

Corporate governance and the level of Bahraini corporate compliance with IFRS disclosure

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Abstract

Purpose – The purpose of this paper is to examine the relation between corporate governance (CG) and International Financial Reporting Standards (IFRS) disclosure one year before the issuance of the first Corporate Governance Code (CGC) in Bahrain.

Design/methodology/approach – The CG is measured by board composition, audit committee characteristics, and ownership structure. Ordinary least-squares regressions are used to examine the relationships between the level of Bahraini corporate compliance with mandatory IFRS disclosure requirements as dependent variable and eight CG mechanisms as independent variables and five other firm-specific attributes, as control variables.

Findings – The results show that three of the CG mechanisms (i.e. board independence, audit committee independence, and Chief Executive Officer duality) are associated with the level of IFRS disclosure. This suggests that CG mechanisms are effective in the financial reporting practices. However, the results show that the other five CG mechanisms (i.e. board size, audit committee size, blockholder ownership, managerial ownership, and government ownership) are not associated with the level of IFRS disclosure. This result may prove the importance of the CGC as an effective enforcement mechanism to enforce Bahraini companies to fully comply with IFRS disclosure.

Research limitations/implications – Although the study can contribute to the understanding of the relationship between CG and IFRS in Bahrain, it may not be able to be generalized to other countries. Such relationships could be different from country to country due to business and legal environments. Therefore, there is a need to investigate these relationships among different countries. This study examines the relation between CG and the level of compliance with IFRS disclosure one year before the issuance of the first CGC in Bahrain. Future research might attempt to examine the relation one year after the issuance of the first CGC in Bahrain to confirm the importance of the CGCs as an effective enforcement mechanism.

Practical implications – The findings of this study are of great concern to all users of annual reports and of particular interest to accounting regulators to improve the level of supervision and the standard of reporting in Bahrain. Also, it is of great concern to professional accounting bodies, policy makers, and governments in emerging markets in countries that share similar economic, political, and cultural environments.

Originality/value – This paper's contribution to the literature is twofold: it examines the relation between three groups of CG mechanisms (i.e. board characteristics, audit committee characteristics and ownership structure) and the level of corporate compliance with IFRS disclosure; it examines the relation one year before implementing the first CGC in Bahrain and provides new evidence on the importance and effectiveness of the CGCs.

Keywords Corporate governance, IFRS, Disclosure, Compliance, Bahrain

Paper type Research paper

1. Introduction

The reliability and the quality of financial reporting has been a persistent concern among regulators and practitioners, especially after high-profile accounting scandals involving once well-respected companies, such as Enron, WorldCom, and Xerox. A number of studies (e.g. Byrne, 2002; Deakin and Konzelmann, 2004) argue that accounting scandals have long been one of the main drivers of corporate governance (CG) because corporate failures are often attributed to inadequate CG practices. The failure of corporations appears to have been a case of mismanagement of corporate risk and conflicts of interest between the board and shareholders.

Companies' financial reporting outcomes depend on the quality of financial reporting standards in place as well as the incentives and constraints preparers face to comply with

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those standards (Pope and McLeay, 2011). All over the world, many countries have adopted International Financial Reporting Standards (IFRS), making it one of the most significant regulatory changes in the history of accounting. However, the mere adoption of IFRS may not bring the intended consequences if there is no simultaneous full compliance with the standards disclosure requirements.

Hodgdon *et al.* (2008) focus on the consequences of IFRS compliance, and they found that the analysts' earnings forecast errors are negatively associated with the level of compliance with IFRS disclosure requirements. Bova and Pereira (2012) found that IFRS compliance is positively associated with greater stock turnover, in a developing country with low enforcement. The results of Hodgdon *et al.* (2008) and Bova and Pereira (2012) may suggest that the adoption of IFRS may not bring the intended consequences if there is no full compliance with the financial reporting standards. In this regard, Pope and McLeay (2011) argued that company-level CG mechanisms are expected to have an important influence on preparers' incentives to comply with IFRS, particularly in countries where the country-level enforcement is relatively weak. Brown (2011) also argued that the achievement of IFRS benefits depends on many factors, including the legal or regulatory support for the standards and the degree of compliance monitoring and enforcement.

The quality of financial reporting and the benefits of adopting IFRS depend on the strength of preparers' incentives to comply and make high-quality disclosures. These incentives depend to a large extent on the enforcement framework. Enforcement framework is interpreted broadly in the literature to include all institutions and procedures employed to ensure compliance with the requirements, including CG, auditors, regulators, and courts (IAS Regulation, 2014).

Corporate disclosure plays an effective CG role, by providing transparent information to both shareholders and other parties. In this regard, Verriest *et al.* (2013) suggest that disclosures are of higher quality when firms have strong CG, and disclosure levels improve generally on average with the introduction of IFRS, and firms with higher quality governance make more extensive disclosures on the financial statement effects of specific standards. Forker (1992) suggests that CG mechanisms such as board independence would enhance the monitoring of the quality of firm disclosures and would reduce the benefits from withholding information. Also, Williamson (1984) suggests that higher levels of board independence leads to improved transparency and responsibility by means of more information disclosure under the principle of accountability to the company and shareholders for any decision and its consequences.

The audit committee is being looked upon as a distinct culture for CG and has received wide publicity across the globe. Government authorities, regulators, and international bodies all have indicated that they view an audit committee as a potentially powerful tool that can enhance the reliability and transparency of financial information (United Nations Conference on Trade and Development, 2006). The existence of an audit committee enhances quality report, increases disclosure quality, improves the internal control system and, as a result, achieves more reliable financial reporting (Forker, 1992; Ho and Wong, 2001). The company ownership structure is acknowledged to be an important governance mechanism. In this regard, Makhija and Patton (2004) suggest that the extent and quality of corporate disclosure are an outcome of conflicting interests, among management, majority shareholders, and minority shareholders. With controlling power, large blockholders may manipulate the extent of disclosure to maximize private benefits, gained directly from the firms and/or from changes in share values in the capital market.

CG mechanisms have been established to ensure that managers are working primarily for the benefit of shareholders by trying to increase the economic value of the company. Regulatory authorities in both developed and emerging markets, recognizing the need to protect shareholders' interests, have published directives and statements of principles for CG (Chalevas, 2011). In Bahrain the first Corporate Governance Code (CGC) has been

effective on January 1, 2011. All Bahraini companies to which this Code applies should be in full compliance by the end of 2011.

There has been growing recognition in recent years of the importance of CG in enhancing financial reporting quality. However, the impact of CG on the level of corporate compliance with IFRS remains unexplored in emerging stock markets. In addition, there is a relative shortage of financial disclosure and CG studies that target the Gulf Cooperation Council (GCC) countries. Given the importance of IFRS compliance in enhancing the quality of financial reporting in the region, this study focuses on one of the GCC countries, namely, Bahrain.

The remainder of this study is organized as follows. The next section briefly presents the CG and business environment in Bahrain. Section 3 presents a review of the literature and the development of hypotheses. Section 4 explains the research methodology employed in this study. The empirical findings are presented in Section 5. Finally, Section 6 summarizes the main conclusions of the study.

2. CG and business environment in Bahrain

The Bahrain CGC is based upon nine core principles of CG that adhere to international best practices. The Code includes recommendations to apply the principles, as well as recommendations which support the implementation of good CG. The purpose of this Code is to establish the best-practice CG principles in Bahrain, and to provide protection for investors and other company stakeholders through compliance with those principles.

Bahrain tried to enact a raft of legislations to support CG, and the most recent one of them is "Bahrain Bourse CG Policy 2013." According to that policy, Bahrain Bourse seeks to apply the rules and principles of CG in an effective manner in accordance with the legislation issued by the Central Bank of Bahrain (CBB) and the Ministry of Industry and Commerce, and in fulfillment of the responsibility of the board of directors in the overall control, supervision and enhancement of compliance with the requirements of CG. Such compliance will contribute to improving the performance of the Bourse and thus help in enhancing the efficiency of the capital market and attract more domestic and foreign investments.

Bahrain is one of the most open economies in the MENA region and it is one of the world's leading international financial centers. The Bahrain Stock Exchange (BSE), which officially commenced operations in 1989, has grown significantly in the number of listed securities with currently 49 companies (Baena, 2011). Royal Decree No. 60 was issued regarding the establishment of Bahrain Bourse to replace BSE. This step has been taken to bring in line the bourse's capability to meet the modern administrative requirements of international exchanges, as well as the commercial standards that are deemed necessary to meet the rapid developments witnessed in modern stock exchanges. During 2010, Bahrain Bourse joined the Association of National Numbering Agencies.

Bahrain has become a recognized and well-established financial center due to the excellent reputation of the CBB, the successor to the Bahrain Monetary Agency, and due to Bahrain's infrastructure and the absence of tax and exchange controls. Bahrain has established itself not only as a leading regional center for conventional banking and financial activities, but also for Islamic financial services. Bahrain has the largest concentration of Islamic financial institutions in the Middle East with 31 such institutions dealing with diversified activities including commercial banking, investment banking, offshore banking, insurance and funds management.

Decree No. 26 of 1996 regulates the auditing profession and sets out the auditing principles to be followed. The law requires that auditors comply with International Standards on Auditing issued by the International Federation of Accountants. Procedures issued by the Ministry of Industry and Commerce, the CBB or other related official bodies should also be adhered to. All listed companies must publish their annual audited financial statements and they should be prepared in accordance with IFRS (Ernst & Young, 2011).

3. Literature review and hypotheses development

3.1 Literature review

CG mechanisms are directly or indirectly impact compliance with information disclosure requirements. The relevant role of non-executive directors in the governance process has led most CG codes to recommend the presence of a majority of independent directors on the board. Improved quality of financial reporting practices has been widely cited as one of the major benefits of companies establishing audit committees (Blue Ribbon Committee, 1999; Ramsay, 2001). As a result of the failure of many companies, CG reforms in many countries have empowered the role of the audit committee in the oversight of financial reporting (Smith, 2003).

Sabia and Goodfellow (2003) stated that the single most important achievement an audit committee can make is to lead the way to a recognition and acceptance of the interdependent nature of the relationships that exist among the committee, management, and the external auditor. An audit committee cannot be effective if it does not have the right people as members; that means that audit committee members should be independent and competent.

The structure of ownership determines the level of monitoring and thereby the level of disclosure, so that in a widely held company, managers may provide additional information to signal that they are acting in the best interests of the principles, whereas highly concentrated ownership may be linked to lower levels of disclosure (Haniffa and Cooke, 2002).

In the literature, a number of studies have been undertaken to examine the relationship between CG mechanisms and disclosure, for example, Samaha *et al.* (2012) in Egypt, found that the extent of governance disclosure is lower for companies with duality in position and higher ownership concentration as measured by blockholder ownership and increases with the proportion of independent directors on the board and also firm size.

There was a lot of concern for the way accounting is developing as a theory and as a practical implementation in the context of globalization. That motivated the researchers' interest in IAS/IFRS adoption all over the world. Verriest *et al.* (2013) investigate the association between CG strength and EU listed firms' choices with respect to IFRS adoption in 2005. Their results show that stronger governance firms disclose more information, comply more fully and use IAS 39's carve-out provision less opportunistically.

An increasing body of literature shows that managers exercise considerable discretion in their compliance with disclosure regulation (e.g. Street and Gray, 2002; Owusu-Ansah and Yeoh, 2005). This lack of compliance suggests that disclosures may be sub-optimal, particularly where management has incentives to avoid compliance (Ball *et al.*, 2003), and where regulatory enforcement and CG are weak (Nelson *et al.*, 2010).

This study adds to the CG literature in two ways. Three previous empirical papers have examined the association between CG characteristics and the level of compliance with IFRS disclosure in developing countries (Al-Akra *et al.*, 2010 in Jordan; Alanezi and Albuloushi, 2011 in Kuwait; Ba-Abbad and Wan-Hussin, 2011 in Oman). However, no previous study has examined that association with three groups of CG mechanisms (i.e. board characteristics, audit committee characteristics, and ownership structure). Also, no previous study has examined that association one year before the issuance the first CGC to provide evidence on the importance and effectiveness of the CGCs.

3.2 Hypotheses

In the light of the empirical and the theoretical literature and the agency theory framework, I have found a series of relationships, which other authors also previously found, between CG mechanisms and the level of compliance with IFRS disclosure.

3.2.1 The CG. Eight aspects of CG are likely to directly or indirectly impact compliance with IFRS disclosure: board independence, board size, audit committee independence, audit committee size, Chief Executive Officer (CEO) duality, blockholder ownership, managerial ownership, and government ownership.

Board independence. Board independence is almost universally viewed as a desirable governance characteristic. Agency theory assumes that role duality (i.e. chairman is also CEO) reduces the ability of directors to monitor CEO which increases agency problems that affect board independence (Haniffa and Cooke, 2002). When the roles of CEO and chairperson are combined, agency problems may arise because the one person has the ability, and the influence, to opportunistically distort the information flow to outsiders (Yermack, 1996; Ho and Wong, 2001). Chen and Jaggi (2000) present two main arguments in support of independent directors. First, independent directors advise corporate boards on strategic decisions, such as information disclosure decisions. Second, boards with a higher proportion of independent directors exercise greater control and greater monitoring over managerial decisions. Based on that, the following hypothesis is proposed:

H1. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is positively associated with board independence.

Board size. Large boards might be more effective in monitoring financial reporting because the company has greater resources to appoint directors and audit committee members with relevant and complementary expertise and skills (Song and Windram, 2004). While a board's monitoring ability increases with board size, the benefits may be negated by the incremental cost of less effective communication and reduced decision making capabilities associated with larger groups (John and Senbet, 1998). In analyzing the effectiveness of small boards, Yermack (1996) found a negative relation between board size and firm value. Ba-Abbad and Wan-Hussin (2011) found that board size is not associated with the level of compliance with IFRS disclosure. By contrast, Al-Akra *et al.* (2010) found a significant positive relationship. Based on that, the following hypothesis is proposed:

H2. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is positively associated with board size.

Audit committee independence. Klein (2002) argues that audit committee independence influences the effectiveness of the committee in monitoring financial reporting, because of the effect of independence on the ability of the directors to monitor the financial reporting of a company effectively. Felo *et al.* (2003) and Abbott *et al.* (2004) argue that audit committee independence is claimed to be a necessary requirement for the committee to be able to carry out its responsibilities objectively. Ba-Abbad and Wan-Hussin (2011) found that audit committee independence is not associated with the level of compliance with IFRS disclosure. However, Al-Akra *et al.* (2010) found a significant positive association between the existence of a voluntary audit committee and the level of IFRS disclosure. In light of that, the following hypothesis is proposed:

H3. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is positively associated with audit committee independence.

Audit committee size. Audit committee size is claimed to contribute to better internal CG. Menon and Williams (1994) argue that an audit committee with less than three members is likely to be ineffective. Anderson *et al.* (2004) reported that the large audit committee can be more effective because there are more members with a variety of expertise to enable them to undertake the various tasks involved in monitoring financial reporting practices. Consistent with this claim, Felo *et al.* (2003) found that larger audit committees positively influence financial reporting quality. Anderson *et al.* (2004) found that audit committee size is inversely related to the firm's cost of debt, which they attribute to the influence of the committee size on disclosure transparency. Empirical findings on the relationship between audit committee size and the level of compliance with IFRS disclosure are mixed. While Ba-Abbad and Wan-Hussin (2011) found no significant association, Al-Akra *et al.* (2010)

and Alanezi and Albuloushi (2011) found significant positive association. Based on that, the following hypothesis is proposed:

H4. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is positively associated with audit committee size.

CEO duality. Agency theory predicts that role duality creates individual power for the CEO that would influence the effective control exercised by the board. In this regard, Firth *et al* (2007) suggests that, when the chairman of the board of directors also takes the role of the CEO, the effectiveness of the board to monitor top management is decreased. Jensen (1993) argued that when the CEO also holds the position of chairman of the board, internal control systems fail as the board cannot effectively perform its key control functions. Gul and Leung (2004) argued that firms with a large number of independent directors are expected to be more effective in board monitoring and hence in offering more information to the public. Forker (1992) found that CEO duality leadership is negatively associated with disclosure quality. Based on these arguments the following hypothesis is proposed:

H5. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is negatively associated with CEO duality.

Blockholder ownership. Large blockholder ownership means that the shares are controlled by a small group of people, hence ownership is concentrated. Concentrated ownership structure serves as an efficient monitoring mechanism, to prevent managers from expropriating resources for private benefit (Noe, 2002). Based on the efficient-monitoring hypothesis of ownership concentration, large blockholders would be expected to encourage managers to provide more disclosures, in order to increase share prices and enhance the firm's value. On the other hand, investors who own a large proportion of equity shares in a company, obtain information about the company from internal sources. Therefore, more closely held companies are more likely to disclose less information, because their main investors can access internal sources of information (Marston and Polei, 2004). Based on that, the following hypothesis is proposed:

H6. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is negatively associated with blockholder ownership.

Managerial ownership. Managers, who are the shareholders of the entities, are motivated to increase the entities' values, as well as to increase shareholders' wealth, as it will also increase their own wealth. Accordingly, information disclosure will increase because managers with greater shareholdings can derive greater share-market benefits of better disclosure. Therefore, it is expected that as managers have the same interests as the owners, they will comply with financial reporting standards and disclose more information. In light of that, the following hypothesis is proposed:

H7. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is positively associated with managerial ownership.

Government ownership. Ghazali and Weetman (2006) found that the government ownership in Malaysia does not promote greater disclosure and better transparency. They argued that in a developing country, like Malaysia, government-controlled companies are strongly politically associated, and such companies tend to disclose less information to protect their political linkages or even their beneficial owners. In light of that, the following hypothesis is proposed:

H8. The level of Bahraini corporate compliance with mandatory IFRS disclosure requirements is negatively associated with government ownership.

3.2.2 *The company attributes.* Following prior research, five company attributes are likely to directly or indirectly impact compliance with IFRS disclosure: company size, profitability, audit firm size, industry type, and leverage.

Company size. Information disclosure studies frequently document an association between disclosure and company size, and documented that the size of the company has featured as an important determinant of disclosure levels (e.g. Ho and Wong, 2001; Lang and Lundholm, 1993; Owusu-Ansah and Yeoh, 2005; Barako, 2007), and there is a general agreement that a positive relationship between the size of a firm and its extent of disclosure is to be expected. Most studies have reported a positive association between firm size and level of disclosure compliance with IFRS (e.g. Hodgdon *et al.*, 2009; Al-Shammari, 2011). Based on that, the following hypothesis is proposed:

H9. The level of compliance with mandatory IFRS disclosure requirements is positively associated with Bahraini company's size.

Profitability. The rationale for an influence of profitability on information disclosure is obvious. Profitable companies have incentives to distinguish themselves from less profitable companies in order to raise capital on the best available terms. Therefore, more profitable companies can be expected to disclose more information than non-profitable companies. Lang and Lundholm (1993) suggested that the direction of the relationship between profitability and information disclosure is not clear. However, it is more likely that the management of a profitable enterprise will disclose more information to the market to enhance the value of the firm. Based on that, the following hypothesis is proposed:

H10. The level of compliance with mandatory IFRS disclosure requirements is positively associated with Bahraini company's profitability.

Audit firm size. Certain external governance factors such as external auditor quality (i.e. audit firm size) are associated with improved information disclosure. DeAngelo (1981) and Owusu-Ansah and Yeoh (2005) argued that large audit firms invest more to maintain their reputation as providers of quality audit than smaller audit firms. Therefore, larger audit firms are more likely to exert a greater influence over a company's disclosure and compliance practices than smaller audit firms.

Large audit firms are expected to deal with multinational companies conducting their business activities over the world. Therefore, their work is more likely to be influenced by IFRS and it is expected that their clients will provide more levels of information in their annual reports. Based on that, the following hypothesis is proposed:

H11. The level of compliance with mandatory IFRS disclosure requirements of Bahraini companies audited by large auditing firms are more than those audited by small auditing firms.

Industry type. Firms in a specific industry might face particular circumstances that may influence their disclosure practice. For example, there are significant differences in the operations and reporting practices of a firm in the manufacturing industry and another in the financial industry (Wallace *et al.*, 1994). In addition, firms that operate in a highly regulated industry might be subjected to serious rigorous controls that can significantly impact on their corporate disclosure practices (Owusu-Ansah, 1998). Therefore, some of the disclosure studies used only non-financial companies, and other studies used all industry sectors. In the current study, financial institutions (i.e. banks, investment, and insurance) are not excluded because they form a major part of the corporate structure in Bahrain in general and of the BSE in particular. Empirical findings on the relationship between information disclosure and industry type are mixed. While Cooke (1992), Meek *et al.* (1995), and Samaha *et al.* (2012) found significant association, Inchausti (1997), Owusu-Ansah (1998) and

Akhtaruddin (2005) found no significant association. Based on that, the following hypothesis is proposed:

H12. The level of compliance with mandatory IFRS disclosure requirements by Bahraini financial companies are more than the level of compliance by Bahraini non-financial companies.

Leverage. Agency theory suggests that the level of information disclosure increases as the leverage of the firm grows (Jensen and Meckling, 1976). Ahmaed and Nicholls (1994) argued that in countries where financial institutions are a primary source of company funds, there is an expectation that companies, which have large sums of debt on their balance sheet, will disclose more information in their annual reports. Also, such companies tend to disclose detailed information to enhance their chance of getting funds from financial institutions. This is similar to the Bahrain environment in which financial institutions play an active part in the provision of funds to borrowers, some of which are the listed companies. Based on that, the following hypothesis is proposed:

H13. The level of compliance with mandatory IFRS disclosure requirements is positively associated with Bahraini company's leverage.

4. Methodology

4.1 Study sample, data collection, and data analysis

The most important change in the field of accounting in Bahrain is that according to a 2007 self-assessment performed by the Bahrain Accountants Association, under the Commercial Companies Law, listed and unlisted companies in Bahrain are required to prepare annual financial statements in full compliance with IFRS. In order to meet the objective of the current study, I used the annual reports for the year 2010 which I used in my prior IFRS study (Juhmani, 2012) to provide new evidence related to CG and Bahraini companies' compliance with IFRS. Moreover, the year 2010 is chosen to examine the relation between CG and IFRS disclosure one year before implementing the first CGC in Bahrain, to provide new evidence on the importance and effectiveness of CGC.

Due to the relatively small number of companies listed on BSE all companies listed in 2010 are considered for inclusion in the survey. At the end of 2010, there were 49 listed companies, 44 Bahraini companies, and five non-Bahraini companies. The 44 Bahraini companies make up the initial sample for this study. However, one company is eliminated from the list of companies because of suspension, and two companies are eliminated because of incomplete data. Therefore, the final sample consists of 41 companies. These companies and their industry classifications are presented in Table I.

The data for measuring the dependent and independent variables investigated in this study were collected from the sampled companies' annual reports that were downloaded from the official website of the Bahraini companies and BSE. The data are analyzed through

Sector	Number of companies	%
Commercial banks	12	29.26
Investment	6	14.63
Insurance	5	12.19
Industrial	4	9.75
Services	9	21.95
Hotels and tourism	5	12.19
Total	41	100

Table I.
Industrial
classification

the use of bivariate correlation and linear regression analysis. Consistent with the prior IFRS compliance literature, ordinary least-squares regression is used to investigate the relationships between the level of Bahraini corporate compliance with mandatory IFRS disclosure requirements as dependent variable and eight CG characteristics as independent variables and three other firm-specific attributes, as control variables.

4.2 Selection of IFRS

To achieve the objective of this study all the IFRS that are in issue during the study period were intended to be included. However, seven standards (i.e. IFRS 1, IAS 12, IAS 19, IAS 26, IAS 29, IAS 34, and IAS 41) were excluded. Bahrain has made IFRS mandatory since 2007; therefore, IFRS 1 does not apply because its objective is to prescribe the procedures when an entity adopts IFRS for the first time as the basis for preparing its financial statements. IAS 12 is excluded, because there is no income tax in Bahrain. The objectives of IAS 19 and IAS 26 do not apply to Bahraini companies because all Bahraini-listed companies must follow labor law with respect to employee benefits and retirement benefits. IAS 29 is excluded, because the Bahraini economy is not a hyperinflationary economy. IAS 34 is not applicable because this study is related to annual reporting. IAS 41 is excluded because there is no agriculture listed firms in Bahrain. Other standards (i.e. IFRS 2, IFRS 3, IFRS 6, IAS 11, IAS 17, IAS 20, and IAS 31) were excluded because they are not applicable to Bahraini listed companies. Accordingly, in this study the 27 selected IFRS were the most applicable to Bahraini listed companies.

4.3 The dependent variable (disclosure compliance index)

Previous disclosure studies construct different disclosure indices, some researchers use self-constructed checklists, whereas some use checklists developed by others. As in most of prior IFRS compliance studies (e.g. Glaum and Street, 2003; Al-Shammari *et al.*, 2008; Hodgdon *et al.*, 2009), this study used a self-constructed index consisting mainly of mandatory disclosure items. The checklist was based on 27 IFRS. Ultimately, the checklist includes 224 disclosure items. To measure compliance with IFRS mandatory disclosure requirements this study employs the commonly used “dichotomous” approach.

Disclosure scores are calculated for each company and used as the dependent variable in the regression models. The total of IFRS disclosure score for a company is equal to the number of items disclosed in its annual report (if a particular item were not mentioned in the annual report, it would be treated as not applicable). A disclosure index was then created to measure the relative level of IFRS disclosure after scoring the total disclosure score of each firm. The index is a ratio of the actual scores obtained by a firm to the maximum score possible.

4.4 Measurement of the independent variables

The independent variables used in this research are board independence, board size, audit committee independence, audit committee size, CEO duality, blockholder ownership, managerial ownership, and government ownership which represent the CG characteristics. The eight CG variables are initially identified and measured as shown in Table II.

4.5 Measurement of the control variables

In order to test the association between the dependent variable and the independent variables, it is important to include control variables that could be associated with the dependent variable. The control variables included in the regression models control for other non-governance factors likely to explain disclosure IFRS compliance.

Table II.
Variables definitions

Variables	Definitions
<i>Independent variables</i>	
BORD INDP	Board independence, the percentage of non-executive directors on the board
BORD SIZE	Board size, the number of directors on the board
AUD COM INDP	Audit committee independence, the percentage of non-executive directors on audit committee
AUD COM SIZE	Audit committee size, the number of members on audit committee
CEO DUAL	CEO duality, a dummy variable that equals 1 if the CEO is also the chairman of the board and 0 otherwise
BLOK OW	Blockholder ownership, the proportion of shares, owned by substantial shareholders (5% or more)
MNG OW	Managerial ownership, the proportion of shares owned by managers (i.e. the CEO and inside directors)
GOV OW	Government ownership, a dummy variable that equals 1 if a government-linked company and 0 otherwise
<i>Control variables</i>	
CO SIZE	Company size, the companies' natural log of total assets
PROF	Profitability, defined as return on equity, measured as the ratio of the companies' net income to the companies' shareholders' equity
AUD FIRM SIZE	Audit firm size, a dummy variable that equals 1 if the company is audited by Big-4 auditor and 0 otherwise
IND	Industry, a dummy variable coded as 1 for financial companies and 0 otherwise
LEVG	Leverage, measured as the ratio of the companies' total liabilities to the companies' shareholders' equity

This study includes five control variables: company size, profitability, audit firm size, industry type, and leverage, which represent the firm-specific attributes. The five control variables were measured as shown in Table II.

4.6 Models development

In this study various multivariate regression models are executed. To determine the impact of the three groups of CG mechanisms (i.e. board characteristics, audit committee characteristics, and ownership structure) on the dependent variable, Model 1 is executed:

$$\begin{aligned} \text{DIS IND} = & \beta_0 + \beta_1 \text{BORD INDP} + \beta_2 \text{BORD SIZE} + \beta_3 \text{AUD COM INDP} \\ & + \beta_4 \text{AUD COM SIZE} + \beta_5 \text{CEO DUAL} + \beta_6 \text{BLOK OW} \\ & + \beta_7 \text{MNG OW} + \beta_8 \text{GOV OW} + \beta_9 \text{CO SIZE} \\ & + \beta_{10} \text{PROF} + \beta_{11} \text{AUD FIRM SIZE} + \beta_{12} \text{IND} + \beta_{13} \text{LEVG} + e \end{aligned} \quad (1)$$

where DIS IND is the disclosure index, BORD INDP the board independence, BORD SIZE the board size, AUD COM INDP the audit committee independence, AUD COM SIZE the audit committee size, CEO DUAL the CEO duality, BLOK OW the blockholder ownership, MNG OW the managerial ownership, GOV OW the government ownership, CO SIZE the company size, PROF the profitability, AUD FIRM SIZE the audit firm size, IND the industry type, LEVG the leverage, and e the error term.

To determine the impact of board characteristics group on the dependent variable, Model 2 is executed:

$$\begin{aligned} \text{DIS IND} = & \beta_0 + \beta_1 \text{BORD INDP} + \beta_2 \text{BORD SIZE} + \beta_3 \text{CEO DUAL} \\ & + \beta_4 \text{CO SIZE} + \beta_5 \text{PROF} + \beta_6 \text{AUD FIRM SIZE} + \beta_7 \text{IND} + \beta_8 \text{LEVG} + e \end{aligned} \quad (2)$$

To determine the impact of audit committee characteristics group on the dependent variable, Model 3 is executed:

$$\begin{aligned} \text{DIS IND} = & \beta_0 + \beta_1 \text{AUD COM INDP} + \beta_2 \text{AUD COM SIZE} \\ & + \beta_3 \text{CO SIZE} + \beta_4 \text{PROF} + \beta_5 \text{AUD FIRM SIZE} \\ & + \beta_6 \text{IND} + \beta_7 \text{LEVG} + e \end{aligned} \quad (3)$$

To determine the impact of ownership structure group on the dependent variable, Model 4 is executed:

$$\begin{aligned} \text{DIS IND} = & \beta_0 + \beta_1 \text{BLOK OW} + \beta_2 \text{MNG OW} + \beta_3 \text{GOV OW} \\ & + \beta_4 \text{CO SIZE} + \beta_5 \text{PROF} + \beta_6 \text{AUD FIRM SIZE} \\ & + \beta_7 \text{IND} + \beta_8 \text{LEVG} + e \end{aligned} \quad (4)$$

5. The empirical findings

Table III shows the descriptive statistical test results of all variables for the sample of companies. The table presents the minimum, maximum, mean, and standard deviation for dependent and independent variables in the regression models. The results show that the level of compliance with IFRS disclosure ranging from a minimum of 61 percent to a maximum of 94 percent, with an average of 80.73 percent. The results also show that the board has an average size of 9.14 ranging from a minimum of 5 to a maximum of 13. This may be considered as a reasonable board size.

Potential problems related to multicollinearity may be investigated by means of a correlation matrix. The Pearson correlation coefficients between dependent and independent variables are presented in Table IV. The results show that there is a moderately high correlation between some variables. However, it has been suggested that correlation coefficients should not be considered harmful until they exceed 0.80 (Judge *et al.*, 1985). The coefficients in the correlation matrix in Table IV reveal that the highest correlation is (0.686) between disclosure index and audit firm size, which support the lack of multicollinearity in the regression models.

The Pearson correlations in Table IV suggested that multicollinearity between the explanatory variables was most unlikely to cause a serious problem in the interpretation of

Variables	Minimum	Maximum	Mean	SD
DIS IND	0.61	0.94	0.8073	0.08164
BORD INDP	0.25	1.00	0.6495	0.19561
BORD SIZE	5.00	13.00	9.1463	1.89157
AUD COM INDP	0.25	1.00	0.5922	0.25776
AUD COM SIZE	2.00	5.00	3.4634	0.71055
CEO DUAL	0.00	1.00	0.3415	0.48009
BLOK OW	0.11	0.96	0.4985	0.18420
MNG OW	0.01	0.51	0.1657	0.13757
GOV OW	0.00	1.00	0.4878	0.50606
CO SIZE	8.52	16.12	11.7736	1.84418
PROF	0.00	25.64	9.4912	6.83348
AUD FIRM SIZE	0.00	1.00	0.6829	0.47112
IND	0.00	1.00	0.5610	0.50243
LEVG	0.04	28.19	4.2327	7.03575

Table III.

Descriptive statistics

Note: The variables are defined in Table II

	DIS IND	BORD IND	BORD SIZE	AUD COM INDP	AUD COM SIZE	AUD COM	CEO DUAL	BLOK OW	MNG OW	GOV OW	CO SIZE	PROF	AUD FIRM SIZE	IND	LEVG
DIS IND	1														
BORD IND	0.380*	1													
BORD SIZE	0.014	0.074	1												
AUD COM INDP	0.165	0.647	0.286	1											
AUD COM SIZE	0.408**	0.541**	0.069	0.157	1										
CEO DUAL	0.008	0.387*	0.357*	0.328	0.111	1									
BLOK OW	0.020	0.012	0.022	-0.045	0.490	0.586	1								
MNG OW	-0.167	0.052	-0.029	0.782	-0.191	0.121	0.071	1							
GOV OW	0.037	-0.101	-0.118	0.082	0.610	0.231	0.659	0.172	1						
CO SIZE	-0.250	0.086	0.057	0.163	-0.054	0.450	0.018	-0.217	-0.449**	1					
PROF	0.115	0.591	0.722	0.307	0.738	0.255	0.913	0.172	0.003	0.293	1				
AUD FIRM SIZE	0.697	0.898	0.991	0.709	0.101	0.119	0.018	-0.115	-0.198	0.063	0.150	1			
IND	0.447**	0.006	0.273	0.201	0.216	0.255	0.182	-0.115	-0.198	0.293	0.150	-0.092	1		
LEVG	0.003	0.973	0.085	0.207	0.175	0.458	0.474	0.214	0.063	0.567	0.349	0.016	0.923	1	
	0.826	0.082	-0.086	0.266	0.407	0.458	0.119	-0.161	0.090	0.567	0.349	0.016	0.923	0.242	1
	0.686**	0.121	0.138	0.288	0.450**	0.049	0.049	0.095	-0.184	0.246	0.369*	0.016	0.923	0.242	0.242
	0.000	0.453	0.391	0.068	0.003	0.763	0.553	0.553	0.251	0.122	0.017	-0.351*	0.024	0.127	0.351*
	0.531**	-0.247	0.148	0.011	0.024	-0.088	-0.015	-0.413**	-0.022	0.526**	-0.351*	0.024	0.127	0.351*	0.501**
	0.000	0.120	0.355	0.943	0.882	0.582	0.925	0.007	0.893	0.000	0.024	0.024	0.127	0.351*	0.501**
	0.377*	-0.014	0.165	0.208	0.119	-0.092	0.017	-0.211	-0.176	0.544**	-0.362*	0.020	0.024	0.001	0.001
	0.015	0.930	0.302	0.193	0.458	0.569	0.914	0.186	0.270	0.000	0.020	0.020	0.024	0.001	0.001

Notes: The variables are defined in Table I. **Correlation is significant at the 0.05, 0.01 level (two-tailed), respectively

Table IV. Pearson correlations

the results of the regression models. In addition, another more formal method for detecting multicollinearity involves the calculation of the variance inflation factor (VIF). VIF measures the degree to which each explanatory variable is explained by the other explanatory variables and very large VIF values indicate high collinearity and a common cutoff threshold is VIF values above 10 (Hair *et al.*, 1995). The VIF figures of all independent variables are calculated, the results are as follows: 2.267, 1.519, 2.463, 2.087, 1.144, 1.256, 2.283, 2.695, 2.898, 1.694, 1.776, 2.564, and 2.702. The results show that the highest VIF value is 2.898 indicating that multicollinearity did not exist in the regression models.

The adjusted R^2 and F -values for the four regression models are presented in Table V. The results indicate that the four multiple regression models are highly significant, which statistically supports the significance of the four models. However, there are some apparent differences in the explanatory power of the different types of independent variables as shown by the adjusted R^2 . The amount of explained variation in the dependent variable (i.e. disclosure index) is 78.5 percent for all CG mechanisms groups, 80.3 percent for board group, 62.7 percent for audit committee group, and 57.3 percent for ownership structure group.

Table V presents the results of the ordinary least square regression models. Standardized β coefficients and t -values are given for each independent and control variable. The empirical evidence derived from the first and second regression models indicates that there is a strong significant positive association at the 1 percent level between disclosure index and board independence. This finding supports *H1* and suggests that the level of compliance with IFRS disclosure in Bahrain is increased with the increase in the percentage of non-executive directors on the board. This result confirms the assumptions that the independence of the board by separate leadership is necessary so that the board will be able to put pressure on the CEO and management in disclosing more information, which is in line

Disclosure index (DIS IND) Independent variables	Dependent variable			
	Model 1	Model 2	Model 3	Model 4
Constant	(8.993)***	(11.697)***	(9.241)***	(8.742)***
<i>Corporate governance variables</i>				
BORD INDP	0.524 (4.750)***	0.433 (5.669)***		
BORD SIZE	0.118 (1.303)	0.062 (0.849)		
AUD COM INDP	-0.115 (-1.002)		0.235 (2.160)**	
AUD COM SIZE	-0.115 (-1.084)		0.093 (0.843)	
CEO DUAL	-0.197 (-2.519)**	-0.195 (-2.698)***		
BLOK OW	0.041 (0.497)			-0.006 (-0.057)
MNG OW	0.062 (0.558)			-0.068 (-0.472)
GOV OW	-0.001 (-0.009)			-0.183 (-1.151)
<i>Control variables</i>				
CO SIZE	-0.079 (-0.630)	-0.082 (-0.850)	-0.014 (-0.112)	0.113 (0.690)
PROF	0.167 (1.755)*	0.122 (1.477)	0.102 (0.880)	0.180 (1.494)
AUD FIRM SIZE	0.591 (6.055)***	0.534 (6.784)***	0.481 (4.043)***	0.606 (4.954)***
IND	0.622 (5.305)***	0.587 (6.312)***	0.476 (3.812)***	0.395 (2.574)**
LEVG	-0.020 (-0.164)	-0.038 (-0.404)	-0.046 (-0.343)	-0.076 (-0.473)
R^2	0.855	0.843	0.692	0.658
Adjusted R^2	0.785	0.803	0.627	0.573
F -statistic	12.259	21.402	10.610	7.706
Prob. (F -statistic)	0.000	0.000	0.000	0.000
Obs.	41	41	41	41

Table V.
The results of the regression models

Notes: The variables are defined in Table II. t -values in parentheses. *, **, ***Significant at the 0.10, 0.05, 0.01 level (two-tailed), respectively

with the interests of the shareholders, and the inclusion of independent directors on the board is critical to the board's effectiveness as a CG mechanism (Fama and Jensen, 1983; Jensen, 1993). Inclusion of independent directors on the boards is thus expected to improve the firm's compliance with disclosure requirements, which in turn, will enhance the comprehensiveness and quality of disclosure. Empirical research generally supports these claims and assumptions. Greater board independence is found to be associated with more comprehensive statutory disclosures and greater disclosure of stock option information (Chen and Jaggi, 2000; Conyon *et al.*, 2002). Higher percentage of non-executive directors on the board is found to be associated with higher quality of information disclosure (Chen and Jaggi, 2000; Nelson *et al.*, 2010).

The empirical evidence derived from the third regression model indicates that there is significant positive association at the 5 percent level between disclosure index and audit committee independence. This result supports *H3* and suggests that the level of Bahraini corporate compliance with IFRS disclosure is positively associated with audit committee independence. Also, the empirical evidence derived from the first and second regression models indicates that there is a strong significant negative association at the 5 percent level and at the 1 percent level between disclosure index and CEO duality. This result supports *H5* and suggests that the level of Bahraini corporate compliance with IFRS disclosure is negatively associated with CEO duality. This result may support the argument that firms with CEO duality leadership enable the person who occupies both roles to withhold unfavorable information (Ho and Wong, 2001).

However, the results of the four regression models show that the other five CG mechanisms (i.e. board size, audit committee size, blockholder ownership, managerial ownership, and government ownership) are not significantly associated with the level of corporate compliance with IFRS disclosure. These findings may prove the importance of the CGC to enforce Bahraini companies to fully comply with IFRS disclosure requirements, which in turn, will enhance the comprehensiveness and quality of disclosure and financial reporting in Bahrain. Also, the results are consistent with the argument that CG mechanisms are expected to have an important influence on preparers' incentives to comply with IFRS, particularly in countries where the country-level enforcement is relatively weak (Pope and McLeay, 2011). Also, consistent with the argument that the phenomenon of non-compliance may be attributed to the ineffectiveness and inadequacy in the regulatory framework, and may be attributed to the lack of statutory CG disclosure requirements (Samaha *et al.*, 2012). Moreover, the results support the assumption that disclosures are of higher quality when firms have strong CG, and firms with higher quality governance make more extensive disclosures on the financial statement (Verriest *et al.*, 2013).

The results of the current study indicate that there is no impact for ownership structure group (i.e. blockholder ownership, managerial ownership, and government ownership) on the level of corporate compliance with IFRS disclosure. This finding may support the argument that, where a firm's shares are closely held, there is a preference for confidentiality so that disclosure is restricted to those who are closely involved with the management and financing of the firm (Gray, 1988).

In relation to the control variables, the results of the first regression model show that there is significant positive association at the 10 percent level between disclosure index and profitability. This finding supports *H10* and suggests that the level of compliance with IFRS disclosure is positively associated with Bahraini company's profitability. This result confirms the assumption that profitable companies have incentives to distinguish themselves from less profitable companies in order to raise capital on the best available terms, therefore, they disclose more information than non-profitable companies.

The results of the four regression models show that there is a strong significant positive association at the 1 percent level between disclosure index and audit firm size. This finding

supports *H7* and suggests that Bahraini companies audited by large auditing firms comply with IFRS disclosure requirements and disclose more information than Bahraini companies audited by small-auditing firms. This result confirms the assumption that large audit firms are expected to deal with multinational companies conducting their business activities over the world. Therefore, their work is more likely to be influenced by the IFAS and it is expected that their clients will comply with IFRS disclosure and provide more levels of information in their annual reports. Moreover, this result is generally consistent with the previous findings on IFRS compliance, suggesting that Big 4 auditors sustain higher levels of compliance with IFRS disclosure. Empirical previous researches generally support these claims and assumptions and reported a significant positive association between audit firm size and compliance with accounting standards, including IFRS (e.g. Street and Gray, 2002; Glaum and Street, 2003; Hodgdon *et al.*, 2009; Al-Akra *et al.*, 2010).

Also, the results of the four regression models show that there is a strong significant positive association between disclosure index and industry type. This finding supports *H12* and suggests that the level of compliance with IFRS disclosure by Bahraini financial companies is more than the level of compliance by Bahraini non-financial companies. This finding confirms the assumption firms that operate in a highly regulated industry such as financial institutions might be subjected to serious rigorous controls that can significantly impact on their corporate disclosure practices (Owusu-Ansah, 1998). In relation to the remaining control variables, I find that leverage is not statistically significant in any of the four models. This implies that the level of IFRS disclosure is not influenced by the agency costs of debt in Bahrain. This finding is consistent with previous findings (e.g. Inchausti, 1997; Barako, 2007; Samaha *et al.*, 2012). Also, I find that company size is not statistically significant in any of the four models.

In this study a robustness test was conducted to ensure that the regression results were not sensitive to alternative measures of the dependent variable. The test involved transforming the dependent variable by replacing it by its logarithm. The results are presented in Table VI. Replacing the dependent variable by its logarithm did not make a major noticeable difference to the results obtained in the primary four models. The results confirm the significant of the same independent variables except one control variable (i.e. profitability) which is not statistically significant in any of the four models. Therefore, the robustness test confirms the results of the primary four models presented in Table V.

6. Conclusion

This study provides the first evidence on the relation between CG and the level of corporate compliance with IFRS in Bahrain, and it provides new evidence on the importance of the CGCs. As a small developing market, Bahrain's unique business environment and context offer a good opportunity and provides a useful setting for examining the effectiveness of CG mechanisms in enhancing the level of compliance with IFRS. The empirical evidence of the regression models indicates that there is a significant positive association between disclosure index and Board independence, and a significant positive association between disclosure index and audit committee independence. Also, the results show that CEO duality is negatively associated with the level of corporate compliance with IFRS disclosure in Bahrain. These findings suggest that the level of corporate compliance with IFRS in Bahrain increases with the proportion of independent directors on the board and increases with the proportion of independent directors on audit committee. Also the findings suggest that the level of compliance decreases for companies with duality leadership. This directly or indirectly suggests that CG mechanisms are effective in the financial reporting practices in Bahrain.

This study contributes by testing the relation between CG and IFRS disclosure one year before implementing the first CGC in Bahrain. As shown above, the empirical results of this study reveal that only three of the CG mechanisms (i.e. board independence, audit committee

Independent variables	Dependent variable			
	Model 1	Model 2	Model 3	Model 4
Transformed disclosure index (DIS IND)				
Constant	(5.945)***	(7.524)***	(5.209)***	(4.409)***
<i>Corporate governance variables</i>				
BORD INDP	0.503 (4.487)***	0.421 (5.447)***		
BORD SIZE	0.129 (1.404)	0.076 (1.029)		
AUD COM INDP	-0.093 (-0.796)		0.246 (2.275)**	
AUD COM SIZE	-0.123 (-1.145)		0.084 (0.766)	
CEO DUAL	-0.200 (-2.510)**	-0.200 (-2.730)***		
BLOK OW	0.028 (0.337)			-0.014 (-0.125)
MNG OW	0.053 (0.475)			-0.069 (-0.481)
GOV OW	-0.001 (-0.010)			-0.181 (-1.141)
<i>Control variables</i>				
CO SIZE	-0.090 (-0.712)	-0.094 (-0.961)	-0.022 (-0.169)	0.103 (0.630)
PROF	0.148 (1.522)	0.110 (1.321)	0.084 (0.722)	0.162 (1.350)
AUD FIRM SIZE	0.609 (6.135)***	0.550 (6.905)***	0.497 (4.207)***	0.621 (5.081)***
IND	0.604 (5.065)***	0.575 (6.109)***	0.467 (3.762)***	0.385 (2.511)**
LEVG	-0.026 (-0.210)	-0.039 (-0.406)	-0.051 (-0.389)	-0.078 (-0.485)
R ²	0.850	0.839	0.696	0.658
Adjusted R ²	0.778	0.799	0.632	0.573
F-statistic	11.786	20.815	10.799	7.711
Prob. (F-statistic)	0.000	0.000	0.000	0.000
Obs.	41	41	41	41

Notes: The variables are defined in Table II. *t*-values in parentheses. **, ***Significant at the 0.05, 0.01 level (two-tailed), respectively

Table VI.
The results of the regression models after transforming the dependent variable (DIS IND) to its logarithm

independence, and CEO duality) are associated with the level of corporate compliance with IFRS disclosure. However, the other five CG mechanisms (i.e. board size, audit committee size, blockholder ownership, managerial ownership, and government ownership) are not associated with the level of corporate compliance with IFRS disclosure. This result may support the assumption that the mere adoption of IFRS may not bring the intended consequences if there is no simultaneous full compliance with the standards disclosure requirements. Also, this result suggests that the non-compliance with IFRS disclosure requirements may be attributed to the ineffectiveness and inadequacy in the regulatory framework in Bahrain, which may prove the importance of the CGC as an effective enforcement mechanism to enforce Bahraini companies to fully comply with IFRS disclosure requirements, which in turn, will enhance the comprehensiveness and quality of disclosure and financial reporting in Bahrain.

The findings of this study are undoubtedly of great concern to professional accounting bodies, policy makers, and governments in emerging markets in countries that share similar economic, political, and cultural environments. Also, it is of great concern to all users of annual reports and of particular interest to accounting regulators to improve the level of supervision and the standard of reporting in Bahrain. Moreover, the findings will assist in evaluating the extent of mandatory disclosure by Bahraini companies and explaining the variation of disclosure in light of CG mechanisms.

This study is not free from limitations. Although the study can contribute to the understanding of the relationship between CG and IFRS in Bahrain, it may not be able to be generalized to other countries. Such relationships could be different from country to country due to business and legal environments. Therefore, there is a need to investigate these relationships among different countries. This study examines the relation between CG and

the level of compliance with IFRS disclosure one year before the issuance of the first CGC in Bahrain. Future research might attempt to examine the relation one year after the issuance of the first CGC in Bahrain to confirm the importance of the CGCs as an effective enforcement mechanism.

References

- Abbott, L.J., Parker, S. and Peters, G.F. (2004), "Audit committee characteristics and restatements", *Auditing: A Journal of Practice and Theory*, Vol. 23 No. 1, pp. 69-87.
- Ahmaed, K. and Nicholls, D. (1994), "The impact of non-financial company characteristics on mandatory disclosure in developing countries: the case of Bangladesh", *International Journal of Accounting Education and Research*, Vol. 29 No. 1, pp. 62-77.
- Akhtaruiddin, M. (2005), "Corporate mandatory disclosure practices in Bangladesh", *The International Journal of Accounting*, Vol. 40 No. 4, pp. 399-422.
- Al-Akra, M., Eddie, I.A. and Ali, M.J. (2010), "The influence of the introduction of accounting disclosure regulation on mandatory disclosure compliance: evidence from Jordan", *The British Accounting Review*, Vol. 42 No. 3, pp. 170-186.
- Alanezi, F.S. and Albuloushi, S.S. (2011), "Does the existence of voluntary audit committees really affect IFRS-required disclosure? The Kuwaiti evidence", *International Journal of Disclosure and Governance*, Vol. 8 No. 2, pp. 148-173.
- Al-Shammari, B. (2011), "Factors influencing the extent of mandatory compliance with international financial reporting standards: the case of Kuwaiti listed companies", *Journal of International Business and Economics*, Vol. 11 No. 4, pp. 11-31.
- Al-Shammari, B., Brown, P. and Tarca, A. (2008), "An investigation of compliance with international accounting standards by listed companies in the gulf co-operation council member states", *The International Journal of Accounting*, Vol. 43 No. 4, pp. 425-447.
- Anderson, R., Mansi, S. and Reeb, D. (2004), "Board characteristics, accounting report integrity, and the cost of debt", *Journal of Accounting and Economics*, Vol. 37 No. 3, pp. 315-342.
- Ba-Abbad, K.M. and Wan-Hussin, W.N. (2011), "Internal corporate governance mechanisms and the level of compliance with mandatory IFRSs disclosure requirements", *1st International Conference on Accounting, Business and Economics (ICABEC), Kuala Terengganu, Terengganu, November 1-2*.
- Baena, V. (2011), "The effect of corruption on global franchising in emerging markets", *International Journal of Business and Emerging Markets*, Vol. 3 No. 1, pp. 57-74.
- Ball, R., Robin, A. and Wu, J. (2003), "Incentives versus standards: properties of accounting income in four East Asian countries and implications for acceptance of IAS", *Journal of Accounting and Economics*, Vol. 36 Nos 1-3, pp. 235-270.
- 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.
- Blue Ribbon Committee (1999), "Report and recommendations of the Blue Robin Committee on improving the effectiveness of corporate audit committees", New York Stock Exchange and National Association of Securities Dealers, New York, NY.
- 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.
- Brown, P. (2011), "International financial reporting standards: what are the benefits?", *Accounting and Business Research*, Vol. 41 No. 3, pp. 269-285.
- Byrne, J. (2002), "How to fix corporate governance", *Business Week*, May 6, available at: www.businessweek.com/print/magazine/content/02_18/b3781701.htm

- Chalevas, C.G. (2011), "The effect of the mandatory adoption of corporate governance mechanisms on executive compensation", *The International Journal of Accounting*, Vol. 46 No. 2, pp. 138-174.
- Chen, C.J. and Jaggi, B. (2000), "Association between independent nonexecutive directors, family control and financial disclosures in Hong Kong", *Journal of Accounting and Public Policy*, Vol. 19 Nos 4-5, pp. 285-310.
- Canyon, M., Mallin, C. and Sadler, G. (2002), "The disclosure of directors' share option information in UK companies", *Applied Financial Economics*, Vol. 12 No. 2, pp. 95-103.
- Cooke, T.E. (1992), "The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations", *Accounting and Business Research*, Vol. 22 No. 87, pp. 229-237.
- Deakin, S. and Konzelmann, S. (2004), "Learning from Enron", *Corporate Governance*, Vol. 12 No. 2, pp. 134-142.
- DeAngelo, L.E. (1981), "Auditors size and audit quality", *Journal Accounting and Economics*, Vol. 3 No. 4, pp. 183-199.
- Ernst & Young (2011), "Doing Business in Bahrain", Ernst&Young, Manama.
- Fama, E.F. and Jensen, M.C. (1983), "Separation of ownership and control", *Journal of Law and Economics*, Vol. 26 No. 2, pp. 301-325.
- Felo, A., Krishnamurthy, S. and Solieri, S. (2003), "Audit committee characteristics and the perceived quality of financial reporting: an empirical analysis", working paper, Pennsylvania State University, Malvern, PA.
- Firth, M., Fung, P. and Rui, O. (2007), "Ownership, two-tier board structure, and the informativeness of earnings – evidence from China", *Journal of Accounting and Public Policy*, Vol. 26 No. 4, pp. 463-496.
- Forker, J. (1992), "Corporate governance and disclosure quality", *Accounting and Business research*, Vol. 22 No. 86, pp. 111-124.
- Ghazali, N.A.M. and Weetman, P. (2006), "Perpetuating traditional influences: voluntary disclosure in Malaysia following the economic crisis", *Journal of International Accounting, Auditing and Taxation*, Vol. 15 No. 2, pp. 226-248.
- Glaum, M. and Street, D.L. (2003), "Compliance with the disclosure requirements of Germany's new market: IAS versus US GAAP", *Journal of International Financial Management & Accounting*, Vol. 14 No. 1, pp. 64-100.
- Gray, S.J. (1988), "Towards a theory of cultural influence on the development of accounting systems internationally", *Abacus*, Vol. 24 No. 1, pp. 1-15.
- 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.
- Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1995), *Multivariate Data Analysis with Readings*, Prentice-Hall, New York, NY.
- Haniffa, R.M. and Cooke, T.E. (2002), "Culture, corporate governance and disclosure in Malaysian corporations", *Abacus*, Vol. 38 No. 3, pp. 317-349.
- Ho, S. and Wong, K. (2001), "A study of the relationship between corporate governance structures and the extent of voluntary disclosure", *Journal of International Accounting, Auditing and Taxation*, Vol. 10 No. 2, pp. 139-156.
- Hodgdon, C., Tondkar, R.H., Adhikari, A. and Harless, D.W. (2008), "Compliance with IFRS disclosure requirements and individual analysts forecast errors", *Journal of International Accounting, Auditing and Taxation*, Vol. 17 No. 1, pp. 1-13.
- Hodgdon, C., Tondkar, R.H., Adhikari, A. and Harless, D.W. (2009), "Compliance with international financial reporting standards and auditor choice: new evidence on the importance of the statutory audit", *The International Journal of Accounting*, Vol. 44 No. 1, pp. 33-55.

- IAS Regulation (2014), "A review of the literature on the impact of the mandatory adoption of IFRS in the EU", available at: http://ec.europa.eu/finance/accounting/.../141024-document-impact_en.pdf (accessed October 24, 2014).
- Inchausti, B. (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. (1993), "The modern industrial revolution, exit and the failure of internal control systems", *Journal of Finance*, Vol. 48 No. 3, pp. 831-880.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.
- John, K. and Senbet, L. (1998), "Corporate governance and board effectiveness", *Journal of Banking and Finance*, Vol. 22 No. 4, pp. 371-403.
- Judge, G.G., Griffiths, W.E., Hill, R.C., Lutkepohl, H. and Lee, T. (1985), *The Theory and Practice of Econometrics*, 2nd ed., John Wiley & Sons, New York, NY.
- Juhmani, O. (2012), "Factors influencing the extent of corporate compliance With IFRS: evidence from companies listed in Bahrain stock exchange", *Journal of International Business and Economics*, Vol. 12 No. 2, pp. 67-79.
- Klein, A. (2002), "Economic determinants of audit committee independence", *The Accounting Review*, Vol. 77 No. 2, pp. 435-452.
- Lang, M. and Lundholm, R. (1993), "Cross-sectional determinants of analyst ratings of corporate disclosures", *Journal of Accounting Research*, Vol. 31 No. 2, pp. 246-271.
- Makhija, A.K. and Patton, J.M. (2004), "The impact of firm ownership structure on voluntary disclosure: empirical evidence from Czech annual reports", *The Journal of Business*, Vol. 77 No. 3, pp. 457-491.
- Marston, C. and Polei, A. (2004), "Corporate reporting on the internet by German companies", *International Journal of Accounting Information Systems*, Vol. 5 No. 3, pp. 285-311.
- Meek, G., Roberts, C.B. and Gray, S.J. (1995), "Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations", *Journal of International Business Studies*, Vol. 26 No. 3, pp. 555-572.
- Menon, K. and Williams, J.D. (1994), "The use of audit committees for monitoring", *Journal of Accounting and Public Policy*, Vol. 13 No. 2, pp. 121-139.
- Nelson, J., Gallery, G. and Percy, M. (2010), "Role of corporate governance in mitigating the selective disclosure of executive stock option information", *Accounting & Finance*, Vol. 50 No. 3, pp. 685-717.
- Noe, T. (2002), "Investor activism and financial market structure", *Review of Financial Studies*, Vol. 15 No. 1, pp. 289-318.
- Owusu-Ansah, S. (1998), "The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe", *The International Journal of Accounting*, Vol. 33 No. 5, pp. 605-631.
- Owusu-Ansah, S. and Yeoh, J. (2005), "The effect of legislation on corporate disclosure practices", *Abacus*, Vol. 41 No. 1, pp. 92-109.
- Pope, P.F. and McLeay, S.J. (2011), "The European IFRS experiment: objectives, research challenges and some early evidence", *Accounting and Business Research*, Vol. 41 No. 3, pp. 233-266.
- Ramsay, I. (2001), "Independence of Australian company auditors: review of current Australian requirements and proposals for reform, Commonwealth of Australia, ACT, Canberra.
- Sabia, M. and Goodfellow, J. (2003), *Integrity in the Spotlight: Opportunities for Audit Committees*, The Canadian Institute of Chartered Accountants, Toronto, December.
- Samaha, K., Dahawy, K., Hussainey, K. and Stapleton, P. (2012), "The extent of corporate governance disclosure and its determinants in a developing market: the case of Egypt", *Advances in Accounting*, Vol. 28 No. 1, pp. 168-178.
- Smith, R. (2003), "Audit committees: combined code guidance", report, Financial Reporting Council, London.

-
- Song, J. and Windram, B. (2004), "Benchmarking audit committee effectiveness in financial reporting", *International Journal of Auditing*, Vol. 8 No. 3, pp. 195-205.
- 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 and Taxation*, Vol. 11 No. 1, pp. 51-76.
- United Nations Conference on Trade and Development (2006), *Guidance on Good Practices in Corporate Governance Disclosure*, United Nations Conference on Trade and Development, New York, NY.
- Verriest, A., Gaeremynck, A. and Thornton, D.B. (2013), "The impact of corporate governance on IFRS adoption choices", *European Accounting Review*, Vol. 22 No. 1, pp. 39-77.
- Wallace, R.S.O., Naser, K. and Mora, A. (1994), "The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain", *Accounting and Business Research*, Vol. 25 No. 97, pp. 41-53.
- Williamson, O.E. (1984), "Corporate governance", *Yale Law Journal*, Vol. 93 No. 7, pp. 1197-1230.
- Yermack, D. (1996), "Higher market valuation of companies with a small board of directors", *Journal of Financial Economics*, Vol. 40 No. 2, pp. 185-211.

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