

Corporate governance and voluntary disclosures in annual reports: a post-International Financial Reporting Standard adoption evidence from an emerging capital market

Richard Nana Boateng

*DCU Business School, Dublin City University, Dublin, Ireland and
Department of Accounting Studies, Akenten Appiah-Menka University of Skills
Training and Entrepreneurial Development, Kumasi, Ghana*

Vincent Tawiah

DCU Business School, Dublin City University, Dublin, Ireland, and

George Tackie

UCC Business School, University of Cape Coast, Cape Coast, Ghana

Abstract

Purpose – The purpose of this paper is to provide an empirical evidence concerning the influence of Corporate governance and voluntary disclosures in annual reports: a post-International Financial Reporting Standards adoption evidence from an emerging capital market.

Design/methodology/approach – Data were collected from the annual reports of all 22 listed non-financial firms over a five-year period. Using content analysis, the audited annual reports of the firms were scored on the extent of overall and four specific types of voluntary disclosures made. The panel data obtained were analyzed using a generalized ordinary least squares regression model.

Findings – The findings of the study show that voluntary disclosures among the firms are low even after the adoption of IFRS. Corporate governance attributes of board size and board leadership structure are significant determinants of the extent of voluntary disclosures made by the firms. However, board independence and auditor type exhibit only a significant positive effect on voluntary financial and forward-looking information disclosures.



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Research limitations/implications – Firms' voluntary information disclosure and governance variables were restricted to those in annual reports, which may partially reflect the reality of firms' disclosure and governance practices.

Practical implications – The present study offers useful insights to regulators of the capital market to strengthen monitoring of firms to ensure strict adherence to corporate governance best practice guidelines as a means of improving information environment.

Originality/value – This study is one of the very few ones in Africa, especially in the context of Ghana Stock Exchange, to use post-IFRS data and examine a disaggregated voluntary disclosure by firms.

Keywords Corporate governance, IFRS, Annual reports, Ghana Stock Exchange, Voluntary disclosures

Paper type Research paper

1. Introduction

Corporate governance systems, including issues of information disclosures and transparency, have witnessed significant improvements in developed economies following the devastating collapse of many corporate giants, such as Enron in the USA and Parmalat in the European Union (EU). However, developing economies, including Ghana, continue to lag behind, despite efforts at improving overall corporate governance (Papadopoulos, 2019). Ghana's adoption of international financial reporting standards (IFRS) and corporate governance best practice guidelines, in 2007 and 2010, respectively, were expected to improve overall firm-level corporate governance, financial reporting, information disclosure and transparency (Appiah *et al.*, 2016; Tawiah and Boolaky, 2019). Scholars have suggested that mandatory adoption of IFRS and its effective compliance among firms is a function of firm-level corporate governance practices and other firm characteristics (Horton *et al.*, 2012; Tawiah and Boolaky, *et al.*, 2019; Appiah *et al.*, 2016; Barako, 2007). Despite the adoption of IFRS and implementation of corporate governance guidelines, the capital market witnessed major corporate scandals and failures – e.g. UT Bank and Capital Bank (Ansah, 2017). This calls into question whether the mandatory adoption of IFRS and corporate governance best practices guidelines have had any significant impact on the information disclosure and transparency environment of Ghana. Thus, in this study, we examine the influence of firm-level corporate governance practices on the extent of voluntary disclosures by listed firms.

While interest in disclosure research has surged over the past three decades, the plethora of studies has rather concentrated on advanced economies in Europe and the USA (Ștefănescu *et al.*, 2012; Boesso *et al.*, 2007; Barros *et al.*, 2013) with scant evidence on developing economies, particularly Africa (Adelopo *et al.*, 2011; Barako, 2007; Rouf, 2011; Appiah *et al.*, 2016). Scholars have highlighted that enhanced disclosures by firms in developing economies can strengthen their corporate brands, attract foreign investment, lower cost of capital, reduce political and regulation intervention and enable firms to function within a productive and responsible framework (Hongxia and Ainian *et al.*, 2008; Chan *et al.*, 2014; Hermalin and Weisbach, 2012; Entwistle, 1997).

There are several channels for communicating important corporate information, including internet websites and press releases (Healy and Palepu, 2001). However, the audited annual report remains the most important and credible medium for communicating corporate transparency and voluntary disclosures, including financial and non-financial information (Nandi and Ghosh, *et al.*, 2012; Neu *et al.*, 1998). Unlike other channels, the annual report is subject to strict regulation and scrutiny by external auditors, hence is relied on by firms' relevant publics (Neu *et al.*, 1998). As such, firms invest significant amount of time, energy and money in generating and circulating their annual reports every year, as they acknowledge the ability of its content to influence the perception of its relevant publics and promote corporate legitimacy (Neu *et al.*, 1998).

In Ghana, public companies are required to place an audited annual report before shareholders at an annual general meeting with copies filed with the Ghana Stock Exchange (GSE) and Securities and Exchange Commission (SEC). This is part of the strategy to promote high levels of disclosure and transparency environment. Additionally, the GSE listing rules provide the timeframe within which annual reports must be circulated, whereas the Companies Code (supported by the GSE listing rules) requires listed firms to disclose key information such as members of the board and key executives, directors' material interests in transactions or contracts affecting the company and so on. Indeed, the annual report is an authoritative reference document and offers a one-stop-shop for all corporate stakeholders in Ghana, who seek credible information to aid them in making economic and other important decisions. Thus, examining voluntary disclosures in the annual reports are key to understanding the legitimacy, credibility and transparency of firms and the institutional environment within which they function.

Ghana provides a peculiar setting and rationale for this research for several reasons. First, as a developing economy in Africa, Ghana is plagued by low adherence to global benchmarks (World Bank ROSC, Nobes, 2011), blamed on weak institutional and regulatory framework (Bova and Pereira, 2012). More so, due to the low contribution of the capital market to economic growth, Ghana is often ignored in many studies (Nnadi and Soobaroyen, 2015; Tawiah and Boolaky, 2019). What is more, the significant differences in financing, ownership and governance structures between developing and developed economies (La Porta *et al.*, 1999; Gordon *et al.*, 2012; Nnadi and Soobaroyen, 2015) provides further rationale for this research. Whereas companies in the USA, Europe and elsewhere have large numbers of dispersed and active minority shareholders, majority of African firms is saturated with blocks and internal shareholdings, with very few non-active external shareholders. African, and particularly Ghanaian, firms are generally highly levered, underscoring their dependence on sources of finance outside the capital market (Ntim, 2013). This is in sharp contrast to most firms outside Africa that rely principally on the stock exchanges (Agyei-Mensah, *et al.*, 2017; Tsamenyi *et al.*, 2007). Consequently, we can expect significant differences in the level of information disclosures.

We argue that because most Ghanaian firms rely heavily on external sources of finance outside the stock market, their voluntary disclosure policy and associated factors will differ from the extant literature on Europe, the USA and Asia. Thus, Ghanaian companies may use other channels apart from the annual reports to disclose additional information that meet the expectation and requirement of stakeholders primarily outside of the capital market. Finally, Ghana's adoption of IFRS and corporate governance best practice guidelines afford us the opportunity to investigate and compare the voluntary disclosure regime post-IFRS in this study to other studies done prior to the adoption and implementation of IFRS.

Therefore, in this study, we use five-year panel data post-IFRS adoption in 2007 to examine the effect of firm-level corporate governance mechanisms on the extent of voluntary disclosures in audited annual reports of all 22 listed non-financial companies on the GSE. In line with prior studies (Barako, 2007; Adelojo, 2011; Dey *et al.*, 2020), we used a content analysis methodology to score the voluntary disclosures. The panel data constructed is analyzed using a generalized ordinary least squares (OLS) regression. Our results reveal that voluntary disclosures remains critically low among listed firms in Ghana despite IFRS adoption. Further, we document that all corporate governance variables used in this study predict at least two of the specific types of voluntary disclosures in annual reports. Particularly, board size and CEO duality positively influence the extent of overall voluntary disclosures of the selected firms, whereas board independence and auditor type drive only financial data and forward-looking information disclosures. The result with respect to board independence highlights the emphasis placed on board monitoring function when

a firm faces significant agency costs, requiring the need for increased financial and forward-looking information to reduce information asymmetries (Inchausti, 1997).

While our study is not the first to examine the transparency and disclosure regime of listed firms in Africa, and Ghana in particular, it differs significantly from other studies and makes incremental contributions to literature in four ways. First, unlike other voluntary disclosure studies in Ghana and Africa (Tsamenyi *et al.*, 2007; Bopkin and Isshaq *et al.*, 2009; Albitar *et al.*, 2020; Borgi and Mnif, 2021), our study provides further insight by disaggregating firm's voluntary disclosures into specific types of voluntary disclosures. The disaggregation of voluntary disclosure into categories is considered desirable as it mimics variations in decision relevance for users (Meek *et al.*, 1995; Ho and Taylor, 2013). We disaggregate voluntary disclosure into four categories: general and strategic information, financial information, forward-looking information and social and board disclosures. Second, our focus on post-IFRS adoption period enables us to compare the voluntary disclosure regime of corporate Ghana with similar prior studies (Tsamenyi *et al.*, 2007; Bopkin and Isshaq, 2009) that pre-dates IFRS adoption. Prior studies document improved reporting quality following IFRS adoption, evidenced by voluntary information content, among others (Barth *et al.*, 2008; Landsman *et al.*, 2012). Our results do not support the assertion that IFRS adoption will automatically lead to increased transparency through the voluntary disclosure of information. Third, our study departs from studies that focus on examining listed firms' compliance with mandatory IFRS to examine the extent of voluntary disclosure in annual reports as additional transparency characteristics. Finally, we focus on key corporate governance variables that have not been previously examined with respect to voluntary disclosures by listed firms in Ghana. Prior studies focused on either ownership and/or non-corporate governance firm characteristics (Tsamenyi *et al.*, 2007; Appiah *et al.*, 2016).

The remainder of this paper is organized as follows. Section 2 discusses the literature review and outlines prior empirical findings as well as the development of hypotheses. Section 3 discusses the methods that were used. Presentation and discussion of the results are done in Section 4. Finally, conclusions, implications, limitations of the study as well as direction for further research are discussed in Section 5.

2. Literature review

2.1 Corporate governance in Ghana

Prior to the year 2010, Ghana had no specific corporate governance best practice guidelines to streamline the corporate governance landscape. The corporate governance system was solely based on precise regulatory frameworks and laws, namely, the Ghana Companies Code 1963 (Act 179), the Securities Industry Law (1993) (PNDCL 333) as revised by the Securities Industry Act, 2000 (Act 590) and the listing regulations, 1990 (L. I. 1509) of the GSE. Moreover, the Institute of Chartered Accountants (Ghana) provided further support by issuing and administering the Codes of Conduct and the Ghana National Accounting Standards (replaced with IFRS since 2007). In 2010, the SEC introduced a code of best practices on corporate governance that was based on the principles of good corporate governance by the Organization of Economic Cooperation and Development (OECD, 2004) as an additional guideline to augment the existing regulations and laws. Having been colonized by the British, Ghana's laws and, by extension, its corporate governance framework largely mimics that of the British, which is based on an Anglo-Saxon model (Adegbite, 2012).

To promote a disclosure and transparency regime, the GSE listing regulations require listed companies to provide key information to investors that bothers on the board of directors and key management, including their compensations, material foreseeable risks, major share ownership and voting rights, company's financial operating results and so on.

Furthermore, the regulations stipulate the period within which companies are to distribute their audited annual reports to appropriate quarters. Both the Companies Code and GSE listing regulations also mandate listed companies to establish an audit committee to assist the board of directors to provide effective monitoring and financial reporting. Enshrined in the Code are also provisions relating to the appointment, removal and retirement of directors (Tsamenyi *et al.*, 2007; Amartey *et al.*, 2019). Some of the guidelines enshrined in the 2010 SEC code of best practice include the separation of the roles of the board chair and CEO, with a precise statement of the responsibilities of each role, the definition of an independent director, the responsibilities of the board of directors and so on (Agyemang and Castellini, 2013). These provisions define the disclosure and transparency environment of Ghana.

Several scholars (Kuranchie-Pong *et al.*, 2016; Agyemang and Castellini, 2013; Okeahalam, 2004) have acknowledged poor implementation or enforcement of laws and regulations as the bane of a sound system of corporate governance among most developing economies, including Ghana. These scholars argue that the challenge of corporate governance does not stem from inadequate laws and regulations. For instance, Kuranchie-Pong *et al.* (2016), in a study of the disclosure and risk-taking propensity of banks in Ghana, concluded that market discipline is ineffective in Ghana. Also, a World Bank (2005) report indicated that listed companies in Ghana had board members who were ineffective at supervising firm-level corporate governance, attributing this to questionable board independence or NEDs who act as rubber stamps for decisions (Okeahalam, 2004). The same report also indicted audit committees for their lack of effectiveness to function as expected. Among some of the issues and challenges identified as inhibiting sound corporate governance in Africa and Ghana, in particular, are ineffectiveness of boards, poor monitoring and transparency of financial statements, government interference of companies' affairs, corruption among other factors (Adegbite, 2012; Agyemang and Castellini, 2013; Okeahalam, 2004). Consequently, if these issues are addressed, corporate governance will be improved: transparency enhanced, minority shareholders protected, boards become more effective in performing their functions, etc., leading to more confidence in the capital market (Agyemang and Castellini, 2013).

2.2 Voluntary versus mandatory disclosures

Disclosure research comes in two perspectives, namely, mandatory and voluntary disclosures. While mandatory disclosure research examines the extent of compliance of firms to appropriate financial reporting and legal regulations and standards (Tsalavoutas *et al.*, 2011; Appiah *et al.*, 2016), voluntary disclosure research investigates the level and quality of information transparency within a firm as a function of the overall efficiency of corporate governance of national economies (Barako, 2007; Nandi and Ghosh, 2012). There is, however, an increasing demand and motivation for voluntary disclosure research compared to mandatory disclosure research. This has been attributed to the general dissatisfaction with mandatory disclosures to forestall corporate scandals and capital market failures in many economies (Binh, 2012; Hongxia and Ainian, 2008).

Enhanced voluntary disclosures in the annual reports are deemed to reflect corporate governance effectiveness and yield numerous benefits for companies, corporate managers, shareholders and other corporate stakeholders. A good disclosure policy is a means to mitigate information asymmetry between corporate managers and shareholders, thus reducing agency costs (Jensen and Meckling, 1976). In a similar vein, the cost of information conveyed by large transactions is lower for firms that provide more disclosures about their operations, implying that voluntary disclosure reduces information asymmetries between investors, which ultimately mitigate transaction cost (Chan *et al.*, 2014; Diamond and

Verrecchia, 1991). In general, corporate disclosures are considered a critical factor for the functioning of an efficient capital market (Healy and Palepu, 2001).

2.3 Theoretical background and hypotheses

A range of theories have been used to explain corporate disclosure. Early theories regarding this issue assumed that corporate managers are interested only in the firm's market value (Clarkson *et al.*, 1994; Grossman, 1981). Rational investors are aware that firms with encouraging private information are more likely to disclose information to the market to ensure that the value of the firm is enhanced. Therefore, non-disclosure is explained as withholding adverse information, leading to a reduction in firm value. This idea leads to a full disclosure where firms reasonably and voluntarily disclose important information to enhance the value of the firm (Clarkson *et al.*, 1994). Nevertheless, in practice, companies fail to attain the level of full disclosure, bringing to mind that the decision to voluntarily disclose relevant information have to do with additional elements.

Both legitimacy and political theories also offer explanations for differences in the level of corporate disclosure. Legitimacy theory, rooted in political economy theory (Gray *et al.*, 1996), advances the notion that a firm's legitimacy to operate in society is dependent on the social contract that is implicit in nature between the firm and society. Corporate managers persistently make the very effort to ensure that their firm operates within its social contract by ensuring that its operations fall within the expectations of the society. With this, corporate managers have the incentive to disclose information that shows that the firm is operating to meet societal norms and expectations (Deegan and Blomquist, 2006). Meanwhile, the political economy theory postulates that society, politics and economics are inseparable and economic issues cannot be investigated painstakingly without referring to the social, political and institutional structure in which the issue happens. An investigation into the political economy allows corporate governance researchers to mull over wider issues about the information corporate managers choose to disclose in the firm's annual reports (Kent and Stewart, 2008; Gray *et al.*, 1996).

Additional explanation for information disclosure in corporate annual reports is offered by the principal-agent (agency) theory. Corporate managers have incentives to withhold information to restrict the ability of the market to effectively monitor their performance, thus creating a "disclosure agency problem." Studies have investigated whether this problem is reduced by a good corporate governance structure (Adel *et al.*, 2019; Agyei-Mensah *et al.*, 2017; Chan *et al.*, 2014; Khan *et al.*, 2013; Beekes and Brown, 2006). We extend these extant studies by investigating whether corporate governance provides an explanation for the level of voluntary disclosure. Thus, notwithstanding the alternative theories of voluntary disclosure of firms explained above, our attention is on the relationship between voluntary disclosure and corporate governance.

Theory highlights that a good corporate governance structure must result in a more transparent disclosure of information (Albitar *et al.*, 2020; Adel *et al.*, 2019; Majumder *et al.*, 2017; Chan *et al.*, 2014). A major role of corporate governance is to ensure compliance with financial reporting requirements and to ensure financial statements depict the full financial standing of the firm (Davidson *et al.*, 2005; Dechow *et al.*, 1995). Nevertheless, the findings of previous studies have been inconclusive (see meta-analytical review by Majumder *et al.*, 2017). One view advanced is that disclosure is a mechanism of corporate governance that can substitute for other corporate governance elements (Eng and Mak, 2003). Even though, we partly agree to this argument, our hypotheses development is based on the support reported by Beekes and Brown (2006, p. 423) "for the proposition that better-governed [firms] make more informative disclosures." Given that the more extensive voluntary disclosures are likely to be enlightening, we anticipate a positive relationship between the

level of voluntary disclosures and recognized elements of corporate governance within the Ghanaian context. This forms the basis of our hypotheses.

2.4 Board size

Corporate governance scholars recognize the board of directors as the most relevant control element in a firm's internal governance structure (Albitar *et al.*, 2020; Chan *et al.*, 2014; Khan *et al.*, 2013; Fama and Jensen, 1983). A good and effective board should monitor financial discretion as well as ensure accounting choices made by corporate managers are valid (Kent and Stewart, 2008). Board size is possibly related to the ability of corporate directors to monitor, control and evaluate corporate managers (Albitar *et al.*, 2020; Agyei-Mensah, *et al.*, 2017; Chan *et al.*, 2014), even though the direction of influence is inconclusive (Albitar *et al.*, 2020; Agyei-Mensah, 2017). Some studies have highlighted a positive relationship between the number of board directors and both board monitoring (Williams *et al.*, 2005; Anderson *et al.*, 2004) and company performance (Ansong, 2015; Agyemang *et al.*, 2014; Haniffa and Hudaib, 2006). It is contended that larger boards have the expertise and are better positioned to monitor and evaluate corporate managers (Albitar *et al.*, 2020; Agyei-Mensah *et al.*, 2017; Chan *et al.*, 2014; Ansong, 2015; Agyemang *et al.*, 2014), thus enhancing the transparency and management disclosure of more information (Majumder *et al.*, 2017; Agyei-Mensah, *et al.*, 2017; Ahktaruddin *et al.*, 2009). By contrast, other extant studies highlight that smaller boards are more effective in monitoring the CEO and limit the possibility to engage in pervasive decisions (Cheng and Courtenay, 2006; Beasley, 1996; Lipton and Lorsch, 1992; Jensen, 1983). While it is true that larger boards do increase the monitoring capacities of the BOD, such benefit may be mitigated by the increasing cost of poorer communication and decision-making associated with larger groups (John and Senbet, 1998). Notwithstanding the counter view, we argue that a larger board will result in better perspectives in decision-making, implying that firms with a larger board size are likely to disclose more voluntary information. Hence, we hypothesize, in line with agency theory and several recent studies, that:

H1. Firms with a larger board size have a higher extent of voluntary disclosures.

2.5 Chief executive officer duality

Another corporate governance attribute that is associated with strong corporate governance is the separation of the roles of the chief executive officer (CEO) and board chairperson. Guidelines of corporate governance assume that the ability of the board to perform a monitoring and evaluating role is weakened when the CEO is also the board chair (Cadbury Committee, 1992; Guidelines of corporate governance of the Ghana Securities and Exchanges Commission, 2010). The selection and appointment of the CEO to the position of the board chairperson may result in power concentration and potential conflicts of interest, which can lead to a reduction in the level of monitoring (Adel *et al.*, 2019; Majumder *et al.*, 2017; Chan *et al.*, 2014; Haniffa and Cooke, 2002). The agency theory criticizes the combined structure, where the CEO doubles as board chair (CEO duality) and predicts that the interests of the owners will be sacrificed to a degree in favor of management, leading to managerial opportunism and agency loss (Adel *et al.*, 2019; Chan *et al.*, 2014; Kent and Stewart, 2008). Mohamad and Sulong (2010) argue that CEO duality structure could result in the probability of withholding unfavorable information from outsiders by the CEO/chair and promote opportunistic behavior by the CEO. Thus, a two-tier leadership structure of the board (i.e. separation of roles between CEO and board chair) is considered a more effective mechanism against opportunistic behavior by the CEO and ensures adequate information disclosure to relevant stakeholders (Adel *et al.*, 2019; Majumder *et al.*, 2017; Li *et al.*, 2008). Available empirical studies on CEO duality show

inconclusive findings (Adel *et al.*, 2019; Michelon and Parbonetti, 2012). While some studies report significant positive relationships (Jizi *et al.*, 2014; Wang and Hussainey, 2013; Rouf, 2011; Barako, 2007), others report significant negative relationship (Michelon and Parbonetti, 2012; Gul and Leung, 2004). Moreover, other studies found no relationship (Majumder *et al.*, 2017; Cheng and Courtenay, 2006). We sympathize with the agency view, thus, we expect a negative relationship between CEO duality structure and the extent of voluntary disclosures. Hence, we hypothesize that:

- H2. Firms with a CEO Duality structure of the board have a lower extent of voluntary disclosures.

2.6 Board composition

A company's board usually comprises executive and non-executive directors (NEDs). NEDs are those whose only affiliation with the company is because of their directorship, whereas executive directors are part of the management of the firm. The agency theory suggests that a greater proportion of NEDs on the board is a valuable corporate governance mechanism that ensures effective monitoring of corporate managers in the presence of agency conflicts (Majumder *et al.*, 2017; Ajinkya *et al.*, 2005; Patteli *et al.*, 2007). Arcay and Vázquez (2005) explored the role of good corporate governance rules in enhancing corporate disclosure of Spanish listed firms and found that greater proportion of NEDs significantly enhanced corporate disclosure. Other studies that support this include Ahktaruddin *et al.* (2009), Chan *et al.* (2014) and Wang and Hussainey (2013). However, in a meta-analytic study, Majumder *et al.* (2017) found insignificant positive relationship between composition of NEDs and corporate social disclosures in developing countries. Several studies also report an insignificant relationship between board independence (presence and number of NEDs) and corporate disclosures (Amran *et al.*, 2014; Michelon and Parbonetti, 2012). According to Amran *et al.* (2014), this finding may be attributed to the existence of complacency in the appointment of independent competent directors to join the board. Yet still, other studies document rather a negative relationship (Barako *et al.*, 2006; Gul and Leung *et al.*, 2004). This, as suggested by Barako *et al.* (2006), may be because a high level of independent directors may, itself, substitute for the need to rely on corporate reporting to assure stakeholders on the legitimacy of the firm's operations. Our view, notwithstanding, is consistent with the agency theory, and we further argue that a higher number of NEDs on the board may promote corporate legitimacy by increasing voluntary reporting to satisfy various stakeholders. Hence, we hypothesize that:

- H3. Firms with a higher proportion of non-executive directors on the board have a higher extent of voluntary disclosures.

2.7 Auditor type

Jensen and Meckling (1976) consider external auditors as an important governance mechanism because they are entrusted with rendering a fair opinion on the quality of disclosed information. Auditors' reports, thus, provide certifications, which reduces agency costs because it improves users' perception of the credibility of the information in the annual reports. Meanwhile, DeAngelo (1981) and Barros *et al.* (2013) argue for auditor size as a proxy for audit quality. Bigger audit firms possess stronger bargaining power to demand improved disclosures from their clients (Adelopo, 2011) and are considered to provide credibility to their clients (Majumder *et al.*, 2017). Furthermore, they are well known for their high professionalism and their desire to enhance voluntary disclosures in annual reports of their clients (Agyemang *et al.*, 2015). From the agency theoretical perspective, auditor plays an effective monitoring mechanism on the conflict between

the managers and shareholders, i.e. the agent–principal relationship (Lim *et al.*, 2008). Moreover, auditors' credibility, which is underpinned by their recommendations, approval of choosing accounting standards and explanations of critical issues, influences the firm's attitude regarding reporting and disclosure practices (Khan *et al.*, 2013). Furthermore, the selection of a firm's external auditors may influence the perception of relevant publics and either facilitate or inhibit its organizational legitimacy (Ruiz-Barbadillo and Martínez-Ferrero, 2021). Reputable audit and assurance firms (i.e. Big 4 audit firms) are perceived to possess the capacity to provide assurance services in the form of sustainability reporting and disclosures that meet the expectation of relevant stakeholders, thus positively influencing the firm's legitimacy (Ruiz-Barbadillo and Martínez-Ferrero, 2021). Several empirical studies lend support to this theoretical position (Sundarasan *et al.*, 2016; Adelopo, 2011; Ağca and Önder, 2007; Barako, 2007). By contrast, other studies indicate insignificant positive (Lu and Abeyssekera *et al.*, 2014; Lim *et al.*, 2008) and insignificant negative (Ling and Sultana, 2015; Alotaibi and Hussainey, 2016) relationships. Nonetheless, our argument is sympathetic toward the agency perspective, hence our hypothesis that:

- H4. Firms that use the services of a Big 4 audit firm have a higher extent of voluntary disclosures.

3. Research methodology

3.1 Sample selection and data source

A criterion sampling technique was adopted for the study. All listed non-financial companies listed with equity on the GSE were selected. Financial companies were excluded from the study because the sector is highly regulated and as such regulations tend to blur the relationship among the variables to be studied (Desai and Dharmapala, 2009; Abdul-Wahab, 2010). The final sample consisted of 22 listed non-financial companies with active trading activities continuously over five years. This culminated into a total number ranging between 101 and 109 observations for the unbalanced panel data.

3.2 Measurement of variables

Voluntary disclosure is the dependent variable, and it was measured by adapting the disclosure checklist of Barako (2007) (see adapted voluntary disclosure checklist in Appendix). Voluntary disclosure was measured by the quantity and depth of non-mandatory information or data that is contained in the management discussion and analysis in the audited annual reports. Each sample firm's annual report was scored on the level of general and strategic information, financial data, forward-looking information and social and board disclosure that is voluntarily disclosed. Barako's checklist was adapted for this study because it followed a well-planned and comprehensive methodology (Barako, 2007; for details). In addition, a review by experts from the Institute of Chartered Accountants (Ghana), GSE, SEC and Big 4 audit firms was done to confirm the appropriateness and adequacy of the checklist for the Ghanaian context (Barako, 2007).

Two crucial and contentious issues in previous studies on the scoring of disclosure items are apparent: whether the disclosure items should be weighted (Courtis *et al.*, 1979; Barrett, 1976; Abdullah *et al.*, 2015; Tsalavoutas, 2011; Street and Gray, 2002) or non-weighted (Wallace, 1988; Cooke, 1991; Hossain, 1994). Both approaches have received criticisms. Disclosure index was scored using a non-weighted approach. The only argument raised against this approach is the fact that it assumes fundamentally that all items in the checklist are equally important, which may not be necessarily true. Notwithstanding, previous studies have shown that both non-weighted and weighted scores similar results

(Barako, 2007; Firth, 1979). This is underscored by the fact that in a weighted scoring approach, the subjective weights of user groups will average each other out (Cooke, 1989).

Complete audited annual report for each firm was reviewed to understand the nature and complexity of each firm's operation and to form an opinion about the firm before scoring the items. Thus, a firm was scored "1" for an item disclosed in the annual report and "0" if it is not disclosed. The voluntary disclosure score (VDScore) was then computed for each firm as a ratio of the total voluntary disclosure score (TVDScore) for the firm to the maximum voluntary disclosure score (VDMax) possible. The disclosure score (VDScore) for each firm was then expressed as a percentage. The same procedure was used for the categories of voluntary disclosure. Below is a mathematical representation of the voluntary disclosure score (VDScore):

$$VDScore_t = \frac{TVDScore_t}{VDMax_t} = \frac{\sum_{i=1}^m di}{\sum_{i=1}^n di}$$

where:

- VDScore = Voluntary disclosure score/index (extent of disclosure);
- VDMax = Maximum voluntary disclosure score possible;
- TVDScore = Total voluntary disclosure score for each company;
- d_i = Disclosure item i ;
- m = Actual number of relevant disclosure items ($m \leq n$); and
- n = Number of items expected to be disclosed.

3.3 Corporate governance and control (independent) variables

Table 1 specifies how the corporate governance mechanisms and control variables of firm-specific characteristics (independent variables) were measured. The corporate governance mechanisms used in the study are board size, CEO duality, board composition (proportion of NEDs) and auditor type – measured as either a Big 4 audit firm or otherwise. The control

Variable	Definition/measurement
<i>Dependent variable</i> Voluntary disclosure (VDScore)	Quantity and depth of non-mandatory information or data that is contained in the management discussion and analysis in the audited annual reports
<i>Independent variables</i> Board size (BDSZE)	Number of persons serving as directors on the company's board at year-end t
CEO Duality (CEODUAL)	An indicator variable equal to zero if the CEO doubles as the chair of the board of directors at year-end t , otherwise one (for dual leadership structure)
Proportion of NEDs (PNED)	Number of non-executive directors divided by the total number of directors on the board
Auditor Type (AUDTYP)	An indicator variable equal to one if the firm is audited by a Big 4 audit firm at year-end t , otherwise zero
<i>Control variables</i> Firm size (FSZE)	The natural logarithm of the total assets of the firm
Profitability (ROA)	Firm's net profit after tax divided by its net assets and expressed as a percentage
Leverage (LEV)	Firm's total debts divided by its total assets

Table 1.
Variables definitions
and measurements

variables of firm-specific characteristics are firm size proxied with firm's total assets, profitability (return on assets) and leverage.

3.4 Control variables

Many disclosure studies have provided evidence that firm-specific characteristics such as size, profitability and leverage are significant determinants of corporate voluntary disclosures in annual reports (Adelopo *et al.*, 2011; Nandi and Ghosh, 2012; Samaha *et al.*, 2012; Wang and Hussainey, 2013; Tawiah and Boolaky, 2019).

Agency costs are associated with the separation of management from ownership, which is likely to be greater in larger companies (Jensen and Meckling, 1976). Thus, larger firms are likely to provide more information than smaller firms as a means of reducing agency (monitoring) costs. Alsaeed (2006), Aljifri *et al.* (2012) and Alkhatib (2014) acknowledged that highly leveraged firms may deal with higher agency costs due to higher auditing fees. Thus, they argue for more information (voluntary) disclosure in annual reports of such firms as a means of reducing such costs. Lastly, the agency theory suggests that managers of larger profitable firms may wish to disclose more information to obtain personal advantages like the continuance of their management position and compensation (Inchausti, 1997). Based on these theoretical arguments backed by empirical evidence, we anticipate that there should be a significant positive relationship between the control variables and the extent of voluntary disclosures in the annual reports.

3.5 Model specification

Below is the generalized least square pooled regression model, which was fitted to the data to assess the effect of each independent variable on the disclosure data associated with the voluntary disclosure score (VDScore) and categories and to test the associated hypothesis:

$$\text{VDScore}_{it} = \alpha_i + \beta_1 \text{BSZE}_{it} + \beta_2 \text{CEODUAL}_{it} + \beta_3 \text{PNED}_{it} + \beta_4 \text{AUDTYP}_{it} \\ + \beta_5 \text{LogFSZE}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{LEV}_{it} + \mu_{it}$$

$$\text{GenStrgInf}_{it} = \alpha_i + \beta_1 \text{BSZE}_{it} + \beta_2 \text{CEODUAL}_{it} + \beta_3 \text{PNED}_{it} + \beta_4 \text{AUDTYP}_{it} \\ + \beta_5 \text{LogFSZE}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{LEV}_{it} + \mu_{it}$$

$$\text{FinData}_{it} = \alpha_i + \beta_1 \text{BSZE}_{it} + \beta_2 \text{CEODUAL}_{it} + \beta_3 \text{PNED}_{it} + \beta_4 \text{AUDTYP}_{it} \\ + \beta_5 \text{LogFSZE}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{LEV}_{it} + \mu_{it}$$

$$\text{FwdLkInf}_{it} = \alpha_i + \beta_1 \text{BSZE}_{it} + \beta_2 \text{CEODUAL}_{it} + \beta_3 \text{PNED}_{it} + \beta_4 \text{AUDTYP}_{it} \\ + \beta_5 \text{LogFSZE}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{LEV}_{it} + \mu_{it}$$

$$\text{SocBdDisc}_{it} = \alpha_i + \beta_1 \text{BSZE}_{it} + \beta_2 \text{CEODUAL}_{it} + \beta_3 \text{PNED}_{it} + \beta_4 \text{AUDTYP}_{it} \\ + \beta_5 \text{LogFSZE}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{LEV}_{it} + \mu_{it}$$

where:

VDScore = is total voluntary disclosure score;

GenStgInf = is general and strategic information sub-category of VDScore;

FinData	= is financial data sub-category of VDScore;
FwdlklInf	= is forward-looking information sub-category of VDScore;
SocBdInf	= is social and board disclosure sub-category of VDScore;
BSZE	= is board size;
CEODUAL	= is CEO duality;
PNED	= is proportion of NEDs;
AUDTYP	= is auditor type;
FSZE	= is firm size;
ROA	= is return on assets;
LEV	= is leverage;
a	= is total constant; and
μ	= is the error term.

4. Results and discussion

4.1 Descriptive statistics

Table 2 presents the descriptive statistics and normality test of the variables in the study. We report the mean, standard deviation, minimum and maximum, as well as the skewness test, of the variables. An average of 0.32 with minimum and maximum values of 0.10 and 0.67, respectively, of the overall voluntary disclosure score indicate wide variations in the extent of the firms' disclosure of voluntary information. Approximately, on average, only 15 out of the 48 total items of the disclosure checklist were disclosed by the firms. This result is consistent with prior studies that reported low disclosure scores of firms in Ghana pre-IFRS adoption (Tsamenyi *et al.*, 2007; Bopkin and Isshaq, 2009), suggesting that Ghana's adoption of IFRS is yet to improve the information environment of the country. The table shows an average board size of approximately eight members with minimum and maximum values of 3 and 12, respectively. We also document a mean value of 0.84 with minimum and maximum values of 0.00 and 1.00, respectively, for board leadership, implying that majority of the firms had two different persons occupying the position of board chair and CEO, respectively. Concerning the auditor type, we report a mean of 0.81 and minimum and maximum of 0.00 and 1.00, respectively, suggesting that about 81% of the listed firms in Ghana engage the services of a "Big 4" audit firm. On proportion of NEDs on the board, we report a mean of 0.77 with minimum and maximum values of 0.40 and 0.91, respectively. This result suggests that board independence may be generally high among Ghanaian listed firms.

Our normality skewness test suggest that all the predictive variables are not normally distributed, implying that a non-parametric test is required to establish the correlation (Harwell, 1988). Thus, we use the non-parametric Spearman's rho correlation analysis

Variable	Mean	SD	Minimum	Maximum	Skewness	Kurtosis	No. of obs.
VDScore	0.32	0.11	0.67	0.10	0.0000	0.0000	101
Board size	7.93	1.935	4.00	12.00	0.5140	-0.5320	109
CEO duality	0.84	0.37	0.00	1.00	-1.8990	1.6400	109
Proportion of NEDs	0.77	0.12	0.40	0.91	-1.1910	0.8550	109
Auditor type	0.81	0.393	0.00	1.00	-1.6200	0.6370	109
Firm size	19.89	21.26	9.79	23.06	4.4210	18.9750	105
Leverage	0.56	0.26	0.61	1.26	-0.0440	-0.3940	107
Profitability	0.07	0.60	-1.73	3.71	-1.8990	1.6400	107

Table 2.
Descriptive summary
of dependent,
independent and
control variables

summarized in Table 3. The results largely indicate that there were no multicollinearity problems among the variables as indicated by the variance inflation factor (VIF) test reported in the regression tables. All the VIF values reported were below the conservative threshold of 2.5 (Pallant, 2007).

To mitigate the potential effect of model misspecification and bias results, we perform different pre-regression and diagnosis test, including autocorrelation and heteroscedastic check. The results from these analyses confirm the robust of our findings in explaining the determinants of voluntary disclosures in Ghana.

4.2 Main results

The results of the pooled OLS regression are presented in Table 4. Further analyses are provided in Table 5 to highlight how the independent variables predicted the extent of specific

Variable	No. of obs.	8	7	6	5	4	3	2	1
1 Board size	109	<i>0.578**</i>	0.066	0.152	<i>0.233**</i>	<i>0.356**</i>	0.141	<i>0.240**</i>	1
2 CEO duality	109	<i>0.474**</i>	0.071	<i>0.163*</i>	<i>-0.168*</i>	<i>0.390**</i>	0.109	1	
3 Proportion of NEDs	109	0.079	0.108	-0.087	0.013	0.064	1		
4 Auditor type	109	<i>0.397**</i>	<i>0.163*</i>	0.112	<i>0.340**</i>	1			
5 Leverage	107	-0.010	0.139	-0.120	1				
6 Profitability	107	-0.001	-0.147	1					
7 Firm size	105	0.146	1						
8 VDScore	101	1							

Table 3.
Correlation matrix

Notes: Table 3 shows the Spearman’s rho correlation matrix. The sample consists of 22 firm-year observations for a five-year period. Italic text indicates statistical significance at the 5% level or better. See Table 1 for variable definitions

Independent variables	β	t-value	VIF	No. of obs.
Constant		-1.674		
Board size	0.479	<i>5.841***</i>	1.021	109
CEO duality	0.282	<i>3.491***</i>	1.348	109
Proportion of NEDs	-0.025	-0.339	1.274	109
Auditor type	0.042	0.496	1.236	109
<i>Control variables</i>				
Firm size	0.304	<i>4.015***</i>	1.084	105
Leverage	-0.025	-1.306	1.043	107
Profitability	-0.039	-0.526	1.146	107
<i>Model summary</i>				
R	0.71			
R ²	0.51			
Adjusted R ²	0.47			
F-value	13.76			
Significance	<i>0.000***</i>			
Durbin-Watson	0.96			

Table 4.
Multiple regression
results of overall
voluntary disclosure

Notes: Table 4 presents the analysis of the variables of corporate governance and control variables of firm-specific characteristic with respect to the dependent variable, VDScore, using OLS regression with corresponding variance inflation factors. Significance is denoted at the ***0.01, **0.05 and *0.10 levels, respectively. The number of observations for the VDScore is 101

General and strategic information category				
Independent variables	β	<i>t</i> -value	VIF	No. of obs.
Constant		-1.457		
Board size	0.253	2.696***	1.021	109
CEO duality	0.422	4.565***	1.348	109
Proportion of NEDs	0.032	0.378	1.274	109
Auditor type	-0.192	-1.992**	1.236	109
<i>Control variables</i>				
Firm size	0.321	3.708***	1.084	105
Leverage	0.040	0.449	1.043	107
Profitability	-0.00	-0.356	1.146	107
<i>Model summary</i>				
Adjusted R^2		0.276		
<i>F</i> -value		6.46		
Significance		0.000***		
<i>Financial information category</i>				
Constant		0.454		
Board size	0.210	2.209**	1.021	109
CEO duality	0.159	1.700*	1.348	109
Proportion of NEDs	-0.145	-1.689*	1.274	109
Auditor type	0.296	3.035***	1.236	109
<i>Control variables</i>				
Firm size	0.236	2.690***	1.084	105
Leverage	-0.139	-1.549	1.043	107
Profitability	-0.041	-0.488	1.146	107
<i>Model summary</i>				
Adjusted R^2		0.324		
<i>F</i> -value		7.85		
Significance		0.000***		
<i>Forward-looking information category</i>				
Constant		-1.311		
Board size	0.150	1.481	1.021	109
CEO duality	-0.166	-1.668*	1.348	109
Proportion of NEDs	0.089	0.977	1.274	109
Auditor type	0.187	1.792*	1.236	109
<i>Control variables</i>				
Firm size	0.371	3.969***	1.084	105
Leverage	-0.182	-1.891*	1.043	107
Profitability	-0.113	-1.251	1.146	107
<i>Model summary</i>				
Adjusted R^2		0.063		
<i>F</i> -value		1.97		
Significance		0.068		
<i>Social and board information category</i>				
Constant		-1.452		
Board size	0.574	6.413***	1.021	109
CEO duality	0.218	2.478**	1.348	109
Proportion of NEDs	-0.025	-0.306	1.274	109
Auditor type	-0.039	-0.419	1.236	109

(continued)

Table 5.
Multiple regression
results for categories
of voluntary
disclosure

General and strategic information category				
Independent variables	β	<i>t</i> -value	VIF	No. of obs.
<i>Control variables</i>				
Firm size	0.060	0.725	1.084	105
Leverage	-0.061	-0.713	1.043	107
Profitability	0.023	0.284	1.146	107
<i>Model summary</i>				
Adjusted R^2	0.481			
<i>F</i> -value	14.23			
Significance	0.000***			

Notes: Table 5 presents the analysis of the variables of corporate governance and control variables of firm-specific characteristics with respect to the dependent variables, Gen&StrgInf, FinData, FwdLkInfo and Soc&BdDisc. respectively, using OLS regression with corresponding variance inflation factors. Significance is denoted at the ***0.01, **0.05 and *0.10 levels, respectively. The number of observations (N) for all the categories of VDScore is 101

Table 5.

types of voluntary disclosures. To accommodate the panel data, year dummies were included in each of the equations. We document a significant explanatory power with R^2 of 0.51. This is confirmed by the significant *F*-value of 13.76 (p -value = 0.00). The R^2 value suggests that approximately 51% of the variation in the voluntary disclosure can be explained by the variations in the whole set of the independent variables. The model can be considered reliable.

4.3 Corporate governance and overall voluntary disclosure

The results presented in Table 4 indicate that two of the corporate governance variables had significant effects ($p < 0.01$) on the extent of overall voluntary disclosure in the annual reports. These are size of the board of directors and CEO duality. Meanwhile, the control variable of firm size also recorded a significant ($p < 0.01$) effect on the overall voluntary disclosure score. Additionally, the direction for all the variables are as hypothesized, implying that a relatively larger board size, dual leadership structure of the board and a bigger firm size enhances the disclosure of firms, lending support to the agency theoretical position as discussed in the literature review section. These results are consistent with the evidence provided in empirical literature (Nandi and Ghosh, 2012; Samaha *et al.*, 2012; Rouf, 2011; Ahktaruddin *et al.*, 2009).

Contrary to expectation, the results for the proportion of NEDs (board independence) and auditor type – governance mechanisms deemed to have significant positive influence on a firm's disclosure policy – indicate that these variables do not significantly affect the disclosure policies. With respect to the board composition, Eng and Mak (2003) argue that there is a substitute relationship between outside (non-executive) directors and disclosure in monitoring managers. Thus, with the increase in outside (non-executive) directors, disclosure may not be enhanced, and this provides a possible explanation in the Ghanaian case. Another possible reason is provided in the empirical work of Agyemang and Castellini (2013), who observed that in Ghana, majority of directors are appointed by controlling shareholders and, thus, their independence remains a problem or huge challenge – i.e. they may not have the independence required to make judgments regarding disclosure policies or perhaps, they may make private disclosures that serve the interests of the controlling shareholders only.

Even though, the engagement of a “Big 4” audit firm may lead to increased disclosures due to the expertise and reputation of these firms to demand better and increased disclosures from clients, this may not necessarily be the case for most of the firms in the study because of the cost implications associated with increased disclosures in the annual reports. The results are, however, consistent with evidence provided by [Nandi and Ghosh \(2012\)](#), [Rouf \(2011\)](#) and [Barako \(2007\)](#), all of whom found no significant relationship between the auditor type variable and corporate voluntary disclosure.

4.4 Corporate governance and specific types of voluntary disclosure

To provide more insight into the kinds of information that is provided by firms via the annual reports, we have undertaken a further examination of the effects of the governance variables and firm-specific characteristics on the specific types of voluntary disclosures. Four different categories of voluntary disclosures are examined. They are general and strategic information, financial data, forward-looking information and social and board information. The results for the analyses are provided in [Table 5](#).

The results indicate that all four governance variables significantly predicted at least one of the categories of voluntary disclosure. CEO duality variable was significant for all the four categories of voluntary disclosure and the direction for the relationship were as hypothesized except for the forward-looking information category, which showed a negative relationship. Thus, firms that practice a separate leadership structure make less voluntary forward-looking disclosure in the annual reports. Possible explanations may be linked to a strategic view of voluntary forward-looking disclosures that may lead the board chair to limit such disclosures in the annual report. First, the board chairperson may deliberately withhold such information because they are proprietary in nature and can be used by competitors to outcompete the firm. Second, such forward-looking disclosures can arouse high expectations from other stakeholders and can lead them to scrutinize and pressurize top management to meet these expectations.

The variables of board size and auditor type were significant for three of the disclosure subcategories. The directions for the board size were in consonance with hypotheses. Meanwhile, board size was not significant for the forward-looking information category. The explanation given in respect of the CEO duality applies in this case as well. Interestingly, while the auditor type variable was not significant for the social and board information category, the direction for the general and strategic information category was rather contrary to the hypothesis. Thus, the use of a “Big 4” audit firm does not necessarily imply an increased disclosure of social and board information in the annual report. Meanwhile, it leads to a reduction in the disclosure of general and strategic information in the annual reports. In the first instance, the phenomenon may be due to the fact that regulators do not require a strict adherence to corporate governance principles as in the case of other countries. As such, these high-caliber audit firms may not necessarily place premium in demanding clients to disclose such information, bearing in mind the cost involved in increasing such disclosures. In the second instance, the reason may be that “Big 4” audit firm may demand clients to disclose high-quality information – not in terms of volume – by means of chairman’s and/or CEO’s statements rather than the mere making of disclosures, which they consider as unnecessary to the needs of users of the annual report.

The variable of board composition – i.e. the proportion of NEDs on the board – failed to predict any of the categories of voluntary disclosure except for the financial data category, which showed a direction contrary to expectation. As previously explained, there is a substitute relationship between NEDs and disclosure in monitoring managers ([Eng and](#)

Mak, 2003); thus, the presence of NEDs may not necessarily lead to increases in any of the categories of disclosures in the annual report. The result for the financial data category, however, is consistent with the evidence provided by Eng and Mak (2003) in the case of Singaporean listed companies.

With respect to the control variables, only firm size was significant for all the disclosure categories, except for social and board information category and in the predicted direction. Firm size has been consistently found to be a significant and positive determinant of a firm's disclosure policy (Barako *et al.*, 2007; Ahktaruddin *et al.*, 2009; Eng and Mak, 2003; Rouf, 2011; Nandi and Ghosh, 2012). Leverage was significant in only one occasion, i.e. forward-looking information category. The direction suggests that highly geared firms make less disclosure of forward-looking information in the annual reports. This is probably not surprising because highly geared firms may demand forward-looking information via other private means and not the annual report, which is primarily for shareholders. Firm's profitability was not significant for any of the categories of disclosures.

5. Conclusion

The main purpose of this study was to examine the relationship between corporate governance variables and the extent of voluntary disclosures in the annual reports of listed non-financial firms in Ghana. First, we sought to determine the level of overall and specific types of voluntary disclosures made in the annual reports of the sampled firms for the study period. Secondly, we examined the effects of selected corporate governance variables on overall and specific types of voluntary disclosures in the annual reports while controlling for some firm-specific characteristics.

The study revealed that voluntary disclosures of listed non-financial Ghanaian companies are generally very low at approximately 32% and vary widely among the firms. Also, the study found only marginal growth in the voluntary disclosures over the study period. Moreover, the significant impact of board size and leadership structure of on overall voluntary disclosure of the firms is highlighted. Further analysis also found both board size and leadership structure to significantly predict general and strategic information, financial information and social and board information categories of voluntary disclosure but not forward-looking information category. While the findings revealed that auditor type has significant positive relationships with voluntary disclosure categories of financial information and forward-looking information, its relationship with voluntary disclosure category of general and strategic information is negative.

In terms of policy recommendation, the SEC, GSE and other regulators should do more by enforcing adherence to good corporate governance practices. In addition, these regulators should appropriately be resourced by the central government to aid them to conduct their supervisory activities to ensure sound corporate governance practices in Ghanaian firms. Firms in their own capacity should improve their corporate governance practices as a way of enhancing the disclosure of vitally important financial and non-financial information to manage their risks for sustainable growth.

This study is characterized by some limitations. First, voluntary information disclosure of the firms was restricted to only those in annual reports and no other company media. Therefore, studies should be undertaken to extend voluntary disclosure by firms to cover other sources, e.g. internet websites and press releases. Finally, governance variables were solely collected from the annual reports, which sometimes failed to give further clarifications to those variables. For instance, it was difficult to prove the independence of non-executive directors in the annual reports. Future studies should consider to collect corporate governance information from multiple sources.

References

- Abdullah, M., Shukor, Z.A., Mohamed, Z.M. and Ahmad, A. (2015), "Risk management disclosure: a study on the effect of voluntary risk management disclosure toward firm value", *Journal of Applied Accounting Research*, Vol. 16 No. 3, pp. 400-432.
- Abdul-Wahab, N.S. (2010), "Tax planning and corporate governance: effect on shareholders' valuation", Unpublished doctoral thesis, University of Southampton.
- Adegbite, O.G. (2012), "Corporate governance developments in Ghana: the past, the present and the future", *Public and Municipal Finance*, Vol. 1 No. 2, pp. 71-75.
- Adel, C., Hussain, M.M., Mohamed, E.K.A. and Basuony, M.A.K. (2019), "Is corporate governance relevant to the quality of corporate social responsibility disclosure in large European companies?", *International Journal of Accounting and Information Management*, Vol. 27 No. 2, pp. 301-332.
- Adelopo, I. (2011), "Voluntary disclosure practices amongst listed companies in Nigeria", *Advances in Accounting*, Vol. 27 No. 2, pp. 338-345.
- Ağca, A. and Önder, Ş. (2007), "Voluntary disclosure in Turkey: a study on firms listed on Istanbul stock exchange (ISE)", *Problems and Perspectives in Management*, Vol. 5 No. 3, pp. 241-251.
- Agyei-Mensah, B.K. (2017), "The relationship between corporate governance, corruption and forward-looking information disclosure: a comparative study", *Corporate Governance: The International Journal of Business in Society*, Vol. 17 No. 2, pp. 284-304.
- Agyemang, O.S. and Castellini, M. (2013), "The guidelines of corporate governance of Ghana: issues, deficiencies and suggestions", *International Business Research*, Vol. 6 No. 10, pp. 163-173.
- Agyemang, O.S., Fantini, G. and Frimpong, J. (2015), "Does country-level corporate governance enhance ethical behaviour of firms?", *International Journal of Law and Management*, Vol. 57 No. 6, pp. 582-599.
- Agyemang, O.S., Aboagye, E., Antwi, S. and Frimpong, J. (2014), "Board of directors and firm performance of banking institutions: a Ghanaian experience", *European Journal of Economics, Finance and Administrative Sciences*, Vol. 67, pp. 45-59.
- Ahktaruddin, M., Hossain, M.A., Hossain, M. and Yao, L. (2009), "Corporate and voluntary disclosures in corporate annual reports of Malaysian listed firms", *Journal of Applied Management Accounting*, Vol. 7 No. 1, pp. 1-19.
- Ajinkya, B., Bhojraj, S. and Sengupta, P. (2005), "The association between outside directors, institutional investors and the properties of management earnings forecasts", *Journal of Accounting Research*, Vol. 43 No. 3, pp. 343-376.
- Albitar, K., Hussainey, K., Kolade, N. and Gerged, A.M. (2020), "ESG disclosure and firm performance before and after IR: the moderating role of governance mechanisms", *International Journal of Accounting and Information Management*, Vol. 28 No. 3, pp. 429-444.
- Aljifri, K., Hussainey, K. and Oyelere, P. (2012), "The determinants of relevant information disclosure: a corporate governance perspective", *Working Paper*, available at: www.cbe.uaeu.ac.ae/research/docs/wp_2012_07.pdf
- Alkhatib, K. (2014), "The determinants of forward-looking information disclosure", *Procedia – Social and Behavioral Sciences*, Vol. 109, pp. 858-864.
- Alotaibi, K.O. and Hussainey, K. (2016), "Determinants of CSR disclosure quantity and quality: evidence from non-financial listed firms in Saudi Arabia", *International Journal of Disclosure and Governance*, Vol. 13 No. 4, pp. 364-393.
- Alsaeed, K. (2006), "The association between firm-specific characteristics and disclosure", *Managerial Auditing Journal*, Vol. 21 No. 5, pp. 476-496.

- Amran, A., Lee, S.P., and Devi, S.S. (2014), "The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality", *Business Strategy and the Environment*, Vol. 23, pp. 217-235.
- Amartey, L.A., Yu, M. and Chukwu-Lobel, O. (2019), "Corporate governance in Ghana: an analysis of board accountability in Ghanaian listed banks", *Journal of Financial Regulation and Compliance*, Vol. 27 No. 2, pp. 126-140.
- Anderson, R.C., Mansi, S.A. and Reeb, D.M. (2004), "Board characteristics, accounting report integrity, and the cost of debt", *Journal of Accounting and Economics*, Vol. 37, pp. 315-342.
- Ansah, M. (2017), "The rise and fall of UT and capital banks", available at: <http://citifmonline.com>
- Ansong, A. (2015), "Board size, intensity of board activity and financial performance of SMEs: examining the mediating roles of access to capital and firm reputation", *Journal of Entrepreneurship and Business*, Vol. 3 No. 2, pp. 26-41.
- Appiah, K.O., Awunyo-Vitor, D., Mireku, K. and Ahiagbah, C. (2016), "Compliance with international financial reporting standards: the case of listed firms in Ghana", *Journal of Financial Reporting and Accounting*, Vol. 14 No. 1, pp. 131-156.
- Arcay, M.R.B. and Vázquez, M.F.M. (2005), "Corporate characteristics, governance rules and the extent of voluntary disclosures in Spain", *Advances in Accounting*, Vol. 21, pp. 299-331.
- Barako, D.G. (2007), "Determinants of voluntary disclosures in Kenyan companies' annual reports", *African Journal of Business Management*, Vol. 1 No. 5, pp. 113-128.
- Barako, D.G., Hancock, P. and Izan, H.Y. (2006), "Factors influencing voluntary corporate disclosure by Kenyan companies", *Corporate Governance: An International Review*, Vol. 14 No. 2, pp. 107-125.
- Barrett, M.E. (1976), "Financial reporting practices: disclosure and comprehensiveness in an international setting", *Journal of Accounting Research*, Vol. 14 No. 1, pp. 10-26.
- Barros, C.P., Boubaker, S. and Hamrouni, A. (2013), "Corporate governance and voluntary disclosure in France", *Journal of Applied Business Research (JABR)*, Vol. 29 No. 2, pp. 561-578.
- Barth, M.E., Landsman, W.R. and Lang, M. (2008), "International accounting standards and accounting quality", *Journal of Accounting Research*, Vol. 46 No. 3, pp. 467-498.
- Beasley, M.S. (1996), "An empirical analysis of the relation between the board of director composition and financial statement fraud", *Accounting Review*, Vol. 71, pp. 443-465.
- Beekes, W. and Brown, P. (2006), "Do better-governed Australian firms make more informative disclosures?", *Journal of Business Finance & Accounting*, Vol. 33 Nos 3/4, pp. 422-450.
- Binh, T.Q. (2012), "Voluntary disclosure information in the annual reports of non-financial listed companies: the case of Vietnam", *Journal of Applied Economics and Business Research*, Vol. 2 No. 2, pp. 69-90.
- Boesso, G. and Kumar, K. (2007), "Drivers of corporate voluntary disclosure: A framework and empirical evidence from Italy and the United States", *Accounting, Auditing and Accountability Journal*, Vol. 20 No. 2, pp. 269-296.
- Bopkin, G.A. and Isshaq, Z. (2009), "Corporate governance, disclosure and foreign share ownership on the Ghana stock exchange", *Managerial Auditing Journal*, Vol. 24 No. 7, pp. 688-703.
- Borgi, H. and Mnif, Y. (2021), "Compliance level with IFRS disclosure requirements across 12 African countries: do enforcement mechanisms matter?", *Journal of Financial Regulation and Compliance*, Vol. 30 No. 1, pp. 60-81.
- Bova, F. and Pereira, R. (2012), "The determinants and consequences of heterogeneous IFRS compliance levels following mandatory IFRS adoption: evidence from a developing country", *Journal of International Accounting Research*, Vol. 11 No. 1, pp. 83-111.

- Cadbury Committee (1992), *Report of the Committee on the Financial Aspects of Corporate Governance*, Vol. 1, GEE, London.
- Chan, M.C., Watson, J. and Woodliff, D. (2014), "Corporate governance quality and CSR disclosures", *Journal of Business Ethics*, Vol. 125 No. 1, pp. 59-73.
- Cheng, E.C. and Courtenay, S.M. (2006), "Board composition, regulatory regime and voluntary disclosure", *The International Journal of Accounting*, Vol. 41 No. 3, pp. 262-289.
- Clarkson, P.M., Kao, J.L. and Richardson, G.D. (1994), "The voluntary inclusion of forecasts in the MD and a section of annual reports", *Contemporary Accounting Research*, Vol. 11 No. 1, pp. 423-450.
- Cooke, T.E. (1989), "Voluntary corporate disclosure by Swedish companies", *Journal of International Financial Management and Accounting*, Vol. 1 No. 2, pp. 171-195.
- Cooke, T.E. (1991), "An assessment of voluntary disclosure in the annual reports of Japanese corporations", *The International Journal of Accounting Education and Research*, Vol. 26, pp. 174-189.
- Courtis, J.K. (1979), "Annual report disclosure in New Zealand: analysis of selected corporate attributes", New England Accounting Research, Study No. 8.
- Davidson, R., Goodwin-Stewart, J. and Kent, P. (2005), "Internal governance structures and earnings management", *Accounting and Finance*, Vol. 45 No. 2, pp. 241-267.
- DeAngelo, L.E. (1981), "Auditor size and audit quality", *Journal of Accounting and Economics*, Vol. 3 No. 3, pp. 183-199.
- Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1995), "Detecting earnings management", *Accounting Review*, Vol. 70, pp. 193-225.
- Deegan, C. and Blomquist, C. (2006), "Stakeholder influence on corporate reporting: an exploration of the interaction between WWF-Australia and the Australian minerals industry", *Accounting, Organizations and Society*, Vol. 31 Nos 4/5, pp. 343-372.
- Desai, M.A. and Dharmapala, D. (2009), "Corporate tax avoidance and firm value", *Review of Economics and Statistics*, Vol. 91 No. 3, pp. 537-546.
- Dey, P.K., Roy, M. and Akter, M. (2020), "What determines forward-looking information disclosure in Bangladesh?", *Asian Journal of Accounting Research*, Vol. 5 No. 2, pp. 225-239.
- Diamond, D.W. and Verrecchia, R.E. (1991), "Disclosure, liquidity, and the cost of capital", *The Journal of Finance*, Vol. 46 No. 4, pp. 1325-1359.
- Eng, L.L. and Mak, Y.T. (2003), "Corporate governance and voluntary disclosures", *Journal of Accounting and Public Policy*, Vol. 22 No. 4, pp. 325-345.
- Entwistle, G.M. (1997), "Managing disclosure: the case of research and development in knowledge-based firms", Unpublished PhD thesis, University of Western Ontario, Ontario.
- Firth, M. (1979), "The impact of size, stock market listing, and auditors on voluntary disclosure in corporate annual reports", *Accounting and Business Research*, Vol. 9 No. 36, pp. 273-280.
- Ghana Securities and Exchanges Commission (2010), "Corporate governance guidelines of Ghana", available at: www.ecgi.org/codes/all_codes.php
- Gordon, L., Loeb, M. and Zhu, W. (2012), "The impact of IFRS adoption on foreign direct investment", *Journal of Accounting and Public Policy*, Vol. 31 No. 4, pp. 374-398.
- Gray, R., Owen, D. and Adams, C. (1996), "Accounting and accountability: changes and challenges in corporate social reporting and environmental reporting", Hemel Hempstead, United Kingdom.
- Grossman, S.J. (1981), "An introduction to the theory of rational expectations under asymmetric information", *The Review of Economic Studies*, Vol. 48 No. 4, pp. 541-559.
- Gul, F.A. and Leung, S. (2004), "Board leadership, outside directors' expertise and voluntary corporate disclosures", *Journal of Accounting and Public Policy*, Vol. 23 No. 5, pp. 351-379.

- Haniffa, R. and Hudaib, M. (2006), "Corporate governance structure and performance of Malaysian listed companies", *Journal of Business Finance Accounting*, Vol. 33 Nos 7/8, pp. 1034-1062.
- Haniffa, R.M. and Cooke, T.E. (2002), "Culture, corporate governance and disclosure in Malaysia corporations", *Abacus*, Vol. 38 No. 3, pp. 317-349.
- Harwell, M.R. (1988), "Choosing between parametric and non-parametric tests", *Journal of Counselling and Development*, Vol. 67, pp. 34-37.
- Healy, P. and Palepu, K. (2001), "Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature", *Journal of Accounting and Economics*, Vol. 31 Nos 1/3, pp. 405-440.
- Hermalin and Weisbach (2012), "Information disclosure and corporate governance", *The Journal of Finance*, Vol. 67 No. 1, pp.195-233.
- Ho, P.-L. and Taylor, G. (2013), "Corporate governance and different types of voluntary disclosure: evidence from Malaysian listed firms", *Pacific Accounting Review*, Vol. 25 No. 1, pp. 4-29.
- Hongxia, L.I. and Ainian, Q.I. (2008), "Impact of corporate governance on voluntary disclosures in Chinese listed companies", *Corporate Ownership Control*, Vol. 5 No. 2, pp. 360-366.
- Horton, J., Serafeim, G. and Serafeim, I. (2012), "Does mandatory IFRS adoption improve the information environment?", *Contemporary Accounting Research*, Vol. 30 No. 1, pp. 388-423.
- Hossain, M., Tan, L.M. and Adams, M. (1994), "Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur stock exchange", *The International Journal of Accounting*, Vol. 29, pp. 334-351.
- Inchausti, B.G. (1997), "The influence of company characteristics and accounting regulation on information disclosed by Spanish firms", *European Accounting Review*, Vol. 6 No. 1, pp. 45-68.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behaviour, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.
- Jizi, M.I., Salama, A., Dixon, R. and Stratling, R. (2014), "Corporate governance and corporate social responsibility disclosure: evidence from the US banking sector", *Journal of Business Ethics*, Vol. 125 No. 4, pp. 601-615.
- John, K. and Senbet, L.W. (1998), "Corporate governance and board effectiveness", *Journal of Banking and Finance*, Vol. 22 No. 4, pp. 371-403.
- Kent, P. and Stewart, J. (2008), "Corporate governance and disclosures on the transition to international financial reporting standards", *Accounting and Finance*, Vol. 48 No. 4, pp. 649-671.
- Khan, A., Muttakin, M.B. and Siddiqui, J. (2013), "Corporate governance and corporate social responsibility disclosures: evidence from an emerging economy", *Journal of Business Ethics*, Vol. 114 No. 2, pp. 207-223.
- Kuranchie-Pong, L., Bokpin, G.A. and Andoh, C. (2016), "Empirical evidence on disclosure and risktaking of banks in Ghana", *Journal of Financial Regulation and Compliance*, Vol. 24 No. 2, pp. 197-212.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1999), "Law and finance", *Journal of Political Economy*, Vol. 106 No. 6, pp. 113-115.
- Landsman, W., Maydew, E. and Thornock, J. (2012), "The information content of annual earnings announcements and mandatory adoption of IFRS", *Journal of Accounting and Economics*, Vol. 53 Nos 1/2, pp. 34-54.
- Li, J., Pike, R. and Haniffa, R. (2008), "Intellectual capital disclosure and corporate governance structure in UK firms", *Accounting and Business Research*, Vol. 38 No. 2, pp. 137-159.

- Lim, Y.Z., Talha, M., Mohamed, J. and Sallehuddin, A. (2008), "Corporate social responsibility disclosure and corporate governance in Malaysia", *International Journal of Behavioural Accounting and Finance*, Vol. 1 No. 1, pp. 67-89.
- Ling, T.C. and Sultana, N. (2015), "Corporate social responsibility: what motivates management to disclose?", *Social Responsibility Journal*, Vol. 11 No. 3, pp. 513-534.
- Lipton, M. and Lorsch, J.W. (1992), "A modest proposal for improved corporate governance", *The Business Lawyer*, Vol. 48, pp. 59-77.
- Lu, Y. and Abeysekera, I. (2014), "Stakeholders' power, corporate characteristics, and social and environmental disclosure: evidence from China", *Journal of Cleaner Production*, Vol. 64, pp. 426-436.
- Majumder, M.T.H., Akter, A. and Li, X. (2017), "Corporate governance and corporate social disclosures: a meta-analytical review", *International Journal of Accounting and Information Management*, Vol. 25 No. 4, pp. 434-458.
- Meek, G., Roberts, C. and Gray, S. (1995), "Factors influencing voluntary annual report disclosures by U.S., U.K. and Continental European multinational corporations", *Journal of International Business Studies*, Vol. 26, pp. 555-572.
- Michelon, G. and Parbonetti, A. (2012), "The effect of corporate governance on sustainability disclosure", *Journal of Management and Governance*, Vol. 16 No. 3, pp. 577-609.
- Mohamad, W.I.A.W. and Sulong, Z. (2010), "Corporate governance mechanisms and extent of disclosure: evidence from listed companies in Malaysia", *International Business Research*, Vol. 3 No. 4, pp. 216-228.
- Nandi, S. and Ghosh, S.K. (2012), "Corporate governance attributes, firm characteristics, and the level of corporate disclosure: evidence from the Indian listed firms", *Decision Science Letters*, Vol. 2 No. 1, pp. 45-58.
- Neu, D., Warsame, H. and Pedwell, K. (1998), "Managing public impressions: environmental disclosures in annual reports", *Accounting, Organizations and Society*, Vol. 23 No. 3, pp. 265-282.
- Nnadi, M. and Soobaroyen, T. (2015), "International financial reporting standards and foreign direct investment: the case of Africa", *Advances in Accounting*, Vol. 31 No. 2, pp. 228-238.
- Nobes, C. (2011), "IFRS practices and the persistence of accounting system classification", *ABACUS*, Vol. 47 No. 3, pp. 267-283.
- Ntim, C. (2013), "Corporate ownership and market valuation in South Africa: uncovering the effects of shareholdings by different groups of corporate insiders and outsiders", *International Journal of Business Governance and Ethics*, Vol. 8 No. 3, pp. 242-264.
- OECD. (2004), *Principles of Corporate Governance*, 2nd ed., OECD, Paris.
- Okeahalam, C.C. (2004), "Corporate governance and disclosure in Africa: issues and challenges", *Journal of Financial Regulation and Compliance*, Vol. 12 No. 4, pp. 359-370.
- Pallant, J. (2007), *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS Version 15*, McGraw-Hill, New York, NY.
- Papadopoulos, K. (2019), "Corporate governance in emerging markets", *Governance Insights: Latest Trends in Corporate Governance*, pp. 1-8, available at: www.issgovernance.com
- Patelli, L. and Prencipe, A. (2007), "The relationship between voluntary disclosure and independent directors in the presence of a dominant shareholder", *European Accounting Review*, Vol. 16, pp. 5-33.
- Rouf, A. (2011), "Corporate characteristics, governance attributes and the extent of voluntary disclosure in Bangladesh", *African Journal of Business Management*, Vol. 5 No. 19, pp. 7836-7845.
- Ruiz-Barbadillo, E. and Martínez-Ferrero, J. (2021), "The choice of incumbent financial auditors to provide sustainability assurance and audit services from a legitimacy perspective",

Sustainability Accounting, Management and Policy Journal, Vol. 13 No. 2, pp. 459-493, doi: 10.1108/SAMPJ-04-2021-0121.

- Samaha, K., Dahawy, K., Hussainey, K. and Stapleton, P. (2012), "The extent of disclosure and its determinants in a developing market: the case of Egypt", *Advances in Accounting, Incorporating Advances in International Accounting*, Vol. 30, pp. 1-11.
- Ștefănescu, C.A. (2012), "Corporate governance disclosure: an international overview of research trends", *Economics and Management*, Vol. 17 No. 3, pp. 1207-1213.
- Street, D.L. and Gray, S.J. (2002), "Factors influencing the extent of corporate compliance with international accounting standards: summary of a research monograph", *Journal of International Accounting, Auditing & Taxation*, Vol. 11, pp. 51-76.
- Sundarasan, S.D.D., Je-Yen, T. and Rajangam, N. (2016), "Board composition and corporate social responsibility in an emerging market", *Corporate Governance: The International Journal of Business in Society*, Vol. 16 No. 1, pp. 35-53.
- Tawiah, V. and Boolaky, P. (2019), "Consequences and determinants of IFRS convergence in India", *International Journal of Accounting and Information Management*, Vol. 28 No. 2, pp. 303-332.
- Tsalavoutas, I. (2011), "Transition to IFRS and compliance with mandatory disclosure requirements: what is the signal?", *Advances in Accounting*, Vol. 27 No. 2, pp. 390-405.
- Tsamenyi, M., Adu, E.E. and Onumah, J. (2007), "Disclosure and corporate governance in developing countries: evidence from Ghana", *Managerial Auditing Journal*, Vol. 22 No. 3, pp. 319-334.
- Wallace, R.S.O. (1988), "Corporate financial reporting in Nigeria", *Accounting and Business Research*, Vol. 18 No. 72, pp. 352-362.
- Wang, M. and Hussainey, K. (2013), "Voluntary forward-looking statements driven by corporate governance and their value relevance", *Journal of Accounting and Public Policy*, Vol. 32 No. 3, pp. 26-49.
- Williams, R.J., Fadil, P.A. and Armstrong, R.W. (2005), "Top management team tenure and corporate illegal activity: the moderating influence of board size", *Journal of Managerial Issues*, Vol. 17 No. 4, pp. 479-493.
- World Bank. (2005), "Report on the observance of standards and codes: corporate governance", available at: [www.worldbank.org/ifa/Ghana%20ROSC%20final%20\(formtted\).pdf](http://www.worldbank.org/ifa/Ghana%20ROSC%20final%20(formtted).pdf) (accessed 24 January 2022).

Further reading

- Agyei-Mensah, B.K. (2016), "Internal control information disclosure and corporate governance: evidence from an emerging market", *Corporate Governance: The International Journal of Business in Society*, Vol. 16 No. 1, pp. 79-95.
- Agyemang, O.S. and Castellini, M. (2015), "Corporate governance in an emergent economy: a case of Ghana", *Corporate Governance*, Vol. 15 No. 1, pp. 52-84.
- Cadbury, A. (1992), "Report of the committee on the financial aspects of corporate governance", Gee, Vol. 1.
- Lan, Y., Wang, L. and Zhang, X. (2013), "Determinants and features of voluntary disclosure in the Chinese stock market", *China Journal of Accounting Research*, Vol. 6 No. 4, pp. 265-285.
- Levi, S. (2008), "Voluntary disclosure of accruals in earnings press releases and the pricing of accruals", *Review of Accounting Studies*, Vol. 13 No. 1, pp. 1-21.
- Mnif, Y. and Borgi, H. (2020), "The association between corporate governance mechanisms and compliance with IFRS mandatory disclosure requirements: evidence from 12 African countries", *Corporate Governance: The International Journal of Business in Society*, Vol. 20 No. 7, pp. 1371-1392.

OECD (1999), *Principles of Corporate Governance*, OECD, Paris.

Waweru, N. (2020), "Business ethics disclosure and corporate governance in Sub-Saharan Africa (SSA)", *International Journal of Accounting and Information Management*, Vol. 28 No. 2, pp. 363-387.

Appendix. Voluntary disclosure items (adapted from Barako, 2007)

A. General and strategic information

1. Information relating to the general outlook of the economy
2. Company's mission statement
3. Brief history of the company
4. Organizational structure/chart
5. Description of major goods/services produced
6. Description of marketing networks for finished goods/services
7. Company's contribution to the national economy
8. Company's current business strategy
9. Likely effect of business strategy on current performance
10. Market share analysis
11. Disclosure relating to competition in the industry
12. Discussion about major regional economic developments
13. Information about regional political stability

B. Financial data

14. Historical summary of financial data for the past four years or over
15. Review of current financial results and discussion of major factors underlying performance
16. Statement concerning wealth created, e.g. value-added statement
17. Supplementary inflation adjusted financial statement financial ratios
18. Return on assets
19. Return on shareholders' funds
20. Liquidity ratios
21. Gearing ratios
22. Other Ratios

C. Forward-looking information

23. Factors that may affect future performance
24. Likely effect of business strategy on future performance
25. New product/service development
26. Planned capital expenditure
27. Planned research and development expenditure
28. Planned advertising and publicity expenditure
29. Earnings per share forecast
30. Sales revenue forecast
31. Profit forecast

D. Social and board disclosure

32. Number of employees for the past two or more years
33. Reasons for change in employee number
34. Productivity per employee

35. Other productivity indicators
36. Indication of employee morale, e.g. turnover, strikes and absenteeism
37. Information about employee workplace safety
38. Data on workplace accidents
39. Statement of corporate social responsibility
40. Statement of environmental policy
41. Environmental projects/activities undertaken
42. Information on community involvement/participation
43. Names of directors
44. Age of directors
45. Academic and professional qualification of directors
46. Business experience of directors
47. Directors' shareholding in the company and other related interests (e.g. stock options)

Corresponding author

Richard Nana Boateng can be contacted at: richard.boateng2@mail.dcu.ie