Firm-Specific Characteristics and Corporate Financial Disclosure: Evidence from an Emerging Market

Mishari M. Alfraih¹ & Abdullah M. Almutawa²

Abstract

This study aims to empirically investigate the association between firm-specific characteristics and corporate financial disclosure among Kuwait Stock Exchange (KSE)-listed firms. Consistent with prior disclosure research, the extent of corporate disclosures among all KSE-listed firms in 2010 was measured using a self-constructed disclosure index. The results show that the mean level of mandatory disclosures for all KSE-listed firms in 2010 was 74% and ranged from 41–95%. The regression results suggest that older, highly leveraged, larger, and profitable KSE-listed firms are associated with high levels of disclosures. Importantly, the results reveal significant variations in disclosure levels across the three possible auditor combinations, implying the importance of high quality and rigorous external audits in promoting corporate disclosures. The study contributes to the extant literature by extending corporate disclosure research into the Kuwaiti emerging market that comprise different economic, social, political, and cultural characteristics.

Keywords: Corporate Financial Disclosure, IFRS, Firm Characteristics, Kuwait

1. Introduction

Information asymmetry plays a critical role in capital markets. One form of information asymmetry occurs when one or several investors have better or more timely information about the firm’s value (Buskirk, 2012).

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According to economic theory, information asymmetry creates an adverse selection problem in the capital market as informed investors trade on the basis of their private information (Brown and Hillegeist, 2007). However, theoretical disclosure models predict that a firm’s corporate disclosures can prevent private information acquisition and act as a substitute for information held by informed investors, thereby reducing the incentive and ability for investors to acquire private information (Buskirk, 2012). Similarly, Healy and Palepu (2001) argued that corporate disclosure is critical for the functioning of efficient capital because it mitigates information asymmetry. In general, empirical extant literature found broad support for the theoretical notion that greater disclosure leads to lower information asymmetry and other capital market benefits (e.g., Buskirk, 2012; Botosan and Plumlee, 2002). To this end, several empirical studies on corporate disclosure examined the extent of disclosure in annual financial reports in both developing and developed countries. Surprisingly, despite the critical role of corporate disclosures in mitigating information asymmetry, the literature on the extent of corporate disclosure documented substantial variations in disclosure levels across countries and among firms (e.g., Glaum and Street, 2003; Al-Shammari et al., 2008; Demir and Bahadir, 2014; Aljifri et al., 2014). The notable variations in the level of disclosure across firms worldwide encourage researchers to examine factors behind this variation. Firm corporate-specific characteristics are expected to be important factors that influence the level of disclosure.

Empirically, several disclosure studies explored the relationship between the extent of corporate disclosure and several institutional and corporate characteristics, such as industry, size, profitability, liquidity, ownership diffusion, audit quality, leverage, internationality, and age. However, many empirical studies that examined this issue were conducted in countries with highly developed markets, and little attention was given to emerging markets. The corporate characteristics that influence disclosure levels in developed countries may not coincide with such characteristics in less-developed countries because these countries, such as Kuwait, have different economies, societies, politics, and cultures. In this context, the objective of this study is to empirically investigate the association between firm-specific characteristics and corporate financial disclosures among Kuwait Stock Exchange (KSE)-listed firms as measured by the International Financial Reporting Standards (IFRS) mandatory requirement.
To investigate the factors behind variations in corporate financial disclosure among KSE-listed firms, the current study examines seven firm attributes, namely: firm age, liquidity, leverage, firm size, profitability, audit quality, and industry classification. Consistent with prior disclosure studies, the extent of disclosure as determined by IFRS mandatory requirements among all 181 KSE-listed firms in 2010 is measured using a self-constructed, item-based disclosure index. The index is developed based on all applicable and relevant IFRS for the Kuwaiti financial reporting environment and 2010 disclosure requirements. After determining the level of disclosure, the next step is to investigate the relationship between the level of mandatory disclosures and a firm’s attributes to explain why companies differ in their disclosure levels. The disclosure level obtained from the self-constructed disclosure index is used as the dependent variable and a firm’s attributes are used as independent variables in a multivariate regression model.

The results show that the mean level of mandatory disclosures for all 181 KSE-listed firms in 2010 was 74%, with a range of 41–95%. However, a notable variation in firms’ levels of disclosure is observed, which encourages an examination of the firm characteristics that affect the level of corporate financial disclosure. An investigation into the relationship between disclosure levels and firm attributes shows that a significant positive association exists between disclosure levels and several firm attributes, i.e., firm age, leverage, size, profitability, and audit quality. Consequently, the findings suggest that older, highly leveraged, larger, and profitable KSE-listed firms are associated with high levels of disclosures. Importantly, the results reveal significant variations in disclosure across the three possible auditor combinations. Firms audited by two Big Four audit firms achieved the highest level of disclosure, followed by firms audited by one Big Four and one non-Big Four firm, and finally firms audited by two non-Big Four audit firms. These findings show the importance of high-quality and rigorous external audits in promoting corporate disclosures.

This paper contributes to the extant literature by extending corporate disclosure research into emerging markets that comprise different economic, social, and cultural characteristics. In addition, the findings of this research provide regulators, enforcement authorities, and current and prospective investors with an objective assessment of KSE-listed firm disclosure practices and corporate factors that influence the extent of corporate disclosure in Kuwait.
The remainder of the paper is organized as follows. Section 2 presents a brief background on legislation and the regulatory environment in Kuwait. In Section 3, we review the prior theoretical and empirical literature on corporate disclosure and develop the hypotheses tested in this study. In Section 4, we describe the data, methodology, and sample characteristics. In Section 5, we present the results on the extent of corporate disclosures and identify firm attributes that explain why firms differ in their disclosure levels. A conclusion is provided in Section 6.

2. Legislation and the Regulatory Environment: The Kuwait Stock Exchange (KSE)

Kuwait is a relatively open economy with an emerging capital market. The Kuwait Stock Exchange (KSE), established in 1944, is considered the oldest stock market in the Gulf Cooperation Council (GCC) region. The KSE is organized by the Amiri Decree issued in August 1983, as amended by Amiri Decree No. 158 of 2005, and Ministerial Decree No. 35 of 1983. These laws govern the general framework of the KSE and established a KSE Committee with responsibility for setting its rules, general strategies, and policies and for managing the market. Together with the Ministry of Commerce and Industry (MCI) and the Central Bank of Kuwait (CBK), the KSE aims to coordinate and integrate financial and economic activities and capital movements in Kuwait to achieve national economic development and financial stability. Thus listed companies on the KSE follow the regulations released by these previous monitoring bodies.

The Kuwaiti government is working hard to develop its economy and improve its business environment and accounting practices. In this respect, Kuwait may be said to be one of the leading countries in adopting the IFRSs (Al Mutawaa and Hewaidy, 2010). In April 1990, the MCI issued Ministry Resolution No. 18, which stated that all listed companies on the KSE should comply with IFRS requirements. A Permanent Technical Committee (PTC) of the MCI, established by Ministerial Decree No. 75/1981, undertakes the task of approving the application of the standards and their suitability for the business environment. The application of the IFRSs may improve the transparency and credibility of the information provided by companies to users and may enhance the confidence in the KSE. Moreover, application of the IFRSs could enhance the opportunity to compare financial statements of companies at the local and/ or international levels.
In early 2010, consistent with international directives and following approval by the National Assembly, the Kuwaiti legislator enacted a law leading to the establishment of a Capital Markets Authority (CMA). Overall, the main objectives of Law No. 7 are to solve all regulatory shortfalls that exist in the legislation covering the KSE and any troublesome overlaps in the jurisdiction of monitoring among regulatory bodies by separating their tasks.

The 2010 Kuwait Stock Exchange Investor Guide states that 204 Kuwaiti firms were listed on the KSE at the end of 2010. The KSE administration divides all listed firms into seven sectors: banking, insurance, investment, real estate, industry, service, and food. Table 1 shows the number of KSE-listed firms in each sector in 2010.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Firms</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>9</td>
<td>4.4</td>
</tr>
<tr>
<td>Investment</td>
<td>52</td>
<td>25.5</td>
</tr>
<tr>
<td>Insurance</td>
<td>7</td>
<td>3.4</td>
</tr>
<tr>
<td>Real Estate</td>
<td>40</td>
<td>19.6</td>
</tr>
<tr>
<td>Industrial (Industry and Food)</td>
<td>35</td>
<td>17.2</td>
</tr>
<tr>
<td>Services</td>
<td>61</td>
<td>29.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>204</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

3. Theoretical Framework, Prior Studies, and Hypotheses Development

3.1 Theoretical Framework

Accounting research provides evidence that investors rely on financial information revealed by managers (Sletten, 2012). The original theoretical framework for the extent of a firm’s disclosure is from Grossman (1981) and Milgrom (1981). Their developed “unraveling” model explains possible motives for firms to provide full disclosure to investors by assuming that all firms receive value-relevant information, and that the disclosure of this information is common knowledge. Investors value firms at either the level of their disclosed information or the mean of the undisclosed information.
In this setting, no equilibrium exists in which a group of managers choose not to disclose because at least one firm in this group is always higher than the mean, and this firm receives a higher valuation by disclosing instead of withholding. Sletten (2012) argued that the “unraveling” model implies that all managers choose to disclose all relevant information because the firm with the best news always prefers to reveal its news—revealing the news is better than being assumed to have the mean news. Once the best firm reveals its news, the second-best firm, and so on, faces the identical situation. The Grossman (1981) and Milgrom (1981) argument is based on the notion that information asymmetry is created between firms and investors when firms do not fully disclose information (Petersen and Plenborg, 2006). According to economic theory, information asymmetry increases a firm’s capital cost because imperfect information may lead to “adverse selection” between buyers and sellers of a firm’s securities. This adverse selection tends to reduce the liquidity of a firm’s securities (Glosten and Milgrom, 1985).

In contrast, increased disclosure improves comparability and permits potential investors to recognize more efficient firms for investment purposes. Thus, in the absence of full disclosure, firms must discount share issues to provide extra compensation to potential investors who may be hesitant to hold shares in firms that offer limited liquidity. Because of the discount, the firm receives less capital from an equity issuance, ultimately increasing the firm’s capital cost. By increasing their disclosures, firms are likely to mitigate information asymmetry between firms and investors, which should reduce capital costs (Diamond and Verrecchia, 1991). The reduction in capital costs motivates firms to disclose information in their reports to attract investors and maintain low capital costs.

In summary, the existing theoretical literature on disclosure showed that firms might benefit from giving investors additional accounting information to exploit the disclosure benefits that exceed disclosure costs, such as lower capital or debt cost. Given these benefits, assuming that managers are motivated to exploit the discretion offered in accounting standards to maximize reporting and disclosure benefits is reasonable.
3.2 Firm-Specific Characteristics and Corporate Financial Disclosure

Several studies explored the relationship between the extent of corporate financial disclosure and several institutional and corporate characteristics, such as industry, size, profitability, liquidity, ownership diffusion, audit quality, leverage, internationality, and age. Recently, Aljifri et al. (2014) empirically investigated the effect of firm-specific characteristics on the extent of disclosure among United Arab Emirates (UAE) firms. The major conclusion drawn from the study by Aljifri et al. (2014) is that industry type, listing status, and firm size are the most powerful explanatory variables when related to the variation in compliance with regulations that specify mandatory disclosure on UAE firms. Similarly, Demir and Bahadir (2014) investigated the extent of mandatory disclosures by Turkish firms and found that the overall level of mandatory disclosures is positively related to firms being audited by Big Four auditing firms. Demir and Bahadir (2014) noticed that disclosure is negatively associated with the level of leverage, whereas other firm characteristics, such as profitability, company size, and age are determined as being statistically insignificant in explaining the level of disclosure among Turkish firms. In general, the purpose of exploring the association between the extent of disclosure and firm attributes is to understand the factors associated with disclosure and to explain differences in the extent of disclosure across firms and countries. Based on this background, the purpose of this study is to empirically investigate the association between firm-specific characteristics and corporate financial disclosure as measured by IFRS requirements among KSE-listed firms.

3.3 Hypothesis Development

To investigate the factors behind variations in corporate financial disclosure among KSE-listed firms, the current study examines the following seven firm attributes: firm age, liquidity, leverage, firm size, profitability, audit quality, and industry classification. The following discussion examines the seven firm attributes and their related hypotheses.
3.3.1 Firm Age

Generally, old firms are believed to disclose more information because they are more likely to have established, well-organized professional staff to deal with the technical aspects of their financial statements (Demir and Bahadir, 2014). Glaum and Street (2003) compared older and younger firms and argued that younger firms tend to concentrate on product and market development when establishing their businesses, rather than accounting. In addition, managers of younger firms tend to be less experienced in running a listed corporation and complying with regulatory requirements. Consequently, Glaum and Street (2003) argued that younger firms’ accounting systems tend to be inadequate, resulting in lower quality accounting and disclosures. In contrast, older firms tend to have well-established accounting systems and experienced managers and staff, resulting in higher quality accounting and disclosures. Although the KSE was established in 1983, some KSE-listed firms were founded as far back as 1952, whereas others were founded as recently as 2005. Based on this argument and given the large variation observed in the ages of KSE-listed firms, older KSE firms are expected to be associated with a higher level of corporate disclosure than younger KSE firms. Therefore, this study makes the following hypothesis.

H1: The level of corporate disclosure is positively associated with a firm’s age.

3.3.2 Firm Liquidity

Information about a firm’s liquidity is an important and crucial factor for investors and lenders who use financial statements to judge a firm’s solvency (Aljifri et al., 2014). Generally, a firm with a lower liquidity ratio is agreed to have a greater need to allay the fears of investors and lenders. A firm also needs to meet its informational needs regarding its ability to comply with short-term financial obligations without liquidating long-term assets or ceasing operations. To do so, a firm with lower liquidity tends to provide more details in its annual reports than a firm with higher liquidity (Wallace and Naser, 1995). Thus, firms with a lower liquidity are expected to disclose more information and achieve a higher level of compliance with IFRS disclosures than higher liquidity firms.
However, Belkaoui and Kahl (1978) argued that a higher liquidity firm has more disclosures because managers of financially strong firms have nothing to hide from users of financial statements and, hence, are more likely to disclose more information than a firm with lower liquidity. Accordingly, this study makes the following hypothesis.

H2: The level of corporate disclosure is negatively associated with a firm’s liquidity ratio.

3.3.3 Firm Leverage

Leverage was suggested as relevant to explaining variations in the extent of corporate financial disclosure (Demir and Bahadir, 2014). In disclosure literature, the “agency theory” is used to explain the incentive for managers of high-leverage firms to provide more disclosure (Morris, 1987). Alsaeed (2006) argued that firms with proportionally higher levels of debt in their capital structure are prone to higher agency costs. Therefore, managers have an incentive to reduce these agency costs. One method is to disclose more accounting information to satisfy the needs of debenture holders (Morris, 1987). In addition, by disclosing more information, highly leveraged firms assure creditors that they are less likely to bypass their covenant claims (Ali et al., 2004). Consequently, this study makes the following hypothesis.

H3: The level of corporate disclosure is positively associated with a firm’s leverage.

3.3.4 Firm Size

Firm size was found to be an influential variable in explaining differences in corporate financial disclosure practices among firms (Aljifri et al., 2014). A common argument is that because larger firms act to protect their reputation and avoid government intervention, they are more likely to release more information than smaller firms do (Demir and Bahadir, 2014). Watts and Zimmerman (1983) argued that agency costs are higher for larger firms given their larger number of shareholders. As a result, managers of large firms have an incentive to reduce potential agency costs. One method to doing so is to disclose more accounting information. Ahmed and Nicholls (1994) argued that larger firms rely heavily on financial markets to raise funds.
Botosan (1997) showed that greater disclosure is associated with lower equity capital costs. Not only does greater disclosure reduce the cost of equity, but it also reduces the cost of debt (Sengupta, 1998). Consequently, larger firms probably benefit from providing additional accounting information to investors. Thus, this study makes the following hypothesis.

H4: The level of corporate disclosure is positively associated with a firm’s size

3.3.5 Firm Profitability

Profitable firms are expected to be more inclined to release more information to show their excellent performance (Aljifri et al., 2014). Singhvi and Desai (1971) claimed that managers are more likely to disclose detailed information when profitability is high to signal their ability to maximize shareholder value, increase the security of their positions, and justify their compensation. In addition, managers of profitable firms may be proud of their success and disclose more information to the public to promote a positive impression of their performance (Alsaeed, 2006). In contrast, unprofitable firms are less inclined to release more information to hide their poor performance. Using agency and signaling theories, Inchausti (1997) claimed that when managers possess “good news” attributable to better performance, they disclose more detailed information to the market than when they possess “bad news” to prevent their shares from being undervalued. Consequently, this study makes the following hypothesis.

H5: The level of corporate disclosure is positively associated with a firm’s profitability.

3.3.6 Audit Quality

Palmer (2008) argued that the extent and quality of corporate disclosure are related to the quality of the auditor, proxied by size. Given the risk to their reputation capital, in uncertain situations, Big Four audit firms encourage greater and higher quality disclosures (Palmer, 2008). DeAngelo (1981) argued that larger auditing firms have well-established reputations and, therefore, have more to lose if they fail to report a discovered breach or make errors or misrepresentations in their clients’ corporate reports.
Thus, DeAngelo claimed that larger auditing firms have a stronger incentive to maintain independence from their clients and report non-compliance with rules and regulations. In Kuwait, regulations require that each listed firm be audited by two external auditors (Big Four, non-Big Four, or a combination of both); therefore, the level of corporate disclosure is expected to increase with more frequent use of Big Four auditing firms. Accordingly, this study makes the following hypothesis.

H6: The level of corporate disclosure is positively associated with the number of Big Four auditing firms that audit a firm’s financial statements.

3.3.7 Firm Industry

Aljifri et al. (2014) argued that corporate disclosure practices might vary among firms because of their industry-specific characteristics. Owusu-Ansah (1998) justified the concept that firms’ corporate disclosure practices are likely to vary across different industry types and suggested that the nature or importance of an industry type to either investors or the country might explain expected differences in corporate disclosure levels across industries. For example, certain industry types are highly regulated given their overall contribution to the national income. These industry types might be subject to more rigorous regulations. Consequently, rigorous regulations might affect the disclosure practices of firms operating in these industry types. Consequently, this study makes the following hypothesis.

H7: The level of corporate disclosure varies according to a firm’s industry type.

4. Research Design and Method

4.1 Population, Sample, and Data Collection

Because all firms operating on the KSE must comply with IFRS mandatory disclosures in accordance with Resolution No. 18 of 1990, the population used by this study to measure IFRS mandatory disclosures consists of all firms listed on the KSE in 2010. The KSE’s Investor Guide for 2010 shows that, at the end of 2010, 204 Kuwaiti firms were listed on the KSE.
The 204 KSE-listed firms are categorized in the following seven industrial sectors: Banks (9 firms), Insurance (7 firms), Investment (52 firms), Real Estate (40 firms), Manufacturing (28 firms), Service (61 companies), and Food (7 firms). However, 23 firms were excluded for data unavailability. The final sample used to measure the association between firm-specific characteristics and corporate financial disclosure was comprised of the remaining 181 firms. The primary data sources used to test the study hypotheses were the consolidated financial statements of KSE-listed firms. Given the need for manual data collection and the efforts required to assess the extent of disclosure in each financial statement, the study period is limited to 2010 to reflect the most recent data available for KSE-listed firms. Botosan (1997) noted that, unlike voluntary disclosures, mandatory disclosure practices seem to have remained relatively constant over time. All required consolidated financial statements for KSE-listed companies were obtained from the KSE.

4.2 Measuring the Level of Corporate Disclosure

A review of studies on disclosures and determinants showed that Chavent et al. (2006) reported that the vast majority of disclosure studies use an item-based index to investigate the level of disclosures. Consistent with prior disclosure research (e.g., Al-Shammari et al., 2008; Aljifri et al., 2014), the level of mandatory corporate disclosures among KSE-listed firms is measured using a self-constructed, item-based disclosure index (DINDEX). The self-constructed disclosure index is developed based on the applicable and relevant IFRS for the Kuwaiti financial reporting environment and the year 2010. As of December 31, 2010, 37 IAS/IFRS were applicable and effective. Selection of the IFRS for inclusion in the DINDEX was based on the following applicability criteria:

1. applicability of the IFRS to the fiscal year ending December 31, 2010;
2. relevance and applicability of the IFRS to the Kuwaiti business environment;
3. availability of information on the majority of firms' annual reports;
4. compatibility of the particular IFRS with Kuwaiti regulations and legislation; and,
5. Kuwaiti professional and academic opinions.

The assessment of the applicability of IFRS reveals that 10 IAS/IFRS are considered not to be relevant to the study period or not to be applicable to the reporting environments of the KSE-listed firms used in the study.
The process used to determine each IAS/IFRS' applicability and relevance to the Kuwaiti financial environment reveals that IAS 12, IAS 19, IAS 26, IAS 29, and IAS 34 are not applicable to the Kuwaiti financial environment and study purpose. In addition to identifying these standards as not applicable to the Kuwaiti environment, the researchers noticed six IFRS/IAS that are not technically applicable: IFRS 1, IFRS 6, IFRS 7, IAS 20, IAS 41, and IAS 39. Consequently, of the 37 effective standards at the end of 2010, only 26 standards are deemed applicable to an investigation into the level of corporate disclosures by KSE-listed firms in 2010.

To construct and develop the disclosure index, the official International Accounting Standard Board (IASB) volume for 2010 is used to obtain details about each IAS/IFRS requirement. Based on these requirements, a comprehensive index is then developed to address each of the 26 standards' disclosure requirements applicable to the Kuwaiti financial environment. The DINDEX is constructed to specifically address the required financial statements and their disclosures prepared in accordance with IFRS disclosure requirements. Each IAS/IFRS is scrutinized for mandatory disclosure requirements. Disclosures that are explicitly voluntary or merely encouraged and suggested by IFRS are not relevant to this study and are excluded from DINDEX. From the 26 applicable IAS/IFRS, 439 mandatory disclosure requirements are obtained. The lowest number of disclosure requirements for a standard is three for IAS 18 (Revenue). The highest number is 69 for IAS 1 (Presentation of Financial Statements).

4.3 Weighting and Scoring the Disclosure Index (DINDEX)

Chavent et al. (2006) noted that, although a general consensus exists among disclosure studies on the use of item-based disclosure checklists, the weighting assigned to each item faces contentious debate. Some researchers favor unweighted items (or equal weighting), whereas others prefer to assign different weightings to different items in the index. Cooke (1989) argued that the focus of the research should determine whether to use a weighted or an unweighted system. A weighted system is preferable for research targeting a particular user group because that system attaches a higher weight to items considered important to that group. In contrast, if the research focuses on all financial statement users rather than one particular user group, an unweighted system is preferable because the implied assumption is that each disclosure item is equally important among the different groups (Cooke, 1989).
Because the focus of this study is to investigate the level of mandatory corporate disclosures, and because mandatory disclosures provide essential information for all financial statement users, each mandatory disclosure item is assumed of equal importance for all users.

Based on this argument and consistent with Cooke (1989), Al-Shammari et al. (2008), and Aljifri et al. (2014), each disclosure requirement mentioned in the DINDEX is assigned an equal weight. Each disclosure is coded one (1) if the required disclosure was made and zero (0) if it was not. If a disclosure is not applicable to the firm, the item is dropped from the scoring system for that firm. This scoring procedure is based on a careful review of the firm’s complete annual reports. Following Cooke (1989), a company’s total disclosure (TD) score is additive, as follows:

\[ TD = \sum_{i=1}^{m} d_i \]

where:
\[ d_i = 1 \text{ if item } d_i \text{ is disclosed; } \]
\[ d_i = 0 \text{ if item } d_i \text{ is not disclosed; and, } \]
\[ m \leq n \text{ (see below)}. \]

After the total disclosure score (TD) is obtained for a firm, an index is constructed to measure that firm’s relative disclosure level. The index is the ratio of a firm’s actual disclosure score (TD) to the maximum score (M) that the company could achieve by fully complying with the IFRS mandatory disclosure requirements. Because a firm is not penalized for omitting a disclosure item that is irrelevant or not applicable to its business, the maximum score (M) that a company can earn may vary from firm to firm, and is computed as follows:

\[ M = \sum_{i=1}^{n} d_i \]

where:
\[ d_i \text{ is the expected disclosure item, and, } \]
\[ n \text{ is the number of items that the firm is required to disclose.} \]
Accordingly, each firm’s disclosure index (DINDEX) is calculated by dividing the total number of mandatory disclosures (TD) that the firm provides by the total number of applicable mandatory disclosures (M):

\[
DINDEX = \frac{TD}{M}
\]

### 4.4 Determinants of Corporate Financial Disclosure

In this study, specific firm characteristics are used as determinants of corporate financial disclosure. Information regarding firm age and industry categories was obtained from the official website of the Kuwait Stock Exchange (http://www.kse.com.kw). Data related to firm size, audit quality, profitability, leverage, and liquidity were extracted from companies’ financial statements. Table 2 presents definitions of all specific company characteristics used in this study as determinants of corporate financial disclosures.

**Table 2: Definition of Firm Characteristics (Independent Variables)**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>firm age</td>
<td>Number of years that have passed since being founded to the end of 2010</td>
</tr>
<tr>
<td>Liquidity</td>
<td>The ratio of current assets to current liabilities at the end of 2010</td>
</tr>
<tr>
<td>Leverage</td>
<td>The ratio of total debt to total shareholders’ equity at the end of 2010</td>
</tr>
<tr>
<td>firm size</td>
<td>Total assets at the end of 2010</td>
</tr>
<tr>
<td>Profitability</td>
<td>Return on equity (ROE)</td>
</tr>
<tr>
<td>Audit quality</td>
<td>Dummy variable coded 2 if two Big Four audit firms audit the firm’s financial statements, 1 if one Big Four audit firm audits the firm’s financial statements, and 0 otherwise</td>
</tr>
<tr>
<td>Industry</td>
<td>Dummy variable that equals 1 for firms in the financial institutions category and 0 otherwise; dummy variable that equals 1 for firms in the investment category and 0 otherwise; dummy variable that equals 1 for firms in the industrial category and 0 otherwise; dummy variable that equals 1 for firms in the service category and 0 otherwise</td>
</tr>
</tbody>
</table>

### 4.5 Corporate Financial Disclosure Regression Model

After determining the level of corporate disclosure, the next step is to investigate the relationship between the level of disclosures and firm attributes to explain why firms differ in their disclosure levels.
The disclosure level (DINDEX) obtained from the self-constructed disclosure index is used as the dependent variable in a multivariate regression model. To test H1–H7, the firm’s attributes (age, liquidity, leverage, size, profitability, auditing quality, and industry categories) are used as independent variables.

The regression equation tested in the regression analysis is specified as:

\[ DINDEX = \beta_0 + \beta_1 \text{AGE} + \beta_2 \text{LIQUIDITY} + \beta_3 \text{LEVERAGE} + \beta_4 \text{SIZE} + \beta_5 \text{PROFIT} + \beta_6 \text{AUDIT} + \beta_7 \text{IND\_FT} + \beta_8 \text{IND\_INVST} + \beta_9 \text{IND\_INDUS} + \beta_{10} \text{IND\_SERV} + \epsilon \]  

(1)

where:

- \text{DINDEX} = \text{disclosure score;}
- \beta_0 = \text{constant term;}
- \text{AGE} = \text{number of years that have passed since being founded to the end of 2010;}
- \text{LIQUIDITY} = \text{ratio of current assets to current liabilities at the end of 2010;}
- \text{LEVERAGE} = \text{ratio of total debt to total shareholders’ equity at the end of 2010;}
- \text{SIZE} = \text{total assets at the end of 2010;}
- \text{PROFIT} = \text{return on equity (ROE) at the end of 2010, which is the ratio of net income to average common shareholders’ equity;}
- \text{AUDIT} = \text{equals 2 if two Big Four audit firms audit the firm’s financial statements, 1 if one Big Four audit firm audits the company’s financial statements, and 0 otherwise;}
- \text{IND\_FT} = \text{a dummy variable that equals 1 for firms in the financial institutions category and 0 otherwise;}
- \text{IND\_INVST} = \text{a dummy variable that equals 1 for firms in the investment category and 0 otherwise;}
- \text{IND\_INDUS} = \text{a dummy variable that equals 1 for firms in the industrial category and 0 otherwise; and,}
- \text{IND\_SERV} = \text{a dummy variable that equals 1 for firms in the service category and 0 otherwise.}

5. Results

5.1 Descriptive Statistics

Table 3 presents descriptive statistics for the disclosure index (DINDEX), and shows that the mean for the DINDEX of KSE-listed firms in 2010 was 0.74, with a minimum score of 0.41 and a maximum of 0.95. These results suggest that corporate disclosure levels among the 181 firms were widely distributed. However, the descriptive statistics results show a notable variation in firms’ levels of disclosure.
This variation encourages an examination of the firm characteristics that affect the level of corporate financial disclosure.

Table 3: Descriptive Statistics for Disclosure Index (DINDEX)

<table>
<thead>
<tr>
<th>Dependent Var</th>
<th>N</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DINDEX</td>
<td>181</td>
<td>0.74</td>
<td>0.41</td>
<td>0.95</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Table 4 presents the descriptive statistics for the independent continuous and dummy variables used in this study. Panel A of Table 4 shows that the age of the firms examined in this study ranged from 5 to 58 years, with a mean of 22.93 years and a median of 20.05 years. In addition, firm liquidity ranged from 0.00 to 39.63, with a mean of 3.13. The descriptive statistics presented in Panel A show that firm leverage ranges from 0.01 to 0.98, with a mean of 0.44. A significant degree of variation exists in firm size, as shown in Panel A. Firm size ranges from KD 3.48 million to KD 12,898.94 million, with a mean of KD 417.70 million and a median of KD 696.89 million. Given the non-normality, firm size was transformed using the natural logarithm of total assets as of December 31, 2010, as shown in the variable LSIZE. In addition, firm profitability as shown in Panel A varies from -0.22 to 0.31, with a mean of 0.01. Panel B of Table 4 presents the distribution of firms that were audited by Big Four and non-Big Four audit firms. The results reveal that 42% of the firms included in the study were audited by two non-Big Four audit firms, 50% of the firms were audited by one Big Four and one non-Big Four, and 8% of the firms were audited by two Big Four audit firms.

Table 4: Descriptive Statistics for Independent Continuous and Dummy Variable

<table>
<thead>
<tr>
<th>Panel A: Independent Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>22.93</td>
<td>20.05</td>
<td>13.19</td>
<td>5.00</td>
<td>58.00</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>3.13</td>
<td>3.78</td>
<td>3.19</td>
<td>0.00</td>
<td>39.63</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>0.44</td>
<td>0.46</td>
<td>0.41</td>
<td>0.01</td>
<td>0.98</td>
</tr>
<tr>
<td>SIZE</td>
<td>417.70</td>
<td>696.89</td>
<td>1,748.20</td>
<td>3.48</td>
<td>12,898.94</td>
</tr>
<tr>
<td>LSIZE</td>
<td>12.79</td>
<td>12.15</td>
<td>1.47</td>
<td>8.16</td>
<td>2328</td>
</tr>
<tr>
<td>PROFIT</td>
<td>0.01</td>
<td>0.01</td>
<td>0.07</td>
<td>-0.22</td>
<td>0.31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Dummy Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditor Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two Non-Big Four</td>
<td>77</td>
<td>42</td>
</tr>
<tr>
<td>One-Big and One Non-Big</td>
<td>91</td>
<td>50</td>
</tr>
<tr>
<td>Two Big Four</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>181</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 5 shows colinearity diagnostic statistics based on the variance inflation factor (VIF) test. The VIF values presented in Table 5 do not raise a concern regarding multicolinearity among the variables because all variables had low VIF values. The VIF value for each independent variable is significantly less than the suggested VIF of 10 (Pallant, 2013). Consequently, multicolinearity did not appear to be a serious problem during interpretation of the regression results of this study.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>0.858</td>
<td>1.166</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>0.932</td>
<td>1.072</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>0.618</td>
<td>1.618</td>
</tr>
<tr>
<td>LSIZE</td>
<td>0.559</td>
<td>1.787</td>
</tr>
<tr>
<td>PROFIT</td>
<td>0.850</td>
<td>1.176</td>
</tr>
</tbody>
</table>

5.2 Regression Analysis

To jointly investigate the effect of corporate characteristics on the level of financial disclosures as measured by IFRS requirements, this study uses a disclosure multivariate regression model that specifies the level of disclosure as measured by IFRS requirements as a function of firm age, liquidity, leverage, size, profitability, audit quality, and industry category. Table 6 provides the results from estimating the model, and makes evident that the corporate characteristics identified in combination are highly significant in explaining the disclosure level ($F = 18.914$, $p < 0.01$). The adjusted $R^2$ of the multiple regression model indicates that firms-specific attributes considered in this study explain 49% of the variation in corporate financial disclosures.

Consistent with hypothesis H1, Table 6 shows that firm age (AGE) is a significant factor in explaining the variations in corporate disclosure levels among KSE-listed firms ($p < 0.01$). Thus, the study findings suggest that, because of their maturity and associated learning experience, older KSE-listed firms are more likely to have well-established accounting procedures that produce more detailed information than younger KSE firms. Hypothesis H2 predicts that the level of financial disclosures is negatively associated with firm liquidity. Contrary to expectations, Table 6 shows that the LIQUIDITY coefficient is negative but is not significant in explaining the variations in corporate disclosure levels.
A firm with a lower liquidity ratio was argued to have a greater need to allay the information asymmetry concerns of investors and lenders by providing enhanced disclosures. However, this situation does not seem to be the case for KSE-listed firms with regard to corporate disclosures.

Table 6: Corporate Characteristics Explaining the Corporate Disclosure Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted Sign</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>−0.182</td>
<td>−2.677***</td>
</tr>
<tr>
<td>AGE</td>
<td>+</td>
<td>0.001</td>
<td>1.466+</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>−</td>
<td>−0.001</td>
<td>−0.540</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>+</td>
<td>0.004</td>
<td>2.081++</td>
</tr>
<tr>
<td>LSIZE</td>
<td>+</td>
<td>0.026</td>
<td>8.376+++</td>
</tr>
<tr>
<td>PROFIT</td>
<td>+</td>
<td>0.071</td>
<td>1.356+</td>
</tr>
<tr>
<td>AUDIT</td>
<td>+</td>
<td>0.025</td>
<td>2.053++</td>
</tr>
<tr>
<td>IND_FT</td>
<td>?</td>
<td>0.152</td>
<td>4.730***</td>
</tr>
<tr>
<td>IND_INVST</td>
<td>?</td>
<td>0.051</td>
<td>1.655</td>
</tr>
<tr>
<td>IND_INDUS</td>
<td>?</td>
<td>0.045</td>
<td>0.945</td>
</tr>
<tr>
<td>IND_SERV</td>
<td>?</td>
<td>0.075</td>
<td>1.384</td>
</tr>
</tbody>
</table>

\[ \text{N} = 181; \quad R^2 = 0.518; \quad \text{Adj. R}^2 = 0.491; \quad F = 18.914; \quad p = 0.000 \]

+,,,, +++ significant at the 0.10, 0.05, and 0.01 levels respectively (one-tailed). *** significant at 0.01 level (two-tailed).

Hypothesis H3 predicts that the level of financial disclosures is positively associated with firm leverage. As support, Table 6 shows that the level of financial disclosures is positively and significantly associated with firm leverage (p < 0.05). In Kuwait, banks are the main source of loans for KSE-listed firms. Therefore, this result is consistent with the notion that highly geared companies have a greater need to reduce agency costs and satisfy the information needs of long-term creditors. Thus, to meet those needs, they provide more detailed financial disclosures in their annual reports than lower geared firms.

Hypothesis H4 predicts that the level of financial disclosures is positively associated with firm size. Consistent with this prediction, Table 6 shows that firm size (LSIZE) is a significant factor in explaining the variations in the financial disclosures levels among KSE-listed firms (p < 0.01).
This result supports the argument that larger firms are more willing to disclose information to reduce political costs and to mitigate litigation and government intervention. In addition, the cost associated with accumulating information is lower for larger firms because of their extensive internal reporting systems. In comparison, smaller firms are more likely to conceal sensitive information because full disclosure could jeopardize their competitive positions (Chavent et al., 2006).

Consistent with Hypothesis H5, Table 6 shows that the level of financial disclosures is positively and significantly associated with firm profitability (PROFIT), as measured by return on equity, \((p < 0.10)\). This finding supports the argument that managers are more likely to disclose detailed information when profitability is high to signal their ability to maximize shareholder value and avoid share undervaluation. In this way, they increase the security of their positions and justify their compensation. In contrast, firms may disclose less information when profitability is low to hide the various reasons for declining profitability or losses.

Hypothesis H6 predicts that the larger the number of Big Four auditing firms in a firm’s audit team, the higher the level of financial disclosures. As predicted, Table 6 shows that the auditor combination (AUDIT) is a significant factor in explaining variations in the level of financial disclosures \((p < 0.05)\). Although this finding is unique in the disclosure literature, it is nevertheless consistent with the auditor quality argument. Larger international auditing firms (Big Four) have well-established reputations and more to lose if they fail to report a discovered breach or make errors or misrepresentations in their clients’ corporate reports.

Hypothesis H7, which predicts that the level of financial disclosures differs across industry categories, was partially supported by the regression results. Table 6 shows that financial disclosure levels among the financial institution category vary significantly \((p < 0.01)\) from levels of disclosure in the investment, industrial, servicers, and real-estate categories. No significant differences were observed among the other categories.

6. Conclusion

Accounting research provides evidence that investors rely on financial information revealed by managers. To this end, several empirical studies on corporate disclosure assessed the extent of corporate disclosure in annual reports on both developing and developed countries.
However, the notable variation in the level of disclosure across firms worldwide encourages researchers to examine factors behind this variation. Firm-specific characteristics are expected to be important factors that influence disclosure levels. In general, the purpose of exploring the association between the extent of disclosure and firm attributes is to understand the factors associated with disclosure and to explain differences in the extent of disclosure across firms and countries. Based on this background, the purpose of this study is to empirically investigate the association between firm-specific characteristics and corporate financial disclosure as measured by IFRS requirements among KSE-listed firms. This study hypothesized that corporate disclosure levels increase with firm age, leverage, firm size, profitability, and the number of Big Four auditing firms that audit a firm’s financial statements. The study predicted that corporate disclosure levels decrease when a firm has a higher liquidity ratio. In addition, the level of corporate disclosure was expected to vary by industry category. Using the applicable and relevant IFRS mandatory disclosure requirements, the level of disclosure among all KSE-listed firms in 2010 was measured using a self-constructed, item-based disclosure index.

The results showed that the mean level of mandatory disclosures for all 181 KSE-listed firms in 2010 was 74%, with a range of 41–95%. However, a notable variation in firms’ levels of disclosure is observed, which encourages an examination of the firm characteristics that affect the level of corporate financial disclosure. An investigation into the relationship between disclosure levels and firm attributes suggests that older, highly leveraged, larger, and profitable KSE-listed firms are associated with high levels of corporate disclosures. Importantly, the results reveal significant variations in disclosure levels across the three possible auditor combinations. Firms audited by two Big Four audit firms achieved the highest level of disclosure, followed by firms audited by one Big Four and one non-Big Four firm and, finally, firms audited by two non-Big Four audit firms. These findings showed the importance of high quality and rigorous external audits in promoting corporate disclosure.

The findings presented in this study provide an understanding of the corporate disclosure levels among KSE-listed firms and the factors that influence corporate disclosure. In addition, this study contributes to the extant literature by extending corporate disclosure research into emerging markets, such as Kuwait, in which different economic, social, political, and cultural characteristics exist.
As with any research, this study has some limitations. One limitation could be attributed to the subjectivity inherent in scoring the disclosure index; however, consistent with previous studies, several approaches were undertaken to minimize and overcome this potential bias and uncertainty in determining a firm’s disclosure level. In addition, the possibility always exists of omitting other firms’ attributes that assist in explaining variations in corporate disclosures. Future research could examine additional firms’ attributes, such as institutional, government, and international ownership. The disclosure index used in this study was constructed to specifically address the mandatory disclosures in financial statements; therefore, disclosures that are explicitly voluntary or merely encouraged were not investigated in this study. Another area for future research is to assess the level of voluntary disclosure and the factors behind the variations in the level of voluntary disclosure, if any. Given data limitations, the results of this study are based on data from a one-year period. Future research could investigate changes in the level of disclosure and the factors influencing disclosure levels over time.

References


