Does Corporate Governance Affect Intellectual Capital Disclosure Practices?

Mohammad Ahsan Uddin 1, * 🝺, Mir Misnad Sultana 2 💿

¹ Assistant Professor, Accounting Discipline, Department of Business Administration, Premier University, Chittagong, Bangladesh.

² Assistant Professor, Department of Business Administration, BGC Trust University Bangladesh, Bangladesh.

* Corresponding author: Mohammad Ahsan Uddin (mau370100@gmail.com)

Abstract

The current study empirically examines how Intellectual Capital Disclosure (ICD) practices and corporate governance (CG) variables relate to one another while taking firm-specific factors into consideration. The study focusses on a sample of 20 publicly traded companies from Bangladesh's three cognitively demanding industries. The association between ICD and CG is assessed by the study using regression modelling and content analysis. Higher levels of intellectual capital disclosure are positively correlated with variables including gender diversity, audit committees, directors' ownership, government ownership, and business size, according to the research. Conversely, there is an adverse association between ICD and board size, directors' independence, and industry connection. Furthermore, there was no discernible correlation between foreign influence and the level of intellectual capital disclosure by Bangladeshi listed companies.

Keywords: Intellectual Capital Disclosure, Corporate Governance, Gender Diversity, Audit Committee, Directors' Ownership, Government Ownership, Firm Size, Board Size.

ARTICLE INFO

Research paper Received: 10 February 2024 Accepted: 22 September 2024 Published: 23 September 2024 DOI: 10.58970/IJSB.2463

CITATION

Uddin, M. A. & Sultana, M. M. (2024). Does Corporate Governance Affect Intellectual Capital Disclosure Practices? International Journal of Science and Business, 41(1), 34-55.

COPYRIGHT

Copyright © 2024 by author(s) Papers published by IJSAB International are licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.



1. Introduction

In the era of knowledge-based corporate development, intellectual capital has been known to show the most significance when taking into account how employees' skills and usage of technology are being improvised, thus giving higher return to their organizations. It shows that information once neglected in financial statements is now considered part of their main component. According to CIMA (2001), intellectual capital refers to 'the possession of knowledge and experience, professional knowledge and skill, good relationships, and technological capacities, which when applied will give organizations competitive advantage.' Researchers have categorized intellectual capital in various ways. Guthrie and Petty (2000) categorized intellectual capital into internal, external, and human capital whereas, IFAC (1998) states that the intellectual is divided into human, relational and structural capital. Researchers like Keenan and Aggestam (2001) have argued that along with financial and physical capital, companies with strong management committees believe that intellectual capital acting a vital part in reforming the organization to a better position.

This research fills in the knowledge gap about the association between the corporate governance (CG) of a subset of Bangladeshi listed businesses and their disclosures of intellectual capital. The principal source of information used to complete this research study was the annual reports of the chosen Bangladeshi listed corporations. Even though it has been found that Bangladesh, being in the heights of development lack empirical evidence and companies in Bangladesh do not provide abundant information relevant to intellectual capital disclosures as mentioned by Ali, Khan, and Fatima (2008). According to Bukh (2003), information regarding intellectual capital disclosures is necessary for investors as it enables them proper valuation of the company and allows them to be certain about future opportunities. Cañibano et al. (2000) have also noted that encouraging the deliberate disclosure of intellectual capital data is a logical approach to improving financial reporting.

Since this study focusses on Bangladeshi companies, the corporate environment in that nation is characterized by a small firm size, small capital market, and ownership structures controlled by families. However, Bangladesh has implemented a corporate governance structure modeled after Western practices that calls for more prominent board freedom, a separation of the CEO and executive, and audit committees. Studies by Cerbioni and Parbonetti (2007) demonstrate the impact of family ownership on corporate governance, specifically with regard to CEO duality and intellectual capital disclosures. Nevertheless, the SEC (2006) states that CEO duality cannot be implemented across the ownership structure of the company in the rules offered for corporate governance procedures by listed businesses. While a great deal of research has been done on human capital reporting in Bangladesh, relatively little is known about the disclosure of intellectual capital. The condition of intellectual capital disclosure and customer impression were studied by Khan and Ali (2010), albeit their research was restricted to Bangladesh's private commercial banks. Despite the fact that investors welcomed such reporting, they came to the conclusion that the managements of Bangladeshi commercial banks were careless about the need for intellectual capital disclosure. Similar findings were made by Nurunnabi et al. (2011), Khan and Khan (2010), and Rashid (2013), who discovered that Bangladeshi enterprises disclose intellectual capital in their annual reports to a limited extent since doing so has historically been optional in Bangladesh. This gap in such a broad field of study has motivated me to conduct a thorough investigation to gauge the level of intellectual capital disclosure made by Bangladeshi listed firms.

This investigation aims to assess the influence of corporate governance on the ICD policies of Bangladeshi listed firms. In order to understand how different corporate governance factors, affect the amount of intellectual capital disclosed, the research looks at a number of variables, including board size, the number of independent directors, gender diversity, the size of the audit committee, ownership of directors, government ownership, foreign influence, firm size, and industry affiliation. The research also inspects patterns in the disclosure of intellectual capital across time, determining the elements that are most and least shared. Recent studies have underscored the critical role of corporate governance in influencing intellectual capital disclosure (ICD) across various contexts. Widiatmoko et al. (2020) demonstrated that robust corporate governance practices positively affect ICD and, in turn, enhance market capitalization, highlighting the mediating role of ICD in financial performance. Similarly, Tulung et al. (2018) found that the composition of independent commissioners and the competence of audit committees significantly promote ICD in Indonesian private banks, emphasizing the importance of governance structures in driving transparency. Naimah and Mukti (2019) further elucidated that while the size of the audit committee does not impact ICD, its meeting frequency positively correlates with disclosure levels, suggesting that active oversight can enhance transparency. In the educational sector, Ulum et al. (2019) indicated that although universities in Indonesia struggle to fully disclose their intellectual capital indicators, such disclosures positively impact prospective student interest, reflecting the value placed on transparency in attracting stakeholders. Furthermore, Nicolò et al. (2023) explored the determinants of ICD in Italian

healthcare organizations, revealing that organizational size and governance diversity can significantly influence disclosure practices. Collectively, these studies emphasize the pivotal association between CG mechanisms and ICD, indicating that effective governance not only enhances transparency but also supports broader organizational objectives across different sectors. There are important ramifications of this study for politicians and investors. The knowledge-based economy is increasingly recognising the importance of intellectual capital, and in addition to the customary financial disclosure pattern, intellectual capital disclosure would assist investors in making more thorough assessments of business performance when making investment decisions. With the goal of reducing information asymmetry, regulators and legislators may implement crucial measures to improve corporate disclosure of intellectual capital information.

2. Literature Review

This study's overarching goal is to prove that disclosure of intellectual capital is associated with good corporate governance in listed businesses in Bangladesh. This section adds to the expanding corpus of literature on intellectual capital disclosure by doing so. Corporate governance, according to Keenan and Aggestam (2001), should guarantee the wise expenditure of intellectual capital. In addition, they imply that publicly-owned businesses, based on their structure and nature, could have to implement new practices and frameworks in their annual reports to better convey the value that the company's intellectual capital creates for stakeholders. Particular patterns have arisen across nations, even though the breadth and variety of material revealed have been the primary foci of many prior research on intellectual capital disclosure. In their study of 20 major Australian corporations' annual reports, Guthrie and Petty (2000) looked at the frequency of disclosure of specific aspects of intellectual capital. Goh and Lim (2004) examined 20 Malaysian companies, and Brennan (2001) looked at 21 Irish companies to see how they disclosed their intellectual capital. One possible justification for disclosing intellectual capital is a cost-benefit analysis. Companies are encouraged to freely release information when the advantages are seen as greater than the costs, according to this viewpoint. Reduced information asymmetry is the main advantage of voluntary disclosure, as pointed out by García-Meca et al. (2005) and Vergauwen & Alem (2005). A more accurate business valuation results from stakeholders having more information with which to evaluate a company's future wealthgenerating potential. This, in turn, attracts more analysts and leads to more stock market liquidity.

2.1 Intellectual Capital Disclosure

Investors need access to information about intellectual capital to make informed decisions about the potential of the businesses they are considering. Jensen and Meckling (1976) argue that greater transparency reduces a firm's cost of capital by minimizing the risks faced by investors. According to Parker's (2007) assessment of the literature on financial and external reporting, intellectual capital accounting is an important topic that needs more study. Australia, Ireland, Italy, Malaysia, the United Kingdom, and Canada are among the countries that have produced cross-sectional studies on IP disclosure. For example, human capital reporting was one area that Subbarao and Zeghal (1997) zeroed in on in relation to intellectual capital disclosure. On the other hand, Vergauwen and Alem (2005) highlight the emergence of comparative international studies in this field. García-Meca et al. (2005) broadened the scope of intellectual capital disclosure research to include not only annual reports but also other forms of communication, such as analyst presentations. However, intellectual capital disclosure is not without cost. Preparing, sharing, and auditing this information can incur significant expenses (García-Meca et al., 2005; Vergauwen & Alem, 2005). Additionally, voluntarily disclosed confidential information may harm a company's competitive position. Proprietary information—private knowledge that third parties could exploit to impose costs on the business-can lead to what are known as proprietary costs (García-Meca et al., 2005; Vergauwen & Alem, 2005). The possibility that third parties may utilise information that the firm discloses against it and have a negative impact on it influences disclosure decisions. Therefore, managers' unwillingness to divulge volunteer information is explained by proprietary costs. Businesses conceal knowledge that may be exploited by other parties (competitors, for instance, who could alter their production schedules) and result in lower future cash flows. Intellectual Capital (IC) is increasingly recognized as a critical asset for organizations seeking to enhance their competitive advantage and market value. The growing body of literature reflects diverse perspectives on the determinants and implications of IC disclosure (ICD), particularly within varying organizational contexts.

The correlation between corporate governance, disclosure of intellectual capital (IC), and market capitalization was investigated by Widiatmoko et al. (2020) for Indonesian companies that were listed in the Corporate Governance Forum from 2015 to 2018. According to their path analysis, there is a substantial correlation between good corporate governance and IC disclosure, which means that transparent corporate governance policies have a beneficial effect on market valuation. The importance of IC disclosure as a conduit for conveying corporate value to stakeholders is highlighted in this research. Similarly, Naimah and Mukti (2019) investigated the impact of audit committee characteristics and company attributes on IC disclosure among LQ45listed companies on the Indonesia Stock Exchange. Their findings showed that while the size of the audit committee had no significant effect on IC disclosure, the frequency of committee meetings positively influenced disclosure practices. Interestingly, company size and profitability did not have a notable impact. These results provide insights into the specific governance mechanisms that either promote or hinder effective IC disclosure, highlighting the complex relationship between organizational characteristics and disclosure practices. In a related study, Tulung et al. (2018) explored the connection between corporate governance and IC disclosure within Indonesian private banks. They found that the composition of independent commissioners and the competence of the audit committee significantly affected IC disclosure, whereas the competence of the risk oversight committee had no discernible impact. Their research emphasizes the critical role of specific governance elements in shaping transparency in financial reporting, particularly in the banking sector, where stakeholder trust is paramount. In the educational sector, Ulum et al. (2019) examined ICD practices among Indonesian universities and its impact on prospective student interest. Their analysis revealed that, although no university fully disclosed all IC indicators, a positive correlation existed between the extent of ICD and student interest. This study highlights the relevance of IC in educational contexts, suggesting that transparency in disclosing intellectual resources can enhance institutional attractiveness. Nicolò et al. (2023) expanded the discourse to healthcare organizations in Italy, providing insights into ICD practices in this sector. Their content analysis of 158 healthcare organizations' websites indicated a prevalent focus on structural and relational capital disclosures. Moreover, their multivariate regression analysis identified size and indebtedness as negative determinants of ICD, while the presence of a female general manager positively influenced disclosure levels. This research is significant as it shifts the focus towards voluntary disclosure practices in healthcare, an area often underexplored in previous ICD studies. In summary, the literature indicates a multifaceted relationship between corporate governance, organizational characteristics, and ICD across various sectors. The studies collectively reveal that effective governance mechanisms, coupled with organizational attributes, play a vital role in enhancing transparency and stakeholder engagement through intellectual capital disclosures. These insights highlight the necessity for organizations to adopt comprehensive governance strategies that not only comply with regulations but also actively promote transparency in disclosing their intellectual assets. As ICD continues to evolve, future research should further explore the implications of these disclosures on stakeholder behavior and organizational performance.

2.2 Corporate Governance

The way stakeholders influence management's decision-making is shaped by corporate governance, which is formed by a combination of institutional, legal, social, and cultural variables (Weimer and Pape, 1999). The Bangladesh Enterprise Institute drew out a code of corporate

governance in 2004 that applies to all types of enterprises in Bangladesh, including those in the financial, non-financial, and public sectors. The objectives of this law include fighting corruption, making the most efficient use of resources, and helping businesses keep their cash flow steady. On top of that, the BSEC released a notice in 2012 outlining the requirements for corporate governance that any publicly traded firm seeking to be listed on a stock market in Bangladesh had to meet. Mahmood and Islam (2015) note that trustworthy ways of keeping tabs on things and evaluating performance are essential to good corporate governance. Going above and beyond what is required by current prudential requirements, these technologies not only aid in the prevention of financial losses and the detection of fraudulent acts, but they also promote confidence among stakeholders and depositors. Management may reassure investors about the impact of intellectual capital on the firm's value by managing the level of transparency. Businesses should be able to reduce information asymmetry and opportunistic behavior if they disclose their intellectual capital at a high level. The development of testing hypotheses helped to maintain the relationship's centrality. The term "corporate governance" refers to the system of checks and balances put in place to keep an organization honest and answerable to its constituents. There is a large amount of literature that shows how corporate governance affects earnings management, investment policy, and stakeholder protection, among other business practices. In their extensive study of listed Vietnamese companies, Nguyen et al. (2024) find that earnings management techniques are strongly correlated with poor corporate governance. Their research, which included 800 non-financial companies over a decade, used a comprehensive corporate governance index that was in line with Vietnam's best practices. The results show that private companies with a lot of foreign ownership benefit the most from good governance since it reduces the impact of actual earnings management and discretionary earnings management. This highlights the need of good company governance in ensuring honest and open financial reporting. Using a large dataset consisting of 88,929 firm-year observations, Dak-Adzaklo and Wong (2024) investigated the relationship between corporate governance improvements and community trust in 35 nations. In contexts where trust is low, their research shows that corporate governance improvements have a favorable effect on investment and financing methods. Even in settings where public trust is low, regulatory reforms can boost company performance, as this study shows that formal and informal institutions have a complex connection. Adeneye et al. (2024) investigated the link between earnings management and ESG performance across UK enterprises, with a focus on the sustainability element of corporate governance. They looked at how governance mediated the connection. Results show that additional governance tools, including as gender diversity on boards, help to reduce the detrimental effects of profits management on environmental, social, and governance (ESG) outcomes. This study lends credence to agency theory by showing how good governance may limit managerial opportunism and how crucial corporate governance frameworks are for fostering sustainable business practices. The effect of corporate governance on the cash reserves of publicly listed Korean firms was the primary research topic of Chua and Lee (2024). In line with the flexibility hypothesis, their study using a random effect generalized least squares regression model showed that companies with better governance systems tended to have lower levels of cash on hand. Investors and regulators may learn a lot about good cash management tactics within the framework of corporate governance from this study, which shows that adherence to governance indicators linked to shareholder protection and board structure is linked to reduced cash reserves. Finally, in 2024, Franzoni and Ait Allali looked into Islamic bank-specific forms of corporate governance, highlighting the distinctive stakeholder connection between Islamic banks and their participatory depositors who act in accordance with the Profit and Loss Sharing concept. In order to better understand the governance procedures and regulatory frameworks put in place to safeguard these depositors' interests, they compared Malaysia with Morocco. This research adds to the ongoing conversation on sustainable governance models by highlighting the need of Islamic banking-specific safeguards. The literature also highlights the many facets of corporate governance and how it affects company conduct, financial honesty, sustainability, and the protection of stakeholders. Strong governance frameworks are crucial for encouraging ethical standards, improving financial performance, and building trust in many types of organizations, according to these researches. To stay ahead of the curve and take advantage of new possibilities as they arise, corporations must keep digging into the mechanics of corporate governance.

2.3 Hypotheses Development

Board of Directors' Size (BODS)

A key component of good corporate governance is the size of the board of directors. Imperfect boards sometimes lack both executive and non-executive directors. Goshi (as of 2002). Boards should include eight to eleven members, according to Leblanc and Gillies (2003), but eight to nine, according to Lipton and Lorsch (1992). While BSEC (2012) states that a company's board members cannot have less than five or more than twenty members, BEI (2004) suggests that internationally effective corporate boards have seven to fifteen directors. Huge boards hinder communication between directors, reduce their capacity to oversee management, and eventually lead to bad decisions (Eisenberg, Sundgren & Wells, 1998; Jensen, 1993). all of these factors. According to study by Alam and Akhter (2016), board members should have a role in ensuring the efficacy of board decisions. Size of the board of directors correlates with disclosure of intellectual capital. Research has shown that more extensive disclosure of intellectual capital (ICD) may be achieved when boards are bigger because they promote better corporate governance and more openness. For example, according to Kusumawardani et al. (2021), ICD is positively affected by a larger board since it allows for greater monitoring and lowers agency expenditures. The intricacies of intellectual capital and the need for thorough reporting may be best handled by a board with more members. Even though other studies have looked at other aspects of boards (e.g., Mooneeapen et al., 2022; Vitolla et al., 2020), the main point is that the size of the board has a big impact on how much and what kind of information about intellectual capital companies disclose. Thus,

 H_{a1} : There is relationship between intellectual capital disclosure and size of the board of directors.

Director Independence (DI)

It is stated by Haniffa and Cooke (2002) that the ratio of independent directors to total directors is the definition of board independence. In his article from 2002, Goshi makes the argument that the board need to consist of some non-executive members in addition to the executive directors. Jensen and Meckling (1976) claim that independent board members are necessary for enhancing corporate governance processes and preventing executive directors from participating in opportunistic action. They further emphasise the need of having independent board members. In addition, Haniffa and Cooke (2005) state that a greater number of non-executive members on the board may have a substantial impact on transparency since they bring a larger range of experience, prestige, and contacts to the table. In their study from 1983, Fama and Jensen discovered that independent directors have the ability to remove agency conflicts between owners and managers by compelling management to provide additional information. With this information, it appears that independent directors might be considered an instrument of internal governance. Previous study on voluntary disclosure conducted by Beasley (1996) and Chen and Jaggi (2000) found that the number of non-executive directors has a positive correlation with the power of the board to influence choices about voluntary disclosure. This was found to be the case. According to the findings of these research, the makeup of the board was investigated as a potential predictor of voluntary disclosure. Non-executive directors were shown to have a positive correlation with the quantity of voluntary information that companies provided in their annual reports, according to Patelli and Prencipe (2007), who conducted one of the few studies that focused on this particular demography. Therefore, we have come up with the hypothesis that is shown here.

 H_{a2} : There is relationship between intellectual capital disclosure and director independence.

Gender Diversity (GD)

Several researchers in the field of corporate governance have come to the conclusion that gender parity on boards of directors improves business outcomes. Using stakeholder theory, Galbreath (2010) argues that women directors may be better able to engage with different types of stakeholders, meet their needs, and ultimately improve company social activities and requirements because of their strong interpersonal abilities. Also, according to Kramer, Konrad, Erkut, and Hooper (2006), companies may benefit from having more women on their boards if they were to appeal to a wider range of investors and come up with solutions to problems that benefited everyone. What effects does gender diversity have on voluntary disclosure? Researchers have examined real data to find out. The disclosure of intellectual capital was positively correlated with the number of women on the board, according to research on Kenyan banks done by Barako and Brown (2008). Additionally, studies conducted on publicly listed Australian corporations found a positive association between disclosures and the presence of female board members (Galbreath, 2011). Furthermore, in a study of Fortune 500 companies, Williams (2003) discovered a positive association between the number of female directors and corporate charitable contributions and community participation. Thus, the following has been developed.

 H_{a3} : There is relationship between intellectual capital disclosure and gender diversity.

Audit Committee

The subcommittees that supervise and make significant decisions and procedures also have an influence on board monitoring (Cotter and Silvester, 2003). This is in addition to the makeup and organization of the board, which also have an impact. According to Turley and Zaman (2007), the research on the issue has accepted for some time that audit committees are beneficial tools for corporate governance. This recognition has been made in the literature for some time. In order to strengthen internal control, decrease agency expenses, and promote intellectual capital disclosure through effective monitoring, an efficient audit committee should be a component of an internal governance system (Li, Mangena, & Pike, 2012). According to the Smith Report (2003) from the United Kingdom, it is the responsibility of audit committees to make certain that the interests of shareholders are sufficiently protected in respect to financial reporting and internal control. When a business is in the process of preparing its interim reports, preliminary announcements, and formal statements that are connected to them, there are a variety of decisions and issues that may come up. Two examples of these sorts of decisions and difficulties are the release of information that is sensitive to price and the assessment of the company's operations and finances. These are also issues that ought to be investigated by audit committees. It is reasonable to anticipate that audit committees will have a substantial degree of influence over the disclosure of this information. This is due to the fact that intellectual capital is responsible for a major portion of the value of many firms. McMullen (1996), as cited by Ho and Wong (2001), has pointed out that the inclusion of an audit committee has been related with increased levels of reliability in financial reporting, as well as improved levels of quality in reporting and increased levels of openness. A similar positive correlation between audit committee and reporting quality was found by Pomeroy and Thornton (2008) in the setting of emerging economies. This association was shown to be positive across the board. As stated in BSEC (2012), the existing legal framework of Bangladesh mandates that an audit committee must consist of two independent directors. This requirement is in conformity with the requirements of the mandate. Additionally, the chair of audit committees must to be a competent individual who is also knowledgeable in accounting and finance related matters. In their respective studies, Li et al. (2012) and Li, Pike, and Haniffa (2008) found that there is a positive association between the size, frequency, and disclosure of intellectual capital by the audit committee, as well as other committee features, and intellectual capital. Which is why:

 H_{a4} : There is relationship between intellectual capital disclosure and audit committee.

Directors Ownership

The resources that a stakeholder possesses are directly related to their influence on management, as stated by Smith, Adhikari, and Tondkar (2005). The level of voluntary disclosure and monitoring is influenced by the ownership of the directors, according to Eng and Mak (2003). In order to reduce agency costs and information asymmetry, shareholders are pushing for increased transparency from companies, according to agency theory study by Raffournier (1995). However, according to Cormier, Magnan, and Velthoven (2005), closely held companies are more likely to have a system of active governance that is difficult for smaller, less knowledgeable investors to implement because dominant shareholders have access to all the information they need. Holland (2006) argues that this information is particularly crucial for intellectual capital disclosure since fund managers have access to it through private communication channels. Thus, we have develop the following hypothesis.

 H_{a5} : There is relationship between intellectual capital disclosure and directors' ownership.

Government Ownership

Another important factor that determines corporate governance is government ownership. According to Said, Hj Zainuddin, & Haron (2009), everyone has faith in the government. Furthermore, he has said that because the government is involved, businesses must follow the rules that they set out. Government ownership was linked to higher voluntary contributions and disclosures, according to Eng and Mak's 2003 research. The results are in line with those of Nasir and Abdullah (2004), who discovered that the level of government shareholdings affects businesses' voluntary contributions.

 H_{a6} : There is relationship between intellectual capital disclosure and government ownership.

Foreign Influence

The percentage of foreign ownership may have an impact on the degree of voluntary disclosures, according to earlier research by Haniffa and Cooke (2002) and Al-Akra, Eddie, and Ali (2010). This is because there is a high likelihood of information asymmetry because of factors like language barriers, a lack of local knowledge, and physical distance between management and owners. According to Al-Akra et al. (2010), international investors in developing markets like Bangladesh will want enterprises to provide more information than local investors do since they are more unsure and inexperienced with the market. Cahaya, Porter, Tower, & Brown (2012) discovered a favourable correlation between global operations and labour practices disclosures for Indonesian companies, which is somewhat pertinent to this study. Foreign investors will therefore probably have an impact on Bangladeshi enterprises' disclosure policies regarding intellectual capital.

 H_{a7} : There is relationship between intellectual capital disclosure and foreign influence.

2.4 Control Variables

Control factors in the research were company size and industry affiliation. Cahaya et al. (2012), Alvarez Dominguez (2012), Jindal and Kumar (2012), Alam and Deb (2010), Guthrie, Petty, and Ricceri (2006), and Oliveira, Lima, and Craig (2006) are among the several studies that have demonstrated a correlation between the size of a company and its disclosure of intellectual capital. The second control variable, industry affiliation, has also shown some explanatory value when it comes to intellectual capital disclosure. According to several studies (Bozzolan et al., 2003; Bozzolan et al., 2006;; Oliveira et al., 2006; Petty and Cuganesan, 2005), variances in intellectual capital disclosure policies can be attributed to both industry and business size. Firm size and industry are key factors in explaining variations in intellectual capital disclosure across listed Italian firms, according to Bozzolan et al. (2003), who examined annual reports from 2001. Compared to low-profile enterprises in other sectors, high-profile firms in Italy's technology industry disclosed their intellectual capital at substantially different levels. On the other hand, they did find that publicly known and privately held businesses shared a lot of the same information. The impact of industry type (traditional vs. knowledge-intensive) and country on the

disclosure of intellectual capital was later investigated by Bozzolan et al. (2006). They found that company size and industry could accurately predict the amount of IP disclosure after comparing the yearly reports of 30 matching companies in the UK and Italy.

2.5 Control Hypotheses

Firm Size (FS)

Petty and Cuganesan (2005), Bozzolan et al. (2006), Guthrie et al. (2006), Oliveira et al. (2006), García-Meca et al. (2005), and Bozzolan et al. (2003) are among the studies that consistently indicate a favorable association between firm size and intellectual capital disclosure (ICD). For a number of reasons, larger corporations are more likely to be forthcoming with details on their intellectual property (Petty and Cuganesan, 2005, p. 47). To start, bigger businesses can afford to collect and produce more extensive information since they have more resources and more experts on staff. Second, they probably have more intellectual capital to disclose because of their bigger workforces and stakeholder bases. Third, bigger corporations are more likely to provide a deluge of information to their stakeholders due to the increased visibility that comes with being publicly traded. Also, bigger businesses are more likely to be the target of unfavorable reactions since they are subject to more scrutiny from stakeholders. Due to their presence in more geographic and product markets, big companies, according to Brammer and Pavelin (2008), tend to have more diversified and extensive stakeholder groups. This means that companies need to be more transparent about their intellectual property if they want to establish and keep a good reputation. Thus we have develop the following.

 H_{a8} : There is a relationship between intellectual capital disclosure and firm size.

Industry Affiliation

Intellectual capital (IC) disclosure is greatly affected by industry affiliation, according to several research (e.g., Petty and Cuganesan, 2005; Oliveira et al., 2006; Bozzolan et al., 2006; Bozzolan et al., 2003;). Various reasons are put up by Bozzolan et al. (2006, p. 100) to account for the impact of the industry on corporate disclosure. To start, the dangers of disclosing sensitive information are greater in some businesses than in others, which drives up proprietary prices in those sectors. Second, in order to properly evaluate a business's worth, external investors want them to know how the firm stands within its sector, therefore they frequently demand that companies provide industry-specific information in their annual reports. Furthermore, the disclosure procedures of a leading firm in an industry can set the standard for the rest of the industry. "Bandwagon" impacts, in which businesses blindly follow popular trends, could have historical roots as well. Lastly, the amount of disclosure can be affected by how much a certain industry is exposed to other markets. According to Bozzolan et al. (2003), there is a larger need for intellectual capital information from companies operating in industries that have higher future uncertainty and more difficult result predictions. This is an important factor to consider when considering IC disclosure. According to Bozzolan et al. (2006) and Bozzolan et al. (2003), companies in knowledge-intensive businesses are required to reveal more information on their intellectual capital than those in more traditional industries. Therefore:

 H_{a9} : There is relationship between intellectual capital disclosure and industry affiliation.

3. Research Methodology

3.1 Sample Design

3.1.1 Sampling Framework

This study is conducted on firms of industries which contain high intellectual capital companies which were banks, ceramics and pharmaceuticals. The population of the report is all the listed companies under these sectors on the Dhaka Stock Exchange (DSE) operating in Bangladesh.

3.2 Sample Selection

20 firms are taken as sample from three industries of the total population to analyze the relationship between intellectual capital disclosure and corporate governance resulting in a total

of 60 firm-year observations. The time frame considered for the study is financial year-ends between July 2019 and June 2022. The sample firms are mentioned as follows:

Serial	Banks	Pharmaceuticals	Ceramics
No.			
1	AB Bank Limited	Beacon Pharmaceuticals Limited	Fu-Wang Ceramic Industries Ltd.
2	Al-Arafah Islami Bank Ltd.	Beximco Pharmaceuticals Ltd.	RAK Ceramics (Bangladesh) Limited
3	Bank Asia Ltd.	Marico Bangladesh Limited	Shinepukur Ceramics Limited
4	Brac Bank Ltd.	Renata Ltd.	Standard Ceramic Industries Ltd.
5	The City Bank Ltd.	Square Pharmaceuticals Ltd.	
6	Dhaka Bank Ltd.		
7	Eastern Bank Ltd.		
8	Mutual Trust Bank Ltd.		
9	One Bank Limited		
10	Southeast Bank Ltd.		
11	Trust Bank Limited		

Table-1: List of Sample Firms

3.2 Data Analysis

Because of their suitability for investigating the connections between IP disclosure and other corporate governance indicators, the researchers in this study choose to use linear regression and analysis of variance as their statistical tools. Linear regression is particularly suited for this analysis as it allows for the exploration of relationships between a dependent variable (intellectual capital disclosure) and multiple independent variables (such as board size, gender diversity, and ownership structures). This method enables us to quantify the strength and direction of these relationships, making it a robust choice for our research objectives. ANOVA, on the other hand, is useful for comparing means across different groups and assessing the impact of categorical variables, such as industry affiliation. By using ANOVA, we can determine whether significant differences exist in intellectual capital disclosure among firms operating in different industries, providing deeper insights into how context influences disclosure practices. These techniques were chosen over others, such as logistic regression or more complex multivariate methods, due to the nature of our dependent variable, which is continuous and measured on a scale. Moreover, the simplicity and interpretability of linear regression results make it accessible for stakeholders, ensuring that findings can be effectively communicated to both academic and practical audiences. Overall, the combination of linear regression and ANOVA provides a comprehensive framework for analyzing the data, allowing for both detailed examination of individual relationships and broader comparisons across groups. This methodological approach is aligned with the study's goals of elucidating the dynamics of intellectual capital disclosure in relation to corporate governance in Bangladesh.

3.2.1 Research Approach

The study's descriptive technique was carried out using numerical standards, and its findings and analysis were based on quantitative research. One of the goals of this study was to quantify the disclosure of intellectual capital and conduct content analysis using an easy-to-use and trustworthy method. According to Vuontisjarvi (2006), the emphasis was on whether or not disclosures were made, not on how much information was disclosed about a given disclosure. A disclosure instrument was created, and 39 points have been chosen, based on studies conducted by Abeysekera and Guthrie (2004), Oliveira et al. (2006), Abeysekera (2008), and Jindal and Kumar (2012) on a review of the prior literature. The dichotomous technique has been employed to determine the number of chosen elements that have been revealed, with 1 denoting the factor's existence and 0 denoting its non-existence. By dividing the actual number of variables reported in the firm's published reports by the maximum number of disclosure factors (39), the disclosure percentage for each company in a given year was determined.

Disclosure percentage $(D_p) = \frac{\text{Number of factors disclosed by a firm in a year}}{\text{Total number of disclosure factors (39)}} \times 100$

3.2.2 Data Collection Method

Secondary data was taken from the sample businesses' annual reports. The annual reports of the sample firms provided the information on their intellectual capital and corporate governance characteristics. According to Khan, H.U.Z., Halabi, and Samy (2009), one of the most often utilised forms of documentation for investors is the annual report, which is why it was obtained from corporate websites.

3.3 Variable Selection

3.3.1 Dependent Variable

ICD = Intellectual Capital Disclosure is the proportion of items in the human resources disclosures measure that are provided by the company.

3.3.2 Independent Variables

BODS = Number of Directors in a Board
GD = Proportion of female members of the board of directors.
BIND = Percentage of Independent Directors in the Board
ACOM = Number of members in Audit Committee
SADOWN = Percentage of shares held by Sponsors and Directors
GOVOWN = Percentage of shares held by Government
FOROWN = Percentage of shares held by Foreign Investors
FS = Firm size measured as the natural logarithm of total assets
IA = Categorical variable coded "1" for firms affiliated with banking and finance, "2" for other service firms, "3" for manufacturing firms, "4" for agricultural, extraction, mining and other firms engage in primary activities, and "5" for conglomerates.

E = error term

3.4 Model Specification

In this model, regression model is used to understand the relationship between intellectual capital disclosure and corporate governance, which is shown as follows: The fitted regression model for the study is as follows,

ICD = a0 + a1BODS + a2BIND + a3GD + a4ACOM + a5SADOWN + a6GOVOWN + a7FOROWN + a8FS + a9IA + E

3.5 Tools of Data Analysis

3.5.1 IBM SPSS Statistics

IBM SPSS Statistics is a software program that is utilized for logical batched and non-batched statistical analysis tools. It offers a variety of statistical calculations, including linear regression analysis, model summary, analysis of variance, coefficient, and other similar calculations. An investigation of the connection between ICD and corporate governance has been carried out with the assistance of this software.

3.5.2 Content Analysis

This research measures the amount of intellectual capital released by sample firms using a content analysis approach. This method involves grouping the revealed information into many item categories that represent the various facets of intellectual capital needed for analysis. This approach has been applied in a number of research on intellectual capital disclosure (Vergauwen et al., 2007; Brennan, 2001; Guthrie and Petty, 2000; Bozzolan et al., 2003; Abeysekera and Guthrie, 2005; Oliveira et al., 2006; Oliveras et al., 2008; Petty and Cuganesan, 2005). Identifying

the existence or lack of intellectual capital information is the most basic use of this content analysis approach (Bukh et al., 2005; Brennan, 2001; Guthrie and Petty, 2000;). To determine how many of the revealed factors are highly and least disclosed between the sample years selected and the average of the variables used for the outcome, content analysis has been done. The computation was carried out by taking the total number of businesses that disclosed each element in a given year, dividing that total by the number of firms that were included in the sample, or 20, and then taking the average of the last three years. The five characteristics that the majority of businesses supply as a percentage are considered "highly disclosed," whereas the five factors that the least number of firms provide as a percentage are considered "least disclosed."

Factors percentage (F_p) = $\frac{Average total number of firms disclosing each factor x 100$

Total number of firms

3.5.3 Linear Regression Analysis

It makes an effort to fit a linear equation to the data in order to represent the relationship between many variables. With X being the independent variable and Y being the dependent variable, the equation for a linear regression line looks like this: Y = a + bX.

4. Findings and Analysis

4.1 Trend Analysis

Table-2: Average Per	2019-2020	2020-2021	
Firms/Year			2021-2022
AB Bank Limited	76.92	76.92	76.92
Al-Arafah Islami Bank Ltd.	23.08	28.21	28.21
Bank Asia Ltd.	61.54	66.67	66.67
Brac Bank Ltd.	71.79	74.36	74.36
The City Bank Ltd.	61.54	61.54	66.67
Dhaka Bank Ltd.	43.59	51.28	53.85
Eastern Bank Ltd.	94.87	92.31	94.87
Mutual Trust Bank Ltd.	56.41	64.10	71.79
One Bank Limited	38.46	41.03	53.85
Southeast Bank Ltd.	30.77	61.54	74.36
Trust Bank Limited	43.59	48.72	51.28
Beacon Pharmaceuticals Limited	10.26	15.38	17.95
Beximco Pharmaceuticals Ltd.	5.13	15.38	23.08
Marico Bangladesh Limited	46.15	48.72	48.72
Renata Ltd.	10.26	15.38	17.95
Square Pharmaceuticals Ltd.	12.82	23.08	25.64
Fu-Wang Ceramic Industries Ltd.	5.13	2.56	2.56
RAK Ceramics (Bangladesh) Ltd.	41.03	41.03	41.03
Shinepukur Ceramics Limited	15.38	15.38	15.38
Standard Ceramic Industries Ltd.	2.56	2.56	2.56
Average Percentage of Disclosure	37.56	42.31	45.38

As per the result of the above Table 2, trend analysis for the percentage change in disclosure has been performed. The average percentage of factors disclosed by the firms in a year has been taken to differentiate among the years which resulted in an increasing pattern. This trend shows that in financial year of 2019-2020, 37.56% of factors have been disclosed and there has been an increase of 4.75% i.e. 42.31% of factors were being disclosed in 2020-2021. Moreover, this continued though at a lower rate i.e. by 3.07% to 45.38 in the year 2021-2022.



Figure 1: Disclosure Pattern

4.2 Content Analysis Results

Table-3: Disclosed Factors Perce	ntage
----------------------------------	-------

Disclosed Factors	HIGHLY DISCLOSED
Number of employees	82%
Shares owned by directors / managers	82%
Gratuities provided	72%
Professional Qualification for board members and executive management	63%
Initial training / orientation	62%
FACTORS	LEAST DISCLOSED
Cost of training	20%
Paid sick leave	20%
Time spent training	22%
Employee work-life balance principle - appropriate balance, etc.	23%
Programs targeting immigrants or ethnic minorities or historically disadvantaged groups	25%
AND	
Programs targeting persons with disabilities	

The disclosed factors percentage table shows the highlighted factors which are mostly and least disclosed by the sample firms from financial years 2019-2020 to 2021- 2022. As per the table, it can be seen that the average of three years has been taken to calculate which of the factors have been highly and least disclosed among the years. The highly disclosed factors contain the number of employees, the level of gratuities provided to the employees and the level of training provided to them. Also, it contains information about the shareholding pattern by owners and the professional qualification of the directors in the board. However, factors related to the cost and time spent for training are least disclosed. Moreover, the list contains information like paid sick leaves and proper work – life balance related information. Also, it lacks details about programs involving disabled people and those belonging to minority groups in Bangladesh.

4.3 Linear Regression Model Testing

Table-4: Model Summary

Model	R	R R Square A		Std. Error of	
			Square	the Estimate	
1	.905	.820	.787	12.20390	
a. Predictors: (Constant), Industry Affiliation, Gender Diversity, Directors Ownership, Foreign Influence, Government					
Ownership, Director independence, Audit Committee, Board of Directors' Size, Firm Size					
b. Dependent Variable: Intellectual Capital Disclosure					

Table 4 summarizes the data about the fitness of the tested model. The first thing to notice is that the dependent variable and the model are significantly correlated with each other (R=.905). A second concept is the coefficient of determination (R-square), which measures the extent to which the independent variables can explain the variation in the dependent variable. An R-squared value of.820, or 82%, shows that the independent factors can explain the variance in the dependent variable, intellectual capital disclosure. Finally, we look at the appropriate corrected R-squared value of.787, which is 78.7 percent.

Table-5: ANOVA						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
Regression	34420.192	9	3824.466	25.263	.000b	
Residual	7569.299	50	151.386			
Total	41989.491	59				
a. Predictors: (Co	a. Predictors: (Constant), Industry Affiliation, Gender Diversity, Directors Ownership, Foreign Influence,					
Government Ownership, Director independence, Audit Committee, Board of Directors' Size, Firm Size						
b. Dependent Variable: Intellectual Capital Disclosure						

The computations in Table 5 give insights into the degrees of variability in a regression model and serve as a foundation for significance tests. The F test value of 25.263 is known to be significant because the level of significance is less than 5%, as can be seen from the preceding table.

		Table-5: Coe	melents		
	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta	-	
(Constant)	-24.845	56.480		440	.662
Board Of Directors	-2.702	.704	390	-3.838	.000
Independent Directors	337	.162	161	-2.076	.043
Gender Diversity	.512	.154	.229	3.332	.002
Audit Committee	5.541	2.143	.199	2.586	.013
Directors' Ownership	.348	.079	.282	4.414	.000
Government Ownership	46.217	13.611	.217	3.395	.001
Foreign Influence	.199	.181	.081	1.103	.275
Firm Size	8.354	4.636	.298	1.802	.078
Industry	-15.239	4.362	573	-3.494	.001

Table-5: Coefficients

The tested mode's regression coefficient results are shown in Table 5 and help to understand how intellectual capital disclosure varied across the sample period. Looking at the table, foreign ownership is the only corporate governance component that has been studied and shown to be insufficient to explain the difference in intellectual capital disclosure. With ß =.081 and P value =.275, the coefficient of this component is not statistically significant, indicating that the hypothesis is not supported and that there is only a negligible positive correlation between foreign impact and intellectual capital disclosure. The results are in line with research conducted by Branco and Rodrigues (2008) on Portuguese businesses and Sufian and Zahan (2013) on Bangladeshi businesses, who found no evidence of a significant correlation between foreign influence and corporate social disclosures. The board size is the first independent variable used in this study, with a P value of .000 and a ß value of -.390. It indicates that there is a strong inverse link between the size of the board and the disclosure of intellectual capital, supporting the concept. This study supports the findings of earlier researchers like Lipton and Lorsch (1992), who suggested that having a large number of directors on a board might have a detrimental effect on decision-making and that the costs associated with larger boards might outweigh the advantages. Jensen (1993) asserts that coordination issues become less significant as group sizes rise. Moreover, a larger board membership typically results in less efficient oversight of the top management (Yermack, 1996).

The independent variable, independent directors, has a $\beta = -.161$ and a P value of 0.043, indicating that the hypothesis is accepted and that there is a substantial inverse link between intellectual capital disclosure and independent directors. The link is found to be in line with studies that provide a pessimistic view of autonomous non-executive managers as arbitrary and weak members of the hierarchy. Furthermore, Bhattacharjee et al. (2017) suggested in their study that disclosures of intellectual capital are not impacted by an increased number of outside independent directors on the board. Additionally, a negative correlation was found between the percentage of independent directors and the degree of voluntary disclosure by Eng and Mak (2003) in a study of Singaporean companies, Abdelsalam and El-Masry (2008) in a study of Irishbased firms, Gul and Leung (2004) in a study of Hong Kong firms, and Barako, Hancock, and Izan (2006) in a study of Kenyan companies. Gender diversity, or the percentage of women on the board, has a ß = .229 and P value of .002, indicating that the hypothesis is accepted and that there is a substantial positive correlation between the disclosure of intellectual capital and gender diversity. The degree of women's participation on the board and CSR disclosure was shown to be significantly positively correlated, which is in line with research done by Barako and Brown (2008) in a study of Kenyan banks. Likewise, favourable associations have also been documented by Williams (2003) in a study of Fortune 500 businesses and Galbreath (2011) on the boards of publicly listed Australian companies.

The hypothesis is accepted and there is a strong positive association between the audit committee and intellectual capital disclosure, as indicated by the independent variable audit committee's ß =.199 and P value =.013. This is consistent with the Smith Report's (2003) suggestions that audit committees should be in charge of monitoring records like the operating financial review. Additionally, there is a favourable correlation between the audit committee and company voluntary disclosure (Akhtaruddin & Haron, 2010) as well as the quality of financial reporting (Kent, Routledge, & Stewart, 2010). Directors' ownership is the independent variable, and its ß =.282 and P value =.000 values indicate that the hypothesis is accepted and that there is a strong positive link between disclosure of intellectual capital and directors' ownership. Studies on voluntary disclosure that conclude that there is a positive correlation between ownership concentration and voluntary disclosure, including those by Mitchell, Chia, & Loh (1995), Chau and Grey (2002), Eng and Mak (2003), and Leung and Horwitz (2004), support the conclusions. Government ownership is the independent variable, and its ß =.217 and P value =.001 values indicate that the hypothesis is accepted and that there is a strong positive link between government ownership and disclosure of intellectual capital. The outcome is The current analysis compares government ownership to previous studies conducted by Ahmed Haji and Mohd Ghazali (2013), Said, Zainuddin, and Haron (2009), Amran and Devi (2008), and Zunker (2011). It does this by calculating the proportion of shares owned by the government relative to the total number of shares. company size is the control variable. Its β =.298 and P value =.078 indicate that the hypothesis is accepted and that company size and intellectual capital disclosure have a positively correlated, moderately significant connection. The outcome is in line with (see, for instance, Bozzolan et al., 2003; Bozzolan et al., 2006; García-Meca et al., 2005; Oliveira et al., 2006; Petty and Cuganesan, 2005). The industry affiliation control variable has a β = -.573 and P value of.001, indicating that the hypothesis is accepted and that industry affiliation and intellectual capital disclosure have a significant negative relationship. Leventis and Weetman's (2004) analysis of Greek enterprises demonstrates consistency in their finding that industry membership is not correlated with the disclosure of intellectual capital. Similar findings were obtained in studies of Spanish enterprises by Arcay and Vazquez (2005), Indian firms by Nurhayati et al. (2016), and Singaporean companies by Eng and Mak (2003).

4.4 Summary of Tested Hypotheses

Below is a summary of the tested hypotheses. The findings indicate that the model used for the investigation has 78.7% explanatory power.

Hypotheses	Variables	Accepted/Rejected
H_1	BODS	Accepted
H ₂	BIND	Accepted
H ₃	GD	Accepted
H4	ACOM	Accepted
H ₅	SADOWN	Accepted
H ₆	GOVOWN	Accepted
H ₇	FOROWN	Rejected
H ₈	FS	Accepted
H9	IA	Accepted

5. Conclusion

Firms in Bangladesh are the focus of this study, which seeks to understand how ICD relates to corporate governance procedures. Despite a formal corporate governance framework, the results show that the conventional character of the corporate world may make it difficult for these initiatives to improve ICD. In particular, the study reveals that industry affiliation, board size, and the number of independent directors are negatively correlated with disclosure levels, whereas foreign influence has a small but noticeable effect on ICD. On the other side, a higher ICD is positively correlated with government presence, concentrated ownership, and robust audit committees. Comprehensive disclosures about intellectual capital are more likely to be provided by businesses with superior governance structures and stakeholder responsibility.

6. Managerial Implications

The findings of this study have several significant implications for corporate managers and policymakers in Bangladesh. First, companies should prioritize the composition and effectiveness of their boards. Rather than simply increasing board size, organizations should focus on selecting directors with relevant expertise and experience, particularly in areas related to intellectual capital. This approach can enhance decision-making and improve the quality of disclosures. Second, strengthening audit committees is crucial. Firms should ensure that audit committee members are well-trained and possess a deep understanding of intellectual capital reporting. This training will empower them to oversee disclosure practices effectively and ensure compliance with established standards.

Policymakers play a vital role in shaping corporate governance practices. They should consider establishing clear regulations for intellectual capital disclosure that mandate reporting standards across industries. Such regulations can enhance consistency and transparency, making it easier for stakeholders to compare firms. Additionally, introducing incentives for companies that voluntarily disclose intellectual capital can encourage broader participation in transparency initiatives. For instance, tax benefits or public recognition could motivate firms to enhance their disclosure practices. Furthermore, policymakers should facilitate workshops and training programs that educate firms on the importance of intellectual capital and effective governance. By fostering a culture of transparency and accountability, these initiatives can lead to improved stakeholder trust and engagement. Finally, it is essential for regulatory bodies, such as the Securities and Exchange Commission of Bangladesh (SECB), to monitor compliance with disclosure standards actively. Regular assessments and feedback can help firms align their practices with best practices and enhance the overall quality of corporate governance in the country. By implementing these concrete suggestions, both corporate managers and policymakers can work together to create an environment that values intellectual capital and fosters greater transparency in disclosures. This collaboration will ultimately benefit the broader economy and improve stakeholder confidence in the corporate sector.

6. Scope for Further Study

The study presents valuable insights into intellectual capital disclosure and corporate governance practices, yet it is not without limitations. Firstly, it is confined to the context of Bangladesh, indicating a need for future cross-border research to explore these dynamics in a broader context. Additionally, the study examines only 20 businesses across three carefully selected industries, all operational from July 2019 to June 2022. A larger and more diverse sample could offer a more accurate representation of the current landscape in Bangladesh. Including other industries that are heavily reliant on intellectual capital could yield more precise and reliable results. While this study lays a foundational understanding of the relationship between intellectual capital disclosure and corporate governance in Bangladesh, there are several promising avenues for future research. One such direction is to conduct cross-border studies that compare disclosure practices across countries with different levels of economic development and regulatory frameworks. These comparisons could shed light on how cultural, economic, and legal factors influence intellectual capital disclosure, ultimately helping to identify best practices.

Moreover, future research could benefit from a focus on industry-specific analyses that extend beyond the banking, pharmaceuticals, and ceramics sectors covered here. Investigating industries rich in intellectual capital, such as technology, education, or telecommunications, could provide nuanced insights into how sector characteristics shape disclosure practices and governance structures. A longitudinal approach would also enhance understanding by tracking changes in intellectual capital disclosure over time in response to shifts in regulatory policies or market conditions. This would elucidate the dynamics of disclosure practices and the long-term effects of corporate governance reforms. Incorporating qualitative methods, such as interviews or case studies, could further enrich this exploration by revealing the motivations behind intellectual capital disclosures from the perspectives of key stakeholders, including board members, auditors, and investors.

Additionally, examining the role of technology in promoting transparency and enhancing disclosure practices could offer valuable insights, especially in light of the rise of digital platforms and big data analytics. Finally, research that investigates the impact of specific policy changes or regulations on intellectual capital disclosure would be crucial for guiding policymakers. In order to guide future legislative endeavors, it is necessary to determine which regulatory frameworks best encourage openness. Further research can expand upon this study's findings by following these paths, shedding light on the intricate relationship between intellectual capital, corporate governance, and regulatory regimes in different settings.

References

- Abdelsalam, O., & El-Masry, A. (2008). The impact of board independence and ownership structure on the timeliness of corporate internet reporting of Irish-listed companies. *Managerial Finance*, *34*(12), 907-918.
- Abeysekera, I. (2008). Motivations behind human capital disclosure in annual reports. In *Accounting Forum* (Vol. 32, No. 1, pp. 16-29). Elsevier.
- Abeysekera, I., & Guthrie, J. (2004). Human capital reporting in a developing nation. *The British Accounting Review*, *36*(3), 251-268.
- Adeneye, Y. B., Fasihi, S., Kammoun, I., & Albitar, K. (2024). Does earnings management constrain ESG performance? The role of corporate governance. *International Journal of Disclosure and Governance*, *21*(1), 69–92. https://doi.org/10.1057/s41310-023-00181-9
- Ahmed Haji, A., & Mohd Ghazali, N. A. (2013). A longitudinal examination of intellectual capital disclosures and corporate governance attributes in Malaysia. *Asian Review of Accounting*, *21*(1), 27-52.

- Akhtaruddin, M., & Haron, H. (2010). Board ownership, audit committees' effectiveness and corporate voluntary disclosures. *Asian Review of Accounting*, *18*(1), 68-82.
- Al-Akra, M., Eddie, I. A., & Ali, M. J. (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.
- Alam, I., & Deb, S. K. (2010). Human resource accounting disclosure (HRAD) in Bangladesh: multifactor regression analysis-a decisive tool of quality assessment. *The Cost and Management*, 38(3), 9-13.
- Alam, M., R., & Akhter, F. (2016). Impact of Corporate Governance on Performance of Commercial Banks in Bangladesh. *The Cost and Management*, *45*(4), 02-09.
- Ali, M.M., Khan, M.H.U.Z., & Fatima, J.K. (2008). Intellectual capital reporting practices: evidence from Bangladesh. Dhaka *University Journal of Business Studies*, *29*(1), 23-35.
- América Álvarez Domínguez, M. (2012). Company characteristics and human resource disclosure in Spain. *Social responsibility journal*, 8(1), 4-20.
- Amran, A., & Susela Devi, S. (2008). The impact of government and foreign affiliate influence on corporate social reporting: The case of Malaysia. *Managerial Auditing Journal*, *23*(4), 386-404.
- Arcay, M. R. B., & Vazquez, M. F. M. (2005). Corporate characteristics, governance rules and the extent of voluntary disclosure in Spain. *Advances in Accounting*, *21*, 299-331.
- B.S.E.C. (2012). Status of compliance with the conditions imposed by Bangladesh Securities and Exchange Commission's Notification No. SEC/CMRRCD/2006-158/134/Admin/44 dated 07 August 2012: http://www.secbd.org/Notification% 20on% 20CG-07.8. 12-Amended.pdf.
- Barako, D. G., & Brown, A. M. (2008). Corporate social reporting and board representation: evidence from the Kenyan banking sector. *Journal of Management & Governance*, *12*(4), 309.
- 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.
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director c mposition and financial statement fraud. *Accounting review*, 443-465.
- BEI. (2004). The code of corporate governance for Bangladesh: principles and guidelines for best practices in the private sector, financial institutions, state-owned enterprises and non-governmental organizations. *Task Force on Corporate Governance*, 1-85.
- Bhattacharjee, S., Chakraborty, S., & Bhattacharjee, S. (2017). Impact of Corporate Governance Attributes on Intellectual Capital Disclosure: Evidence From Listed Banking Companies in Bangladesh. *Prestige International Journal of Management & IT-Sanchayan, 6*(1), 20-42.
- Bozzolan, S., Favotto, F., & Ricceri, F. (2003). Italian annual intellectual capital disclosure: an empirical analysis. *Journal of Intellectual capital*, *4*(4), 543-558.
- Bozzolan, S., O'Regan, P., & Ricceri, F. (2006). Intellectual capital disclosure (ICD) A comparison of Italy and the UK. *Journal of Human Resource Costing & Accounting*, *10*(2), 92-113.
- Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, *17*(2), 120-136.
- Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of business Ethics*, *83*(4), 685-701.
- Brennan, N. (2001). Reporting intellectual capital in annual reports: evidence from Ireland. *Accounting, Auditing & Accountability Journal, 14*(4), 423-436.
- Cañibano, L., Garcia-Ayuso, M., & Sanchez, P. (2000). Accounting for intangibles: a literature review. *Journal of Accounting literature*, *19*, 102-130.
- 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.
- Chau, G. K., & Gray, S. J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International journal of accounting*, *37*(2), 247-265.
- Chen Goh, P., & Pheng Lim, K. (2004). Disclosing intellectual capital in company annual reports: evidence from Malaysia. *Journal of Intellectual Capital*, *5*(3), 500-510.
- Chen, C. J., & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public policy*, 19(4-5), 285-310.

- Chua, K. T., & Lee, H. (2024). Corporate governance and cash holdings: Focusing on a corporate governance report in Korea. *Investment Management and Financial Innovations*, 21(1), 198– 212. https://doi.org/10.21511/imfi.21(1).2024.16
- CIMA (2001). *Managing the Intellectual Capital within Today's Knowledge-based Organisations*, September, Technical Briefing.
- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: economic incentives, public pressures or institutional conditions? *European accounting review*, *14*(1), 3-39.
- Cotter, J., & Silvester, M. (2003). Board and monitoring committee independence. *Abacus*, *39*(2), 211-232.
- Dak-Adzaklo, C. S. P., & Wong, R. M. K. (2024). Corporate governance reforms, societal trust, and corporate financial policies. *Journal of Corporate Finance*, 84. https://doi.org/10.1016/j.jcorpfin.2023.102507
- Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger board size and decreasing firm value in small firms1. *Journal of financial economics*, *48*(1), 35-54.
- Eng, L. L., and Mak, Y. T. (2003). Corporate Governance and Voluntary Disclosure. *Journal of Accounting and Public Policy*, *22*(4), 325-345.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, *26*(2), 301-325.
- Franzoni, S., & Ait Allali, A. (2024). Corporate governance of Islamic banks: a sustainable model to protect the participatory depositor? *Journal of Banking Regulation, 25*(1), 42–48. https://doi.org/10.1057/s41261-022-00214-3
- Galbreath, J. (2010). "Drivers of corporate social responsibility: the role of formal strategic planning and firm culture", *British Journal of Management*, 21(2), pp. 511-525.
- Galbreath, J. (2011). Are there gender-related influences on corporate sustainability? A study of women on boards of directors. *Journal of Management & Organization*, *17*(1), 17-38.
- García-Meca, E., & Martínez, I. (2005). Assessing the quality of disclosure on intangibles in the Spanish capital market. *European Business Review*, *17*(4), 305-313.
- García-Meca, E., Parra, I., Larrán, M., & Martínez, I. (2005). The explanatory factors of intellectual capital disclosure to financial analysts. *European Accounting Review*, *14*(1), 63-94.
- Goshi, R. S. (2002). Board structure, executive compensation and firm performance. *Evidence from India. Indra Ghandi Institute of Development Research, Mumbai, India.*
- Gul, F. A., & Leung, S. (2004). Board leadership, outside directors' expertise and voluntary corporate disclosures. *Journal of Accounting and public Policy*, 23(5), 351-379
- Guthrie, J., & Petty, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of intellectual capital*, 1(3), 241-251.
- 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.
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, *38*(3), 317-349.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of accounting and public policy*, *24*(5), 391-430.
- Ho, S. S. M., and Wong, K. S. (2001). "A Study of the Relationship Between Corporate Governance Structures and the Extent of Voluntary Disclosure", *Journal of International Accounting*, *Auditing and Taxation*, 10 (2): 139-156.
- Holland, J. (2006). Fund management, intellectual capital, intangibles and private disclosure. *Managerial Finance*, *32*(4), 277-316.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, *48*(3), 831-880.
- 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.
- Jindal, S., & Kumar, M. (2012). The determinants of HC disclosures of Indian firms. *Journal of Intellectual Capital*, *13*(2), 221-247.
- Keenan, J., & Aggestam, M. (2001). Corporate governance and intellectual capital: some conceptualisations. *Corporate Governance: An International Review*, 9(4), 259-275.

- Kent, P., Routledge, J., & Stewart, J. (2010). Innate and discretionary accruals quality and corporate governance. *Accounting & Finance*, *50*(1), 171-195.
- Khan, H. U. Z., & Khan, R. (2010). Human capital disclosure practices of top Bangladeshi companies. *Journal of Human Resource Costing & Accounting*, 14(4), 329-349.
- Khan, M.H.U.Z., and Ali, M.M. (2010). An empirical investigation and users' perceptions on intellectual capital reporting in banks Evidence from Bangladesh. Journal of Human Resource Costing & Accounting, 14(1), 48- 69.
- Khan, M.H.U.Z., Halabi, A.K. and Samy, M. (2009). CSR reporting practice: a study of selected banking companies in Bangladesh. *Social Responsibility Journal*, *5*(3), 344-357.
- Kramer, V. W., Konrad, A. M., Erkut, S., & Hooper, M. J. (2006). Critical mass on corporate boards: Why three or more women enhance governance (pp. 2-4). Wellesley, MA: Wellesley Centers for Women.
- Kusumawardani, A., Wardhani, W., Maria, S., & Yudaruddin, R. (2021). Board structure and disclosure of intellectual capital: An empirical study in an emerging market. *Journal of Governance and Regulation*, *10*(3), 140–149. https://doi.org/10.22495/JGRV10I3ART12
- Lang, M. H., & Lundholm, R. J. (2000). Voluntary disclosure and equity offerings: reducing information asymmetry or hyping the stock? *Contemporary accounting research*, *17*(4), 623-662.
- Leblanc, R., & Gillies, J. (2003, October). Improving board decision-making: an inside view. In 6th International Conference on Corporate Governance and Direction. Henley Management College. October (pp. 6-8).
- Leung, S., & Horwitz, B. (2004). Director ownership and voluntary segment disclosure: Hong Kong evidence. *Journal of International Financial Management & Accounting*, 15(3), 235-260.
- Leventis, S., & Weetman, P. (2004). Timeliness of financial reporting: applicability of disclosure theories in an emerging capital market. *Accounting and Business Research*, *34*(1), 43-56.
- Li, J., Mangena, M., & Pike, R. (2012). The effect of audit committee characteristics on intellectual capital disclosure. *The British Accounting Review*, 44(2), 98-110.
- Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. *Accounting and business research*, *38*(2), 137-159.
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The business lawyer*, 59-77.
- Mahmood, R., & Islam, M. M. (2015). Practices of corporate governance in the banking sector of Bangladesh. *International Journal of Managing Value and Supply Chains*, *6*(3), 17-29.
- McMullen, D. A. (1996). Audit committee performance: An investigation of the consequences associated with audit committees. *Auditing*, *15*(1), 87.
- Mitchell, J. D., Chia, C. W., & Loh, A. S. (1995). Voluntary disclosure of segment information: Further Australian evidence. *Accounting & finance*, *35*(2), 1-16.
- Mooneeapen, O., Abhayawansa, S., Ramdhony, D., & Atchia, Z. (2022). New insights into the nexus between board characteristics and intellectual capital disclosure: the case of the emerging economy of Mauritius. *Journal of Accounting in Emerging Economies*, *12*(1), 29–51. https://doi.org/10.1108/JAEE-12-2020-0322
- 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
- Nasir, N. M., & Abdullah, S. N. (2004). Voluntary disclosure and corporate governance among financially distressed firms in Malaysia. *Financial Reporting, Regulation and Governance, 3*(1), 1-39.
- Nguyen, Q., Kim, M. H., & Ali, S. (2024). Corporate governance and earnings management: Evidence from Vietnamese listed firms. *International Review of Economics and Finance, 89*, 775–801. https://doi.org/10.1016/j.iref.2023.07.084
- Nicolò, G., Ferullo, D., Aversano, N., & Ardito, N. (2023). Intellectual capital disclosure and its determinants in healthcare organisations – Evidence from Italy. *International Journal of Public Sector Management*, 36(1), 20–45. https://doi.org/10.1108/IJPSM-06-2022-0149
- Nikolaj Bukh, P. (2003). The relevance of intellectual capital disclosure: a paradox? *Accounting, Auditing & Accountability Journal, 16*(1), 49-56.
- Notification, B. S. E. C. (2012). Status of compliance with the conditions imposed by Bangladesh

Securities and Exchange Commission's Notification No. SEC/CMRRCD/2006-158/134/Admin/44 dated 07 August 2012: http://www.secbd.org/Notification% 20on% 20CG-07.8. 12-Amended. pdf.

- Nurhayati, R., Taylor, G., Rusmin, R., Tower, G., & Chatterjee, B. (2016). Factors determining social and environmental reporting by Indian textile and apparel firms: a test of legitimacy theory. *Social Responsibility Journal*, *12*(1), 167-189.
- Nurunnabi, M., Hossain, M., & Hossain, M. (2011). Intellectual capital reporting in a South Asian country: evidence from Bangladesh. *Journal of Human Resource Costing & Accounting*, 15(3), 196-233.
- 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 & Accounting*, *10*(1), 11-33.
- Parker, L. D. (2007). Financial and external reporting research: the broadening corporate governance challenge. *Accounting and Business Research*, *37*(1), 39-54.
- Patelli, L., & Prencipe, A. (2007). The relationship between voluntary disclosure and independent directors in the presence of a dominant shareholder. *European Accounting Review*, *16*(1), 5-33.
- Petty, R., & Cuganesan, S. (2005). Voluntary disclosure of intellectual capital by Hong Kong companies: examining size, industry and growth effects over time. *Australian Accounting Review*, 15(36), 40-50.
- Pomeroy, B., & Thornton, D. B. (2008). Meta-analysis and the accounting literature: The case of audit committee independence and financial reporting quality. *European Accounting Review*, *17*(2), 305-330.
- Raffournier, B. (1995). The determinants of voluntary financial disclosure by Swiss listed companies. *European accounting review*, 4(2), 261-280
- Rashid, A. (2013). Corporate intellectual capital reporting in Bangladesh. *International Journal of Learning and Intellectual Capital*, *10*(2), 107-121.
- Roman Cahaya, F., Porter, S. A., Tower, G., & Brown, A. (2012). Indonesia's low concern for labor issues. *Social responsibility journal*, 8(1), 114-132.
- Said, R., Hj Zainuddin, Y., & Haron, H. (2009). The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Social Responsibility Journal*, *5*(2), 212-226.
- SEC. (2006). Order relating to Corporate Governance. In *SEC/CMRRCD/02-06*. Dhaka: Securities and Exchange Commission (SEC).
- SEC. (2012). Proposed Amendment: Corporate Governance Rules, Securities and Exchange Commission of Bangladesh, No. SEC/CMRRCD/2006-158. In. Dhaka: Securities and Exchange Commission (SEC).
- Starovic, D., Marr, B., & Chartered Institute of Management Accountants. (2003). *Understanding corporate value: Managing and reporting intellectual capital*. London: CIMA.
- Subbarao, A. V., & Zéghal, D. (1997). Human resources information disclosure in annual reports: an international comparison. *Journal of Human Resource Costing & Accounting*, *2*(2), 53-73.
- Sufian, M. A., & Zahan, M. (2013). Ownership structure and corporate social responsibility disclosure in Bangladesh. *International Journal of Economics and Financial Issues*, *3*(4), 901-909.
- Sveiby, K. E. (1997). *The new organizational wealth: Managing & measuring knowledge-based assets*. Berrett-Koehler Publishers.
- The Smith Report (2003). *Audit Committees: Combined Code Guidance*, London: Financial Reporting Council. URL: <u>www.frc.org.uk/publications.</u>
- Tulung, J. E., Saerang, I. S., & Pandia, S. (2018). The influence of corporate governance on the intellectual capital disclosure: A study on Indonesian private banks. *Banks and Bank Systems*, 13(4), 61–72. https://doi.org/10.21511/bbs.13(4).2018.06
- Turley, S., & Zaman, M. (2007). Audit committee effectiveness: informal processes and behavioural effects. *Accounting, Auditing & Accountability Journal, 20(5),* 765-788.
- Ulum, I., Harviana, R. R., Zubaidah, S., & Jati, A. W. (2019). Intellectual capital disclosure and prospective student interest: an Indonesian perspectives. *Cogent Business and Management*, 6(1). https://doi.org/10.1080/23311975.2019.1707041

- Van der Laan Smith, J., Adhikari, A., & Tondkar, R. H. (2005). Exploring differences in social disclosures internationally: A stakeholder perspective. *Journal of Accounting and Public Policy*, *24*(2), 123-151.
- Vergauwen, P. G., & Van Alem, F. J. (2005). Annual report IC disclosures in the Netherlands, France, and Germany. *Journal of Intellectual Capital*, 6(1), 89-104.
- Vitolla, F., Raimo, N., Marrone, A., & Rubino, M. (2020). The role of board of directors in intellectual capital disclosure after the advent of integrated reporting. *Corporate Social Responsibility and Environmental Management*, *27*(5), 2188–2200. https://doi.org/10.1002/csr.1957
- Vuontisjärvi, T. (2006). Corporate social reporting in the European context and human resource disclosures: An analysis of Finnish companies. *Journal of business ethics*, 69(4), 331-354.
- Weimer, J., & Pape, J. (1999). A taxonomy of systems of corporate governance. *Corporate Governance: An International Review*, 7(2), 152-166.
- 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
- Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics*, 42(1), 1-10.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of financial economics*, 40(2), 185-211.
- Zunker, T. (2011). Determinants of the voluntary disclosure of employee information in annual reports: an application of stakeholder theory.

Published by

