectual capital information as a monitoring mechanism (Haji & Ghazali, 2013), to guarantee management behaves in the interests of stockholders. Consequently, institutional owners rest an important role in corporate governance and disclosure practices. Therefore, it will promote corporates whose shares are more owned by institutions to publish intellectual capital assets further. Juhmani (2013) reports that institutional investors will encourage companies to publish intellectual capital information in Bahrain. Mukti & Istianingsih (2018) and Ulfah et al. (2021) prove that institutional shareholding will affect the tightness of supervision carried out by investors. Thus, the hypothesis to be examined is:

H2: There is a negative influence between institutional shareholding and disclosure of intellectual capital.

Government Shareholding is politically more sensitive because companies with the most significant capital get a lot of attention, and they should get high public accountability (Haji & Ghazali, 2013). Furthermore, share ownership by the government increases agency problems, so that disclosure is an option to reduce these problems (Firer & Williams, 2005; Gan et al., 2013). Therefore, government ownership should create pressure for companies to disclose additional information, including intellectual capital information because the government should meet the public's expectations as company stakeholders. Previous studies on the relationship between government share ownership and intellectual capital disclosure conducted by Haji & Ghazali (2013) and Gan et al. (2013) showed significant positive results. Rahandika & Dewayanto (2019) also proves that government ownership in banking companies positively influences disclosing intellectual capital. Meanwhile, Mukti & Istianingsih (2018) showed that ownership affects human and structural capital disclosure. These results indicate that the government as the controlling shareholder will promote companies to make disclosures as transparency and public accountability. Thus, the hypothesis is that:

H3: There is a negative influence between government shareholding and disclosure of intellectual capital.

Based on the agency relationship, companies with foreign equity ownership lead to face a high degree of information asymmetry (Jensen & Meckling, 1976; Masum et al., 2020). This is due to several obstacles, including language, limited local information, and geographical cross-section between agents and principals (Muttakin et al., 2015). Information asymmetry and uncertainty faced by foreign investors will promote them to demand a higher level of disclosure from companies, including intellectual capital disclosure. Also, developing countries tend to publish information voluntarily, when dealing with foreign investors to maintain a positive image and investor trust, especially on international issues such as underage workers, poor working conditions, and human rights (Zaini et al., 2018). Kamat (2019) reports that foreign ownership of companies in India can promote extensive intellectual capital publication. In Indonesia, foreign owners can be an effective monitoring mechanism for managers. This is shown by the findings of Sinaga & Sudarno (2018), which proves that foreign shareholders are capable to promote companies to more widely publish intellectual capital information. Thus, the hypothesis needs to be tested is that:

H4: The influence of foreign shareholding on the disclosure of intellectual capital is positive.

2.3. Moderating Effect of Quality of Audit Committee

Modern corporate governance regulations have promoted the audit committee's function to enforce the role of independent commissioners, in monitoring the weaknesses of internal curb and the assurance of firm reporting (Haji, 2015). The presence of an audit committee in a firm has become a driving force for management to publish accurate and timely financial reports (Haji, 2015). They monitor and determine the amount of intellectual capital publication to meet stakeholder expectations (Adegboye et al., 2020). Qualified audit committee can minimize the information asymmetry of external stakeholders (Naimah & Mukti, 2019).

The cogency of the audit committee in realizing monitoring accountability will have an impact on the amount of disclosure of intellectual capital, which is an essential indicator of quality financial reporting. This is evidenced by several previous findings (Gan et al., 2013; Haji, 2015; Muttakin et al., 2015), which reported that audit committee has an important portrayal in determining voluntary disclosure, especially intellectual capital. Correspondingly, Naimah & Mukti (2019) proved that the existence of an audit committee affects the publication of intellectual capital. Similarly, Astuti et al. (2020) investigated the aftermath of audit committee quality on intellectual capital publication in intellectual capital-intensive industries listed on the Indonesian Stock Exchange. The results of this study indicate that the audit committee has a role in ensuring the quality of the financial and non-financial reporting processes. Thus, the idea of integrated reporting that contains financial and other information is a commendable step.

As part of the supervisory mechanism supported by a qualified audit committee, the shareholding structure has a positive brunt on a better monitoring. The higher management shareholding, the lower the conflict of interest between agent and principal. On the other hand, there is a higher level of information asymmetry between insiders and outsiders (Haji, 2015). The asymmetry will be overcome by an audit committee that promotes extensive disclosure of intellectual capital. Furthermore, a qualified audit committee will strengthen the supervisory function of institutional, government, and foreign owners, thereby encouraging management to disclose more extensive and quality information, including intellectual capital information. Thus, the study proposes the following hypothesis:

H5a: Audit committee quality moderates managerial shareholding on intellectual capital disclosure.

H5b: Audit committee quality moderates institutional shareholding on intellectual capital disclosure.

H5c: Audit committee quality moderates government shareholding on intellectual capital disclosure.

H5d: Audit committee quality moderates foreign shareholding on intellectual capital disclosures.

3. Research Methods

3.1. Sampling

The population was all banking companies listed in the Indonesia Stock Exchange in 2016-2020. The reason is that the banking industry has very strict regulations, so it tends to disclose more information. Moreover, it has high intellectual capital and an overall homogeneous intellectual aspect. Samples were chosen using the following indicators: a) publish an annual report and b) have the required data. According to these criteria, the number of data obtained were 177, while removed 18 outlier data to meet the residual normality requirements, to process a total of 159 data.

3.2. Variables and Measurements

The disclosure of intellectual capital, is measured by indicators developed by Ulum (2015) and adjusted to Indonesia's relevant regulations. Besides, 36 indicators cover the categories of human, structural, and relational capital. The identification of intellectual capital disclosure is conducted using the four-way numerical coding system developed by Guthrie et al. (2006). Each indicator is given a weight according to its projection, with a numeric code of 0 when it is not disclosed in the annual report, 1 when it is disclosed in narrative form, 2 when it is in numerical form, and 3 when it is in monetary form. This method identifies the disclosure in terms of quantity and quality.

The shareholding structure as an independent variable, includes share ownership by managers, institutions, governments, and foreigners, measured by calculating the proportion of each to the number of shares outstanding (Haji & Ghazali, 2013; Khafid & Alifia, 2018; Muttakin et al., 2015). Meanwhile, quality of audit committee is measured using four indicators, namely independence, size, competence, and audit committee activity (Baxter, 2010). Table 1 briefly presents the variables measurement.

Table 1. Variables and Measurement

Variables	Definitions	Measurement
Intellectual capital disclosure	Disclosure of information with regard to intellectual capital consisting 36 items	ICD = Total Measurement Score/Cumulative Score (64) (Ulum, 2015)
Managerial shareholding	Sum of shares held by management divided by the sum of outstanding shares	Managerial shareholding = (Sum of shares held by manager/Sum of outstanding shares) x 100% (Haji & Ghazali, 2013; Khafid & Alifia, 2018)
Institutional shareholding	Sum of shares held by institution divided by the sum of outstanding shares	Institutional shareholding = (Sum of shares held by the institution/Sum of outstanding shares) x 100% (Haji & Ghazali, 2013; Khafid & Alifia, 2018)
Government shareholding	Sum of shares held by government divided by the sum of outstanding shares	Government shareholding = (Sum of shares held by the government/Sum of outstanding shares) x 100% (Haji & Ghazali, 2013; Khafid & Alifia, 2018)
Foreign shareholding	Sum of shares held by foreign divided by the sum of outstanding shares.	Foreign shareholding = (Sum of shares held by foreigners/Sum of outstanding shares) x100% (Haji & Ghazali, 2013; Khafid & Alifia, 2018)
Quality of Audit Committee	Performance of audit committee in conducting supervisory responsibilities	Quality of the audit committee is the sum of scores for each indicator which includes: independence, size, expertise, and activity (Baxter, 2010)

3.3. Analysis Technique

Below is the moderated regression analysis (MRA) equation to examine the hypotheses in this study:

$$ICD = \alpha + \beta_1 MS + \beta_2 IS + \beta_3 GS + \beta_4 FS + \beta_5 MS{*}AC + \beta_6 IS{*}AC + \beta_7 GS{*}AC + \beta_8 FS{*}AC + e$$

where ICD = intellectual capital disclosure; MS = managerial shareholding; IS = institutional shareholding; GS = government shareholding; FS = foreign shareholding; AC = quality of audit committee

4. Results

4.1. Descriptive Statistics

Table 2 presents descriptive statistics that describe all variables in this study. The average of intellectual capital disclosure is 0.7625, which means that banking companies are relatively high in disclosing intellectual capital. The average managerial ownership value is 0.0074 or 0.74%, indicating that management's share ownership in banking companies is very low. The average of institutional shareholding is 0.4006, which indicates that the shares owned by institutions are quite high, namely 40%. The government's average shareholding in banking companies in Indonesia is also relatively low, at 11.77%. This is because 80% of the banking companies have no government ownership in the shareholder composition. Foreign shareholding has an average value of 0.3684 or 36.84%, this shows that foreign ownership in the banking industry is relatively low. The amount of banking companies whose shares are not owned by foreigners is 15%. The audit committee has an average value of 3.3459, meaning that the sample companies have a quality audit committee.

Table 2. Descriptive Statistics

Variables	Number	Minimum	Maximum	Average	St. Deviation
ICD	159	0.5300	0.9200	0.7625	0.0759
MS	159	0.0000	0.1600	0.0074	0.0257
IS	159	0.0100	0.9700	0.4006	0.3354
GS	159	0.0000	0.8000	0.1177	0.2502
FS	159	0.0000	0.9900	0.3684	0.3300
AC	159	2.0000	4.0000	3.3459	0.6363

Note: ICD = intellectual capital disclosure; MS = managerial shareholding; IS = institutional shareholding; GS = government shareholding; FS = foreign shareholding; AC = quality of audit committee

The normality examination show that the skewness value is 1.06, between -1.96 and 1.96, so that the distribution of residuals in the regression model are normal. The classical assumption examination shows that all independent variables have a variance inflation factor below 10. Furthermore, the *asymptotic significance 2-tailed* value on the run test indicates that the number 0.474, higher than the 0.05 significance level. The park test outputs show that all variables are insignificant at the 0.05 alpha level. Therefore, the regression model has no multicollinearity, autocorrelation, and heteroscedasticity problems.

4.2. Regression Results

The output of the moderated regression analysis shown in Table 3. According to the information, it is known that the adjusted R2 shows a number of 0.391; therefore, the level of intellectual capital disclosed is determined by managerial, institutional, government, foreign ownership, and synergy between shareholders and a quality audit committee of 39.10%. The remaining 60.90% is interpreted by other variables not included in the model. The F test value is 13.682 with a significance level of 0.000, meaning that this model meets the requirements of the goodness of fit; therefore, it can be used for predictions.

Based on the hypothesis testing in Table 3, managerial shareholding has a negative impact on disclosure of intellectual capital with a significance value of 0.000. Thus, management as a shareholder will try to reduce the extent of disclosed intellectual capital. Institutional shareholding has an impact on reducing intellectual capital disclosed at alpha value 0.039. The beta coefficient is opposite to the prediction, so the hypothesis is rejected. Furthermore, government and foreign ownership have no effect on intellectual capital disclosure, so the third and fourth hypotheses are rejected. The audit committee can moderate managerial, institutional, and government ownership on disclosure of intellectual capital with a significance value of less than 1%, so hypothesis 5a, 5b, and 5c are accepted. However, the audit committee cannot moderate the influence of foreign shareholding on intellectual capital disclosure, so hypothesis 5d is rejected.

Table 3. Result of Moderated Regression Analysis

Model	Unstandardized Coefficients		t	Prob.
	β	Std. Error		
(Constant)	0.690	0.036	19.175	0.000
MS	-5.858	1.409	-4.157	0.000
IS	-0.117	0.056	-2.081	0.039
GS	-0.187	0.119	-1.572	0.118

FS	0.071	0.067	1.052	0.294
MS*AC	1.572	0.382	4.109	0.000
IS*AC	0.049	0.015	3.355	0.001
GS*AC	0.089	0.032	2.827	0.005
FS*AC	0.114	0.017	0.828	0.409
Adjusted R Square				0.391
F Statistics:				13.682
Sig.				0.000

Dependent variable: ICD

Note: ICD = intellectual capital disclosure; MS = managerial shareholding; IS = institutional shareholding; GS = government shareholding; FS = foreign shareholding; AC = quality of audit committee

5. Discussion

This study proves that management as a shareholder significantly reduces the extent of intellectual capital disclosed This finding supports agency theory, which argue that shareholding can be a mechanism for aligning the relationship between management along with shareholders (Jensen & Meckling, 1976). This condition means that external shareholders do not need more information to monitor management. Subsequently, managers have complete access to company information, including intellectual capital, so that there is no incentive to disclose it. This conclusion supports the findings of Haji & Ghazali (2013), Al-Sartawi (2018), Haji (2015), Rahman et al. (2019), and Ulfah et al. (2021), who reported the negative association between managerial shareholding and intellectual capital published.

Additional information such as investment in intellectual capital can assist institutional investors in making decisions on management performance. Therefore, the existence of institutional investors in a company should encourage management to publish more intangible assets information. However, this study showed the opposite result. Shareholding by institutional investors can negatively affect strategic disclosure decisions. Companies with institutional investors' shareholdings have a lower level of asymmetry because shareholders have access to the information needed; therefore, the pressure to disclose it to the market is low (Rahman et al., 2019). This conclusion contradicts with agency relationship perspective that emphasizes the presence of institutional investors can effectively contribute to governance including disclosure policies (Ulfah et al., 2021).

The test results show that share ownership by the government has no impact on the extent of intellectual capital disclosed. This is due to the small number of banking companies owned by the government, that is 20%. Therefore, there is less pressure on management to publish additional report, counting intellectual capital.

Based on the agency theory perspective, companies with foreign share ownership tend to face high information asymmetry. This can be overcome by increasing voluntary disclosure of information (Jensen & Meckling, 1976; Masum et al., 2020). However, the theory is not supported by empirical facts. One of the arguments that can be given is that the average foreign ownership in banking companies is relatively low; therefore, the supervision and monitoring carried out are less effective.

This study proves that the ownership structure, which a qualified audit committee supports, can promote management to publish intellectual capital information more broadly. It can be a mechanism for stakeholders to optimize corporate disclosure practices by increasing the role and function of audit committee in supervising and monitoring management. The existence of an audit committee encourages managers to present financial reporting in a more qualified and timely manner. It also plays a role in integrated reporting initiatives, especially intellectual capital information (Haji, 2015).

6. Conclusions

This research tested the influence of shareholding structure on disclosure of intellectual capital, along with investigate the moderating aftermath of audit committee. The findings prove that management as a shareholder tends to reduce the amount of intellectual capital disclosed. Thus, to control company information to be disclosed, share ownership by management must be limited to minimize their opportunistic behavior. The test results also proved that share ownership by management, institutions, and the government can function as a management control mechanism if a qualified audit committee supports it. The role and function of the audit committee in supervising and monitoring management can be a mechanism for optimizing corporate disclosure practices, including intellectual capital disclosure. Hence, a qualified audit committee will further boost the extent and quality of intellectual capital revelation.

The findings serve as input for the Financial Services Authority, as the party that drafts regulations related to the formation and implementation guidelines of audit committee work. The existence of an audit committee has an important role in promoting managers to publish intellectual capital. The existence of an audit committee has an important role in promoting managers to publish intellectual capital. This will provide several benefits, including reducing information asymmetry, providing information about firm's capability to create longstanding performance, and attracting long-term investors. Therefore, managers should integrate intellectual capital information with financial information, so that it is more useful for users of information for decision making. Further research can be conducted using variables that specifically describe corporate governance activities, like board of commissioner characteristics. Likewise, further study can be carried out on other broader industrial sectors, such as the manufacturing industry, or comparisons with other developing countries.

REFERENCES

Abeysekera, I. (2010). The influence of board size on intellectual capital disclosure by Kenyan listed firms. *Journal of Intellectual Capital*, *11*(4), 504–518. https://doi.org/10.1108/14691931011085650

Abhayawansa, S. A. (2014). A review of guidelines and frameworks on external reporting of intellectual capital. *Journal of Intellectual Capital*, *15*(1), 100–141. https://doi.org/10.1108/JIC-04-2013-0046

Adegboye, A., Ojeka, S., Alabi, O., Alo, U., & Aina, A. (2020). Audit committee characteristics and sustainability performance in Nigerian listed banks. *Business: Theory and Practice*, *21*(2), 469–476. https://doi.org/10.3846/btp.2020.10463

Alfraih, M. M. (2018). The role of corporate governance in intellectual capital disclosure. *International Journal of Ethics and Systems*, *34*(1), 101–121. https://doi.org/10.1108/IJOES-02-2017-0026

Al-Sartawi, A. M. A. M. (2018). Ownership structure and intellectual capital: Evidence from the GCC countries. *International Journal of Learning and Intellectual Capital*, *15*(3), 277–291. https://doi.org/10.1504/IJLIC.2018.094717

Al-Sartawi, A. M. A. M., Sanad, Z., & Alrawahi, F. (2017). Board characteristics and the level of compliance with IAS 1 in Bahrain. *International Journal of Managerial and Financial Accounting*, *9*(4), 303. https://doi.org/10.1504/ijmfa.2017.10009970

Astuti, R. N., Fachrurrozie, F., Amal, M. I., & Zahra, S. F. (2020). Does audit committee quality mediate determinants of intellectual capital disclosure? *Journal of Asian Finance, Economics and Business*, *7*(7), 199–208. https://doi.org/10.13106/jafeb.2020.vol7.no7.199

Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Barrena-Martinez, J., López-Fernández, M., & Romero-Fernández, P. M. (2019). The link between socially responsible human resource management and intellectual capital. *Corporate Social Responsibility and Environmental Management*, *26*(1), 71–81. https://doi.org/10.1002/csr.1658

Baxter, P. (2010). Factors associated with the quality of audit committees. *Pacific Accounting Review*, *22*(1), 57–74. https://doi.org/10.1108/01140581011034227

Branco, M. C., Delgado, C., Sá, M., & Sousa, C. (2010). An analysis of intellectual capital disclosure by Portuguese companies. *EuroMed Journal of Business*, *5*(3), 258–278. https://doi.org/10.1108/14502191011080809

Bruggen, A., Vergauwen, P., & Dao, M. (2009). Determinants of intellectual capital disclosure : evidence from Australia. *Management Decision*, *47*(2), 233–245. https://doi.org/10.1108/00251740910938894

Chu, C. I., Chatterjee, B., & Brown, A. (2013). The Current Status of Greenhouse Gas Reporting by Chinese Companies. *Managerial Auditing Journal*, *28*(2), 114–139.

Corvino, A., Caputo, F., Pironti, M., Doni, F., & Martini, S. B. (2019). The moderating effect of firm size on relational capital and firm performance: Evidence from Europe. *Journal of Intellectual Capital*, *20*(4), 510–532. https://doi.org/10.1108/JIC-03-2019-0044

Edvinsson, L. (2013). IC 21: Reflections from 21 years of IC practice and theory. *Journal of Intellectual Capital*, *14*(1), 163–172. https://doi.org/10.1108/14691931311289075

Firer, S., & Williams, S. M. (2005). Firm ownership structure and intellectual capital disclosures. *South African Journal of Accounting Research*, *19*(1), 1–18. https://doi.org/10.1080/10291954.2005.11435116

Gan, K., Saleh, Z., Abessi, M., & Huang, C. C. (2013). Intellectual capital disclosure in the context of corporate governance. *International Journal of Learning and Intellectual Capital*, *10*(1), 52–70. https://doi.org/https://doi.org/10.1504/IJLIC.2013.052077 PDF View Full Text

Guthrie, J., Petty, R., & Ricceri, F. (2006). The voluntary reporting of intellectual capital: Comparing evidence from Hong Kong and Australia. *Journal of Intellectual Capital*, *7*(2), 254–271. https://doi.org/10.1108/14691930610661890

Haji, A. A. (2015). The role of audit committee attributes in intellectual capital disclosures: Evidence from Malaysia. *Managerial Auditing Journal*, *30*(8–9), 756–784. https://doi.org/10.1108/MAJ-07-2015-1221

Haji, A. A., & Ghazali, N. A. M. (2013). A longitudinal examination of intellectual capital disclosures and corporate governance attributes in Malaysia. *Asian Review of Accounting*, *21*(1), 27–52. https://doi.org/10.1108/13217341311316931

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1–3), 405–440. https://doi.org/10.1016/S0165-4101(01)00018-0

Hidalgo, R. L., García-Meca, E., & Martínez, I. (2011). Corporate Governance and Intellectual Capital Disclosure. *Journal of Business Ethics*, *100*(3), 483–495. https://doi.org/10.1007/s10551-010-0692-x

Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Cost and Ownership Structure. *Journal of Financial Economics*, *3*, 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Johanson, U. (2003). Why are capital market actors ambivalent to information about certain indicators on intellectual capital? *Accounting, Auditing & Accountability Journal*, *16*(1), 31–38. https://doi.org/10.1108/09513570310464255

Jordão, R. V. D., & Almeida, V. R. de. (2017). Performance measurement, intellectual capital and financial sustainability. *Journal of Intellectual Capital*, *18*(3), 643–666. https://doi.org/10.1108/JIC-11-2016-0115

Juhmani, O. I. (2013). Ownership Structure and Corporate Voluntary Disclosure: Evidence from Bahrain. *International Journal of Accounting and Financial Reporting*, *3*(2), 133. https://doi.org/10.5296/ijafr.v3i2.4088

Kamat, G. B. (2019). Role of Corporate Governance in the Voluntary Disclosure of Intellectual

Capital. *International Research Journal of Business Studies*, *12*(3), 243–256. https://doi.org/10.21632/irjbs.12.3.243-256

Khafid, M., & Alifia, D. (2018). The Moderation Role of the Audit Committee Quality on the Effect of the Ownership Structure on Intellectual Capital Disclosures. *Jurnal Dinamika Akuntansi*, *10*(1), 27–39. https://doi.org/10.15294/jda.v10i1.12994

Maharani, N. B., & Faisal. (2019). Intellectual Capital and Company Financial Performance. *Jurnal Reviu Akuntansi Dan Keuangan*, *9*(1), 13–23. https://doi.org/10.22219/jrak.v9i1.40

Mamun, S. A. al, & Aktar, A. (2020). Intellectual capital disclosure practices of financial institutions in an emerging economy. *PSU Research Review*, *5*(1), 33–53. https://doi.org/10.1108/prr-08-2020-0024

Masum, M. H., Lattif, A. R. A., & Osman, M. N. H. (2020). Ownership Structure and Corporate Voluntary Disclosures in Transition Economy*. *Journal of Asian Finance, Economics and Business*, *7*(10), 601–611. https://doi.org/10.13106/jafeb.2020.vol7.no10.601

Mention, A. L., & Bontis, N. (2013). Intellectual capital and performance within the banking sector of Luxembourg and Belgium. *Journal of Intellectual Capital*, *14*(2), 286–309. https://doi.org/10.1108/14691931311323896

Mondal, A., & Ghosh, C. (2021). Effect of intellectual capital disclosure on cost of equity capital: a study on Indian companies. *Asian Journal of Accounting Research*, *6*(2), 165–179. https://doi.org/10.1108/ajar-08-2020-0069

Mousavi, Z., & Takhtaei, N. (2012). the Impact of Intellectual Capital Disclosure on Capital Markets: an Overview. *Business Intelligence Journal*, *5*(2), 267–270. http://search.ebscohost.com/login.aspx?direct=true&db=edb&AN=90712169&site=eds-live

Mukti, A. H., & Istianingsih. (2018). The Impact of Ownership Structure on Intellectual Capital Disclosure. *International Business Management*, *12*(3), 337–345. https://doi.org/10.36478/ibm.2018.337.345

Muttakin, M. B., Khan, A., & Belal, A. R. (2015). Intellectual capital disclosures and corporate governance: An empirical examination. *Advances in Accounting, Incorporating Advances in International Accounting*, *31*(2), 219–227. https://doi.org/10.1016/j.adiac.2015.09.002

Naimah, Z., & Mukti, N. A. (2019). The influence of audit committee's and company's characteristic on intellectual capital disclosure. *Asian Journal of Accounting Research*, *4*(2), 170–180. https://doi.org/10.1108/ajar-05-2019-0036

Olander, H., Hurmelinna-Laukkanen, P., & Heilmann, P. (2015). Human resources – strength and weakness in protection of intellectual capital. *Journal of Intellectual Capital*, *16*(4), 742–762. https://doi.org/10.1108/JIC-03-2015-0027

Rahandika, F., & Dewayanto, T. (2019). The Role of Corporate Governance in Disclosure of Intellectual Capital. *Fokus Ekonomi : Jurnal Ilmiah Ekonomi*, *14*(1), 104–114. https://doi.org/10.34152/fe.14.1.104-114

Rahman, Md. M., Sobhan, R., & Islam, Md. S. (2019). Intellectual Capital Disclosure and Its Determinants: Empirical Evidence from Listed Pharmaceutical and Chemical Industry of Bangladesh. *Journal of Business Economics and Environmental Studies*, *9*(2), 35–46. https://doi.org/10.13106/jbees.2019.vol9.no2.35

Salvi, A., Vitolla, F., Raimo, N., Rubino, M., & Petruzzella, F. (2020). Does intellectual capital disclosure affect the cost of equity capital? An empirical analysis in the integrated reporting context. *Journal of Intellectual Capital*, *21*(6), 985–1007. https://doi.org/10.1108/JIC-12-2019-0283

Sarhan, A. A., & Ntim, C. G. (2019). Corporate boards, shareholding structures and voluntary disclosure in emerging MENA economies. *Journal of Accounting in Emerging Economies*, *9*(1), 2–27. https://doi.org/10.1108/JAEE-03-2017-0033

Sinaga, A. L., & Sudarno, S. (2018). The Influence of Corporate Governance on Disclosure of

Intellectual Capital. *Diponegoro Journal of Accounting*, *7*(4), 1–13.

Tejedo-Romero, F., & Araujo, J. F. F. E. (2021). The influence of corporate governance characteristics on human capital disclosure: the moderating role of managerial ownership. *Journal of Intellectual Capital*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/JIC-03-2019-0055

Ulfah, Y., Yudaruddin, R., & Yudaruddin, Y. A. (2021). Ownership composition and intellectual capital disclosure: Indonesia as a case study. *Investment Management and Financial Innovations*, *18*(2), 37–47. https://doi.org/10.21511/imfi.18(2).2021.04

Ulum, I. (2015). Intellectual Capital Disclosure: An Analysis with Four Way Numerical Coding System. *Jurnal Akuntansi Dan Auditing Indonesia*, *19*(1), 39–50. https://doi.org/10.20885/jaai.vol19.iss1.art4

Ulum, I., Harviana, R. R., Zubaidah, S., & Jati, A. W. (2019). Intellectual capital disclosure and prospective student interest : An Indonesian perspectives. *Cogent Business & Management*, *6*(1), 1–13. https://doi.org/10.1080/23311975.2019.1707041

Widiatmoko, J., Indarti, M. G. K., & Pamungkas, I. D. (2020). Corporate governance on intellectual capital disclosure and market capitalization. *Cogent Business and Management*, *7*(1). https://doi.org/10.1080/23311975.2020.1750332

Zaini, S. M., Samkin, G., Sharma, U., & Davey, H. (2018). Voluntary disclosure in emerging countries: a literature review. *Journal of Accounting in Emerging Economies*, *8*(1), 29–65. https://doi.org/10.1108/JAEE-08-2016-0069

Kentris_Dtaft_IJAEFA_Revised_4.docx

ORIGINALITY REPORT

18%	14%	15%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	"The Moderation Role of the Audit Committee Quality on the Effect of the Ownership Structure on Intellectual Capital Disclosures", 'Universitas Negeri Semarang' Internet Source	2%
2	Submitted to Universitas Diponegoro Student Paper	1%
3	www.virtusinterpress.org Internet Source	1%
4	jurnal.untagsmg.ac.id Internet Source	1%
5	www.researchgate.net Internet Source	1%
6	Francisca Tejedo-Romero, Joaquim Filipe Ferraz Esteves Araujo. "The influence of corporate governance characteristics on human capital disclosure: the moderating role of managerial ownership", Journal of Intellectual Capital, 2020 Publication	<1%

7	Maylia Pramono Sari, Era Mahardika, Dhini Suryandari, Surya Raharja. "The audit committee as moderating the effect of hexagon's fraud on fraudulent financial statements in mining companies listed on the Indonesia stock exchange", Cogent Business & Management, 2022 Publication	<1%
8	koreascience.kr Internet Source	<1%
9	pure.port.ac.uk Internet Source	<1%
10	Mondher Kouki, Mariem Bouchareb, Abderrazek El Khaldi. "Internal corporate governance mechanisms and intellectual capital disclosure: evidence from Tunisia", International Journal of Entrepreneurship and Small Business, 2020 Publication	<1%
11	lib.unnes.ac.id Internet Source	<1%
12	www.repository.rmutt.ac.th Internet Source	<1%
13	Asian Review of Accounting, Volume 21, Issue 1 (2013-05-27) Publication	<1%

14	www.atlantis-press.com Internet Source	<1 %
15	www.um.edu.mt Internet Source	<1 %
16	Submitted to University of Durham Student Paper	<1 %
17	opus.bath.ac.uk Internet Source	<1 %
18	repo.unand.ac.id Internet Source	<1 %
19	"Explore Business, Technology Opportunities and Challenges After the Covid-19 Pandemic", Springer Science and Business Media LLC, 2023 Publication	<1 %
20	Ahmed A. Sarhan, Collins G. Ntim. "Corporate boards, shareholding structures and voluntary disclosure in emerging MENA economies", Journal of Accounting in Emerging Economies, 2019 Publication	<1 %
21	Chieh-Hung Chen, Yang-Yi Sun, Li-Ching Lin, Peng Han et al. "Large air pressure changes triggered by P-SV ground motion in a cave in northern Taiwan", Research Square Platform LLC, 2020	<1 %

Publication

22	www.tandfonline.com Internet Source	<1 %
23	journal.ikopin.ac.id Internet Source	<1 %
24	journal.umy.ac.id Internet Source	<1 %
25	www.ijar-iaikapd.or.id Internet Source	<1 %
26	Mahfoudh Abdulkarem Al-Musali, Mohammed Helmi Qeshta, Mohamed Ali Al-Attafi, Abood Mohammad Al-Ebel. "Ownership structure and audit committee effectiveness: evidence from top GCC capitalized firms", International Journal of Islamic and Middle Eastern Finance and Management, 2019 Publication	<1 %
27	Maria Goreti Kentris Indarti, Jacobus Widiatmoko, Imang Dapit Pamungkas. "Corporate Governance Structures and Probability of Financial Distress: Evidence From Indonesia Manufacturing Companies", International Journal of Financial Research, 2020 Publication	<1 %
28	Seyed Mohamad Fahimi, Hossein Fakhari. "The mediating effect of financial	<1 %

performance on the relationship between intellectual capital & market share: Evidence from Tehran stock exchange", Risk Governance and Control: Financial Markets and Institutions, 2017
Publication

29	repository.ibs.ac.id Internet Source	<1 %
30	www.inderscienceonline.com Internet Source	<1 %
31	"Non-financial Disclosure and Integrated Reporting", Springer Science and Business Media LLC, 2022 Publication	<1 %
32	Francisca Castilla-Polo, Consuelo Ruiz-Rodríguez. "Content analysis within intangible assets disclosure: a structured literature review", Journal of Intellectual Capital, 2017 Publication	<1 %
33	Nasser S. Kh. Al-Enzy, Reza Monem, Shamsun Nahar. "IFRS experience and earnings quality in the GCC region", International Journal of Managerial Finance, 2022 Publication	<1 %
34	dergipark.org.tr Internet Source	<1 %

journal.uin-alauddin.ac.id

35	Internet Source	<1 %
36	journal.unnes.ac.id Internet Source	<1 %
37	virtusinterpress.org Internet Source	<1 %
38	Abdifatah Ahmed Haji, Mutalib Anifowose. "Audit committee and integrated reporting practice: does internal assurance matter?", Managerial Auditing Journal, 2016 Publication	<1 %
39	Fauzan Fauzan, Dyah Ayu Ayu, Nashirotun Nisa Nurharjanti. "The Effect of Audit Committee, Leverage, Return on Assets, Company Size, and Sales Growth on Tax Avoidance", Riset Akuntansi dan Keuangan Indonesia, 2019 Publication	<1 %
40	acikbilim.yok.gov.tr Internet Source	<1 %
41	ajap.um.edu.my Internet Source	<1 %
42	amazoniainvestiga.info Internet Source	<1 %
43	archive.conscientiabeam.com Internet Source	<1 %

44	etd.uum.edu.my Internet Source	<1 %
45	ijaaf.um.ac.ir Internet Source	<1 %
46	ijar-iaikapd.or.id Internet Source	<1 %
47	journals.plos.org Internet Source	<1 %
48	livrozilla.com Internet Source	<1 %
49	pericles.pericles-prod.literatumonline.com Internet Source	<1 %
50	repository.up.ac.za Internet Source	<1 %
51	researcharchive.vuw.ac.nz Internet Source	<1 %
52	www.koreascience.or.kr Internet Source	<1 %
53	عمرو نزيه عزت. "the impact of corporate governance structure on the readability of board of directors' report in Egyptian environment", مجلة البحوث المحاسبية, 2019 Publication	<1 %
54	"Complex, Intelligent and Software Intensive Systems", Springer Science and Business	<1 %

Media LLC, 2021
Publication

55 Elvira Luthan, Sandra Ayu, Ilmainir .. "The Effect of Corporate Governance Quality, Firm Size, Leverage, and Financial Performance on Intellectual Capital DisclosureEmpirical Study: Manufacturing Companies Listed on the IDX", International Journal of Engineering & Technology, 2018 <1%
Publication

56 Giuseppe Nicolò, Giuseppe Sannino, Serena De Iorio. "Gender diversity and online intellectual capital disclosure: Evidence from Italian ‐ listed firms", Journal of Public Affairs, 2021 <1%
Publication

57 Maria Manuela Martins, Ana Isabel Morais, Helena Isidro, Raul Laureano. "Intellectual Capital Disclosure: the Portuguese Case", Journal of the Knowledge Economy, 2016 <1%
Publication

58 Rashidah Abdul Rahman, Musliha Musman. "INTELLECTUAL CAPITAL DISCLOSURE AND CORPORATE GOVERNANCE STRUCTURE AMONG MALAYSIAN GOVERNMENT-LINKED COMPANIES", Corporate Board: role, duties and composition, 2013 <1%
Publication

59	"Intellectual Capital Management as a Driver of Sustainability", Springer Science and Business Media LLC, 2019 Publication	<1 %
60	Abdifatah Ahmed Haji. "The role of audit committee attributes in intellectual capital disclosures", Managerial Auditing Journal, 2015 Publication	<1 %
61	Adam Zakaria, Marsellisa Nindito, Eno Firmansa. "The influence of characteristics of the board of commissioners, audit committee meetings and auditor type on intellectual capital disclosure", Pressacademia, 2018 Publication	<1 %
62	Joshi, Prem Lal, Nik Mohamad Zaki Sallah, Hamsatulazura Hamzah, Shaista Wasiuzzaman, and Anbalagan Krishnan. "Determinants of compliance and disclosure requirements by top listed companies under Malaysian Code of Corporate Governance (2012)", Afro-Asian J of Finance and Accounting, 2016. Publication	<1 %
63	Maria Assunta Baldini, Giovanni Liberatore. "CORPORATE GOVERNANCE AND INTELLECTUAL CAPITAL DISCLOSURE. AN EMPIRICAL ANALYSIS OF THE ITALIAN LISTED	<1 %

COMPANIES", Corporate Ownership and Control, 2016
Publication

64	Md Mamunur Rashid. "Board characteristics and foreign equity ownership: evidence from Bangladesh", Journal of Accounting in Emerging Economies, 2020 Publication	<1 %
65	Muttanachai Suttipun. "The influence of corporate governance, and sufficiency economy philosophy disclosure on corporate financial performance", Asia-Pacific Journal of Business Administration, 2018 Publication	<1 %
66	Wisnu Mawardi, Harjum Muharam, Mulyo Haryanto. "The Role of Audit Committee Characteristics and I.C. Performance on I.C. Disclosure: Evidence from the Indonesian Banking Sector", Economies, 2022 Publication	<1 %

Exclude quotes	On	Exclude matches	< 5 words
Exclude bibliography	On		