

# THE ASSOCIATION BETWEEN FIRM CHARACTERISTICS AND CORPORATE FINANCIAL DISCLOSURES: EVIDENCE FROM UAE COMPANIES

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## ABSTRACT

*This paper provides empirical evidence of the impact of firm specific characteristics on corporate financial disclosures amongst UAE companies. A total of 153 public, joint-stock companies, listed and unlisted, were incorporated at the time of study. Both descriptive statistics and multiple regression analyses are used to test the relationship between the characteristics of UAE firms and the extent of their financial disclosure. Eight hypotheses were established to examine the relationship between a number of explanatory variables (namely, type of industry, listing status, return on equity, liquidity, market capitalization, foreign ownership, non-executive directors, and audit committee) and the extent of disclosure in corporate annual reports. The results of this study show that listing status, industry type, and size of firm are found to be significantly associated with the level of disclosure. This finding not only provides support for previous studies, but also is of relevance to those in the UAE who want to understand corporate disclosure and should also be of interest to UAE user-groups. Conclusions drawn from this study may be of interest to policy makers and regulators who want to improve corporate financial disclosure in their countries.*

**JEL:** M4, M48, M49

**KEYWORDS:** Corporate Financial Disclosure, Firm Characteristics, UAE Firms, Corporate Annual Reports

## INTRODUCTION

The quality of information disclosed in corporate annual reports has received a great deal of attention in the last four decades, mostly in developed countries. The relationship between the extent/quality of disclosure in corporate annual reports and the characteristics of the firm has been extensively examined in the literature. Most of the studies in this area have used an index methodology, which is based on developing a general index and relating it to a number of explanatory variables (e.g., asset size, number of shareholders, profitability, listing status) in order to explain cross-sectional variation in the extent of disclosure in such corporate annual reports.

It is essential to have high-quality standards and reporting practices to provide users of financial information with what they need (Biobele et. al., 2013). Deficiencies in such standards and practices cause inconsistency, incomparability, reduced transparency and a lack of trust in the information provided, which lead to higher costs of capital and increased risks for different user-groups. As Jenkins (2002, p. 2) stated, 'High-quality financial reporting is essential to maintaining an efficient capital market system. A highly liquid capital market requires the availability of transparent and complete information so that all participants can make informed decisions as they allocate their capital among competing alternatives'.

The above-mentioned perceived benefits accrue to economically advanced nations. However, financial reporting is even more essential for developing countries which seek to build a strong economy by regulating financial practices, protecting the national economy from the control of a handful of influential investors, and encouraging citizens to invest locally. The purpose of this study is to examine the relationship between the extent of disclosure in corporate annual reports and selected firms' characteristics in The United Arab Emirates (UAE). UAE, which was established in 1971, is a new country that relies heavily on oil as its main source of income. Since its establishment, the UAE has adopted an open economic strategy, and it is one of the fastest growing countries in the world on various socioeconomic indicators, such as GDP per capita (Wikipedia, 2008). The country has witnessed remarkable progress and development in different economic aspects. However, the accounting profession is not well developed (Khasharmeh & Aljifri, 2010).

The government of the UAE has, since 1980, examined the potential benefits of establishing an official securities market. The market was established in 2000. Different groups of participants in the UAE securities market (investors, brokers, financial analysts and businessmen) have expressed dissatisfaction with the practice of financial disclosure among UAE firms, and have complained about variations in disclosure. The research problem is, therefore, related to corporate disclosure practices in corporate annual reports. This study seeks to examine the corporate disclosure in annual reports of a sample of UAE firms and to determine the factors responsible for the variation, if any, in financial disclosure.

There are few previous studies of UAE financial reporting. Al-Shayeb (2003a) attempted to examine factors that influence the general level of information disclosed by UAE companies in 2000. He found that overall compliance in the UAE was low since none of his sample companies complied with statutory requirements on disclosure. Aljifri (2008) studied the extent of disclosure by public companies listed on the Abu Dhabi Securities Market and the Dubai Financial Market in 2003. Using denominator-adjusted disclosure-indices, he compared the extent of corporate disclosure between companies, sectors, and the two financial markets. The results of his study indicate that significant differences are found between sectors. However, the size, the debt equity ratio, and profitability of a company were found to have no significant association with the level of disclosure. Unfortunately, the sample sizes in both these studies were very small, and so their conclusions about the level of disclosure may not be generalisable. Also the regulations governing disclosure were very new at the time of the studies.

Although the findings of this study are specific to the UAE, the results of this research are relevant to other countries in the region with similar socio-economic environments. Conclusions drawn from this study may be of interest to policy makers and regulators who want to improve corporate financial disclosure in their countries. The findings of this study are also likely to benefit researchers and users of annual reports in other parts of the world.

The rest of this paper is organized as follows: Section 2 presents the background of the UAE securities market and Section 3 provides a literature review. Research hypotheses are presented in Section 4. Section 5 reviews empirical studies which employ various index methodologies to assess and explain disclosure variations in corporate annual reports. The empirical results are presented in Section 6, and discussion and conclusions are provided in Section 7.

## Background

In the UAE, five forces have shaped financial reporting requirements and practice in the UAE, namely, the Ministry of Economy, the Central Bank of the UAE (CBUAE), Emirates Securities and Commodities Authority (ESCA), Dubai International Financial Centre, and Abu Dhabi Accountability Authority. The Ministry of Economy issued Companies Law No.8/1984 and its amendment No.13/1988, both of which require firms to maintain records of their operations and to provide audited financial statements to the Ministry and to other authorities concerned. The Companies Law and its amendments do not specify any

particular standards, format, or information items that should be reported in financial statements. However, Article 190 of the Law states that the board of directors should prepare the company balance sheet, a profit and loss account, a report on company activities during the previous financial year, and the proposal for net profit distribution.

The CBUAE issued Provision No.445/1988 which requires financial institutions to prepare their audited financial statements in accordance with the format prepared by the CBUAE. Later, the CBUAE issued Circular No.20/1999 which requires all banks and financial institutions to adopt the IAS/IFRS in their annual reports. Since 1999, all firms reporting to the CBUAE prepare their financial statements in accordance with the IFRS.

ESCA was established by Federal Law No. 4/2000 on the 29th January 2000. ESCA requires all listed firms to report their reviewed interim financial statements quarterly as well as their audited financial statements at the end of their financial year. Articles Nos. 29, 31, and 36 of Regulation No. 3/2000 stipulate that listed firms and those applying to be listed have to report to ESCA and to make their financial statements public.

Although there is an accounting body in the UAE called the UAE Accountants and Auditors Association (AAA), this association has not issued any national standards and it has no official role in regulating the profession. Hence, the accounting profession is not well-organized and there are no specific professional standards with which UAE firms and auditors must comply. It can therefore be concluded that the legal and regulatory frameworks for financial reporting in the UAE are imprecise and limited in scope.

## **LITERATURE REVIEW**

### Previous Studies and Disclosure Index Methodology

Historically, Cerf (1961) was the first researcher who conducted an empirical study using a quantifiable measure of disclosure and relating it to certain financial and non-financial corporate variables. Cerf's study was based on a sample of 527 US firms listed on the New York Stock Exchange (NYSE), on other exchanges or traded over the counter (OTC). He developed an index consisting of 31 items, each of which was scored on a scale of 1 to 4 on the basis of interviews with financial analysts. The index was then related to four corporate variables. He found a significant positive correlation between the level of disclosure and a firm's asset size for firms that were not listed on the NYSE, and between the level of profitability and disclosure for firms listed on the NYSE and those traded OTC. He also found that firms listed on the NYSE disclosed more information than other firms.

Cerf's (1961) approach, with extensions and modifications, has been used widely in many other studies to examine the adequacy of corporate financial disclosure in different countries. Studies using disclosure index methodology can be classified into three groups: those in developed countries, those in developing countries, and international studies where data from several countries was included. However, the present literature survey in the present study is restricted to developing countries and especially to those countries that have similar socio-economic environments.

### Studies in Developing Countries

Using a general disclosure index, previous studies suggest that the extent of corporate financial disclosures is a function of financial and non-financial characteristics of firms (Imhoff, 1992; Malone et al., 1993; Lang & Lundholm, 1993; Wallace et al., 1994; Inchausti, 1997; Cooke, 1989a, 1989b, 1989c; Patton & Zelenka, 1997; Priebjriyat, 1991; Abu-Nassar, 1993; Suwaidan, 1997; Hooks et al., 2002; Naser & Nuseibeh, 2003; Prencipe, 2004; Alsaeed, 2006; Aljifri, 2008, Hossain and Hammami, 2009; Bhayani,

2012; Ahmed, 2012). While some studies found that firm size, listing status, leverage, and industry type were significantly associated with higher disclosure levels, results for other variables (profitability, size of audit firm, and liquidity) were inconclusive. These findings could be attributed to differences in socio-economic and political environments between countries, organizational structure, construction of disclosure indices, and sampling error (Cooke & Wallace, 1990; Ahmed & Courtis, 1999).

In Saudi Arabia, Abdel-Salam (1985) investigated the relationship between the extent of disclosure and some specific corporate variables. He found a negative results with respect to size of firm measured by either capital or assets. For the other variables (growth, government subsidy, government ownership, audit firm size) the results were not clear.

In Jordan, in a study of 45 Jordanian firms, Solas (1994) found that firm size, number of shareholders, rate of return, and earnings margin had no significant relationship with the quality of financial reporting. These results contradict Abu Nassar's (1993) study, which investigated the relationship between the level of disclosure of 96 firms listed on the Amman Stock Exchange and seven corporate variables. He used five models of regression analysis to overcome the problem of multicollinearity between the independent variables. The results revealed that among the independent variables, total dividends were found to be the most important influence on disclosure. However no relationship was found with equity ratio or the number of shareholders.

In Bangladesh, Ahmed and Nicholls (1994) investigated the extent of corporate compliance with local disclosure requirements. By developing an index and applying it to 63 firms listed on the Bangladesh Stock Exchange, the researchers found no significant association between firm size and the level of disclosure. However, they reported a positive and significant relationship with the status of firms as subsidiaries of multinational firms.

Hannifa and Cooke (2002) examined whether the extent of voluntary disclosure in annual reports of 167 Malaysian listed firms was associated with 31 corporate characteristics, divided into three groups of variables: corporate governance, cultural and firm specific (control) variables. A scoring sheet of 65 voluntary disclosure items, selected on the basis of previous research, was developed and applied to the annual reports of the selected sample. Using regression analysis, the results indicated a significant association between the extent of voluntary disclosure and two corporate governance variables (chair who is a non-executive director and domination of family members on boards) and with one cultural variable (proportion of Malay directors on the board).

Naser et al. (2002) investigated changes in corporate disclosure in Jordan after the introduction of the International Accounting Standards (IAS). The results, applying regression analysis, indicated a slight improvement in the depth of disclosure after the introduction of IAS. In addition, the depth of disclosure was found to be associated with corporate size, audit firm status, liquidity, gearing, and profitability. In another study, Naser and Nuseibeh (2003) tried to assess the quality of information disclosed, in the years 1992-1999, by a sample of non-financial Saudi firms listed on the Saudi Stock Exchange. The researchers used two indices (weighted and un-weighted). The results indicated a relatively high level of compliance with mandatory requirements in all industries except the electricity sector. However, the level of voluntary disclosure was relatively low. Alsaed (2005) also examined the effect of specific characteristics on the extent of voluntary disclosure by a sample of 40 Saudi firms. He reported that while large firms tend to present more voluntary information than small firms, the other characteristics (debt ratio, ownership dispersion, firm age, profit margin, return on equity, liquidity, industry type, and audit firm size) were found not to be significantly associated with the level of disclosure.

Al Zoubi and Al Zoubi (2012) examined the opinions of accounting academics and investors on the adequacy of the quality and quantity of information disclosed by Jordanian listed companies in the

circumstances of the global financial crisis. They used a sample of the two groups of respondents (i.e., academics and investors), consisting of 90 respondents from each category. The analysis of the data gathered by questionnaire revealed that while accounting academics perceived the quantity of disclosed information to be sufficient, investors perceived the quantity of accounting disclosure to be inadequate.

### Research Hypotheses

There has been a great deal of empirical work regarding the relationship between firm-specific characteristics and the extent of corporate disclosure. This research has used a variety of theoretical frameworks, such as agency theory, signalling theory, capital market theory and cost-benefit theory (Haniffa & Cooke, 2002). While the characteristics examined may be classified into various categories, they are not mutually exclusive. In this study, the characteristics of a company were divided into four categories (market-related, performance-related, structure-related, and corporate governance variables, see Table 1) to explain the relationship between company characteristics and their disclosure in the UAE. These characteristics (i.e., the variables) were selected on the basis that they met the following three preconditions: (1) the variable encompasses sound theoretical reasons for explaining the association between the variable and corporate disclosure, (2) the variable is relevant to the socio-economic environment of the UAE; and (3) sufficient data about the variable was available. Based on these criteria, eight firm-specific variables were selected for this research: (1) industry type, (2) listing status, (3) profitability, represented by return on equity ratio (ROE), (4) liquidity, (5) firm size, (6) foreign ownership, (7) composition of board of directors, and (8) audit committee. The theoretical and empirical support for these variables are discussed in the following subsections.

### Industry Type

Accounting policies and techniques may vary between firms because of their industry-specific characteristics. Firms from a particular industry may adopt disclosure practices that differ from firms in other industries (Wallace 1989; Dye & Sridhar 1995). Some industries are highly regulated because of their overall contribution to a country's national income. These industries are subject to more rigorous control, which may affect the level of disclosure (Owsus-Ansah, 1998b). A disclosure differential may also be associated with the scope of business operations. Firms with multi-production lines may have more information to disclose than those with small or single line production (Owsus-Ansah, 1998b). Finally, a dominant firm with a high level of disclosure within a particular industry may lead other firms to "follow the leader" (Belkaoui & Kahl, 1978) in that industry to adopt the same level of disclosure (Wallace & Naser, 1995). Therefore a positive association can be assumed between the industry type and the extent of disclosure:

*H1: There is a significant association between the type of industry and the extent of disclosure.*

### Listing Status

The level of disclosure may vary between listed and unlisted firms. Not only do firms have to comply with the listing rules imposed by the securities market in which they are listed (e.g., Leftwich et al., 1981; Cooke 1989a; Wallace et al. 1994), but they also seek funds and hope to reduce the cost of capital by disclosing more information (Cooke 1989a). Moreover, listed firms are much more in the public eye (Al-Mulhem, 1997) than unlisted ones, so they tend to disclose more information. It can be assumed that there is an association between listing status and increased disclosure:

*H2: Firms listed in the UAE securities market disclose more information than unlisted firms.*

### Profitability

Profitability has been used to explain the variation of disclosure between firms. When profitability is high, management is more willing to disclose detailed information (Inchausti, 1997; Lang & Lundholm, 1993; Wallace & Naser, 1995; Suwaidan, 1997). Unprofitable firms will be less inclined to release more information to hide their poor performance. There are different measures of profitability such as net income, profit margin, return on assets, and return on equity. In this study return on equity was chosen as a proxy for profitability. Hence, it is hypothesised that return on equity is associated with the extent of disclosure:

*H3: Firms in the UAE securities market with a higher return on equity disclose more information than firms with lower return on equity.*

### Liquidity

The assessment of a firm's liquidity is an important issue for those who use financial statements to judge a firm's solvency. Liquidity is of interest to regulatory bodies as well as to investors and lenders. The inability of a firm to meet its current obligations may mean a default in payment of interest and principal to the lenders and may lead to bankruptcy. To alleviate these fears, firms are willing to disclose more information (Wallace & Naser, 1995). Also, liquidity is perceived to be associated with a strong financial position and firms with high liquidity ratios are expected to disclose more information (Belkaoui & Kahl, 1978; Cooke, 1989a, 1989b; Wallace et al., 1994). Therefore, an association between liquidity, as measured by current assets divided by current liabilities, and the extent of financial disclosure is hypothesised as follows:

*H4: Firms in the UAE securities market with high liquidity tend to disclose more information than firms with low liquidity.*

### Firm Size

In the literature, size has been found to be an influential variable in explaining differences in disclosure practices among firms (Cerf 1961; Singhvi & Desai, 1971; Buzby 1974a; Lang & Lundholm, 1993; Wallace et al., 1994; Zarzeski 1996; Naser, 1998; Archambault & Archambault, 2003). There are several reasons for a positive association between firm size and the extent of disclosure. Disclosing detailed information is costly, and thus may not be affordable for small firms. Large firms are usually diverse in the scope of their business, the types of products and geographical coverage. A considerable amount of information is required for management purposes and can be generated internally. Consequently, the marginal cost of disclosing the information publicly is low (Cooke 1989c). Also, large firms go to financial markets to raise funds more often than small ones. These large firms are aware that selling new securities and a low cost of capital depend on disclosing more information to users (Choi, 1973a, 1973b; Spero, 1979; Dhaliwal, 1979, 1980b; Barry & Brown, 1985). On the other hand, disclosure of detailed information may place small firms at a competitive disadvantage with other large firms in the same industry (Buzby, 1975).

Different variables have been used in previous studies as proxies for firm size, including total assets, market capitalization, and net sales. (Wallace & Naser, 1995; Naser et al., 2002; Hanifa & Cooke, 2002). In this research, market capitalization is chosen as it is more objective than other variables and is an externally determined measure, set by choices that are made by the investing public (Wallace & Naser, 1995). A positive association is expected between a firm's size (measured by market capitalisation) and the extent of disclosure:

*H5: Firms in the UAE securities market with a large market capitalization tend to disclose more information than firms with small market capitalization.*

#### Foreign Ownership

Based on agency theory, where there is a separation between owners (shareholders) and management of a firm, the potential for agency costs arise because of conflicts of interest between the principal and the agent (Jensen & Meckling, 1976; Watts, 1977; Fama & Jensen, 1983; Chau & Gray, 2002). Shareholders will be more inclined to increase monitoring of management behaviour in order to alleviate the agency problems. Monitoring costs affect both profitability and management remuneration, and consequently management can reduce monitoring costs by providing more information to shareholders.

Shareholders, according to Wallace (1989), also vary in their information needs. Some shareholders could be interested in profitability, others might be looking for forecast information, while others want information about social responsibility. Accordingly, corporate financial disclosure is likely to be higher in widely-held firms and in this sense the demand for information is expected to be higher from foreign investors due to the geographical separation between management and owners (Bradbury, 1992; Craswell & Taylor, 1992). Diffusion of ownership has been empirically found to be an important variable in explaining the variability of corporate financial disclosure (Leftwich et al., 1981; Craswell & Taylor, 1992; Hossain et al., 1994), and the demand for information is expected to be greater when a high proportion of shares is held by foreign investors. Therefore, it is hypothesized that:

*H6: UAE firms with a higher proportion of foreign ownership disclose more information than those without such ownership.*

#### Composition of Board of Directors

Board composition is defined by Shamser and Annuar (1993, p. 44) as ‘the proportion of outside directors to the total number of directors’. The role of the board of directors in monitoring management behaviour and corporate financial disclosure may be a function of the composition of the board (Gibbins et al., 1990). Having a higher proportion of outside non-executive directors on the board may result in better monitoring of the behaviour of management by the board and limit managerial opportunism (Fama, 1980; Fama & Jensen, 1983).

Also, non-executive board members are less aligned with management, and they may be more inclined to encourage and support more disclosure to the users of financial reporting (Mak & Eng, 2003). A positive relationship between the proportion of independent directors and disclosure has been found empirically in other capital market settings (Chen & Jaggi, 2000). Therefore, it is hypothesised that:

*H7: There is a positive association between the proportion of outside directors and the level of disclosure made by UAE firms.*

#### Audit Committee

Recent high-profile accounting scandals, such as that involving Enron, have shed light on the effectiveness of audit committees. Such problems have led some countries to impose more regulations on audit committee functions, including independence, composition, expertise and disclosure activities (e.g., Sarbane-Oxely Act 2002). The structure of the audit committee determines the level of monitoring and thereby the level of financial disclosure. It has been argued that an effective and independent audit committee has an influential role in the financial reporting process (Kreutzfeldt & Wallace, 1986; Abbott

et al., 2004). An independent audit committee provides greater monitoring of the financial discretion of management and ensures the credibility of corporate financial disclosure (The Blue Ribbon Committee, 1999).

The level of expertise is another factor which enhances the effectiveness of the audit committee. This expertise should be based on members of the audit committee who possess knowledge and experience in accounting and finance (Beasley & Salterio, 2001; Abbott et al., 2004). The US (Sarbane-Oxely Act 2002) and Malaysia (Bursa Malaysia listing requirements 2001) require that at least one member of the audit committee possesses a background in accounting and finance. Hence, it is assumed that having independent and qualified audit committee members enhances the quality of a firm’s financial disclosure. In this research, since information on the independence and qualifications of audit committee members is not available in the UAE, the effect of the existence of an audit committee on the extent of corporate disclosure is assessed by testing whether a firm has an audit committee or not. Therefore, it is hypothesized that:

*H8: There is a positive association between the existence of an audit committee and the level of financial disclosure made by UAE firms.*

Table 1 presents the research hypotheses and the predicted signs for each explanatory variable associated with each hypothesis.

Table 1: Research Hypotheses and Predicted Signs of the Coefficients

Independent Variable	Hypothesis	Expected Sign
<b>Market Variables:</b>		
Industry Type	H <sub>1</sub>	+/-
Listing Status	H <sub>2</sub>	+
<b>Performance Variables:</b>		
Profitability (ROE)	H <sub>3</sub>	+
Liquidity	H <sub>4</sub>	+
<b>Structure Variables:</b>		
Firm Size (Market Capitalization)	H <sub>5</sub>	+
Foreign Ownership	H <sub>6</sub>	+
<b>Corporate Governance Variables:</b>		
Composition of B.O.D.	H <sub>7</sub>	+
Audit Committee	H <sub>8</sub>	+

*This table lists the hypotheses with their expected signs. It shows that market variables (with an exception for industry type), performance variables, structure variables, and corporate governance variables are predicted to have a positive relationship with the level of financial disclosure made by UAE firms.*

## METHODOLOGY

### Selection of Information Items

The most important step in constructing a disclosure index is the selection of information items that could be found in corporate annual reports. It should be noted that there is no consensus on the number or selection of items to be included in a disclosure index (Wallace et al., 1994; Al-Hussaini, 2001). Also, the number of information items used in previous studies has varied considerably, which may reflect differences in the settings where the studies were conducted (Wallace, 1993; Patel, 2003; Ngangan et al., 2005).



As Marston and Shriver (1991) noted, the number of items that could be disclosed by a company is very large, if not infinite. Wallace (1988) argued that there was no agreed criterion on which to select an item of information, and that to overcome the selection bias, an extensive list of disclosure items be developed. The number of items included in the scoring sheet in previous studies varied from a minimum of 17 items (Barrett, 1976) to a maximum of 530 (Craig & Diga, 1998).

The disclosure index may include both mandatory and voluntary information items since both forms of disclosure result from social-system processes (Archambault & Archambault, 2003). Mandatory disclosure is required by statute, professional regulations and listing requirements of stock exchanges. The extent to which firms comply with legal and regulatory requirements depends on the strictness or laxity of the government, professional and other regulatory bodies (Marston & Shivers, 1991; Salawu, 2012). Voluntary disclosure on the other hand, in excess of the minimum, may arise where corporate perceptions of the benefits arising outweigh the costs (Gray & Roberts, 1989; Chakroun & Matoussi, 2012).

In this research, the focus is on mandatory items because financial reporting and disclosure practice in the UAE are not well-organized and free-market mechanisms are immature (Owsus-Ansah, 1998a). In order to avoid penalizing a firm for not disclosing an item that does not apply to it, the list of items was based on the limited and specific requirements set by the UAE regulators, in addition to IFRS, to which all firms in the UAE claim to comply. The initial list of information items (index) consisted of 405 items, of which only six items were related to ESCA requirements. To ensure that a complete, relevant and applicable list of information items was included in the index, two control measures were adopted. First, the list was cross-checked with the disclosure checklists of three of the big-four accounting firms: KPMG, Ernst and Young and Deloitte. Second, the list was discussed with three senior external auditors working for three big auditing firms in the UAE (Deloitte, KPMG, and Talal Abu Ghazala). The purpose of this step was to refine the list and to determine the suitability of the items for firms operating in different sectors in the UAE.

Based on these measures, 88 items were excluded as they related to 9 standards that were irrelevant or inapplicable to the UAE or the dates when they came into effect were after 2005 (see Table 2). These standards were: IFRS 1 First-time Adoption of IFRS; IFRS 6 Exploration for and Evaluation of Mineral Assets; IFRS 7 Financial Instruments Disclosure; IFRS 8 Operating Segments; IAS 12 Income Taxes; IAS 26 Accounting and Reporting by Retirement Benefit Plan; IAS 29 Financial Reporting in Hyperinflationary Economies; IAS 34 Interim Financial Reporting; and IAS 39 Financial Instruments Recognition and Measurement (see Table 2 for the reasons for exclusion).

Table 2: Excluded IAS & IFRS Items

IFRS/IAS	Title	Reasons for Exclusion
IFRS 1	First-time Adoption of IFRS	All firms claimed adoption of IFRS before 2004
IFRS 6	Exploration for and Evaluation of Mineral Assets	It is effective on January 2006 onward
IFRS 7	Financial Instruments: Disclosures	It is effective on January 2007 onward
IFRS 8	Operating Segments	It is effective on January 2009 onward
IAS 12	Income Taxes	UAE firms pay no income tax
IAS 26	Accounting and Reporting by Retirement Benefit Plan	The UAE has its own benefits and retirement plan
IAS 29	Financial Reporting in Hyperinflationary Economies	Inflation has been relatively low (1.5% to 4%) over the past ten years (GCC 2003)
IAS 34	Interim Financial Reporting	The objective of this research is to assess disclosure in corporate annual reports
IAS 39	Financial Instruments: Recognition and Measurement	All disclosure requirements in IAS 39 were covered in IAS 32

*This table reports the excluded IFRS/IAS with the reason of exclusion. These standards were excluded as they that were irrelevant or inapplicable to the UAE or the dates when they came into effect were after 2005.*

The final list included a total of 317 items of information. This final list was then pilot tested on 20 companies from different sectors to ensure that items peculiar to each selected sector were taken into account.

Sample Selection, Data Collection, and Variables Measurements

Based on the constitution of the UAE, the Ministry of Economy is responsible for the orderly operation of the country’s economy. Companies Law No. 8/1984 is the main act which governs the incorporation, control, and management of different types of firms. There are seven types of firms that may be incorporated in the UAE: general partnership, simple limited partnership, joint participation (venture); public joint stock company, private joint stock company, limited liability company, and partnership united with shares. All public joint stock firms have to lodge their annual reports with the Ministry. Therefore, the Companies Department at the Ministry of Economy was approached to provide copies of the 2005 annual reports of all public joint stock companies as this was the best and quickest way to obtain the required data.

The year 2005 was selected as it was the most recent data available at the time of the request. A total of 153 public joint stock companies, listed and unlisted, were incorporated at the time of study. Seven firms were excluded from the sample as they were incorporated in either 2005 or later and had very little information in their annual reports. Another 33 firms were excluded because their annual reports were not available. Twenty of these 33 companies were solely owned by the UAE government, and while they had been registered as joint stock companies, their annual reports were not accessible. For the other 11 companies, annual reports were not available to the researchers, despite numerous efforts to obtain them. Hence, they were also excluded from the sample. Consequently, only 113 corporate annual reports were collected representing approximately 75% of the total population. Table 3 provides a summary of the total sample.

The dependent variable, total disclosure index (TDI), for each firm was the disclosure made by the firm through its annual report and it was measured by the total disclosure index (TDI) as explained in the next subsection. Data for these variables was obtained from the annual reports of the selected firms, and from the annual guide of firms published by ESCA. Table 4 summarises data collection and variables measurement.

Table 3: Population and the Sample of Public Joint Stock Companies in the UAE

Sector	Companies			Annual Reports Available/Not Available						Total Available	%
	Listed	Unlisted	Total	Listed			Unlisted				
				Available	Established late 2005	Not Available	Available	Established Late 2005	Not Available		
<b>Banking</b>	22	3	25	22	0	0	3	0	0	25	100%
<b>Insurance</b>	23	1	24	23	0	0	1	0	0	24	100%
<b>Services</b>	36	32	68	34	2	0	0	4	28	34	50%
<b>Industries</b>	27	9	36	27	0	0	3	1	5	30	83%
<b>Total</b>	<b>108</b>	<b>45</b>	<b>153</b>	<b>106</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>5</b>	<b>33</b>	<b>113</b>	<b>74%</b>

*This table presents a summary of the population and the sample of Public Joint Stock Companies in the UAE. A total of 153 public joint stock companies, listed and unlisted, were incorporated at the time of study, however, only 113 corporate annual reports were collected representing approximately 75% of the total population*

Table 4: Data Collection and Measurement of Variables

Independent Variable	Proxy	Sources of Information
<b>Market Variables:</b>		
Industry Type	Dummy variable coded: Industry 1(Banking) = 1, otherwise = 0 Industry 2 (Insurance) = 1, otherwise = 0 Industry 3 (Services) = 1, otherwise = 0 Industry 4 (Industrial) = 1, otherwise = 0	ESCA
Listing Status	Dummy variable coded 1 = listed, 0 = unlisted	ESCA
<b>Performance Variables:</b>		
Profitability (ROE)	Return on Equity = earnings/total shareholders' equity	Firms' Annual reports
Liquidity	Current assets/ current liabilities	Firms' Annual reports
<b>Structure Variables:</b>		
Firm Size (Market Capitalization)	Number of shares at year-end date X market value per share	ESCA
Foreign Ownership	Percentage of non-UAE national investors' ownership	ESCA
<b>Corporate Governance Variables:</b>		
Composition of B.O.D. Audit Committee	Proportion of outside directors to the total number of directors Dummy variables coded: 1 = if a company has an audit committee, 0 = otherwise	ESCA ESCA

*This table reports data collection of the independent variables and their proxies. Data for these variables was obtained from the annual reports of the selected firms, and from the annual guide of firms published by ESCA.*

### Statistical Procedures

One of the methodological problems associated with the scoring procedures of the disclosure index is whether or not an item is applicable to a particular firm (Owsus-Ansah, 1998a). To overcome this problem, following Cooke's (1989a) recommendation, the entire annual report of every company was read first by the researcher to understand clearly the scope of the disclosure practice and to determine whether an undisclosed item was in fact applicable to that particular company. This procedure led to the creation of a relative index for each sample firm. The relative index, which includes information items a firm was expected to disclose, was adopted by several previous studies (Buzby, 1975; Wallace, 1987; Firth, 1980; Babbie, 1994; Ahmed & Nicholls, 1994; Inchausti, 1997; Owsus-Ansah, 1998a, Aljifri, 2008). Consequently, the risk of penalising a firm for not disclosing an item, inapplicable to that firm, was significantly reduced.

The next step was to apply the index to each firm using the dichotomous procedure of matching the firm's annual report disclosures to the index. Following the unweighted index scoring scheme, an item scored one if it was disclosed and zero if it was not. Based on the calculated scores for each firm, the descriptive statistics were calculated to form a judgement about the current level of disclosure in the UAE. The scores of the disclosure index for each firm were calculated by dividing the total scores by the maximum score ( $M$ ) (based on the relative index of the firm), as follows:

$$M = \sum_{i=1}^n di \tag{1}$$

where,

$d_i$  = expected item of disclosure

$n$  = the number of items applicable to a firm, i.e.  $n \leq 317$

The total disclosure score ( $TD$ ) for a firm was calculated as follows:

$$TD = \sum_{i=1}^M d_i \quad (2)$$

where:

$$d_i = \begin{cases} 1 & \text{if the item } d_i \text{ is disclosed} \\ 0 & \text{if the item } d_i \text{ is not disclosed} \end{cases}$$

$$M \leq n$$

The total disclosure index (TDI) for each firm was therefore calculated as:

$$TDI = TD \quad (3)$$

### Statistical Tests

Different statistical approaches and methodologies have been adopted in previous studies to test the relationship between the extent of disclosure and various firm-specific variables. Earlier studies (Singhvi & Desai, 1971; Buzby, 1975; Stanga, 1976; Belkaoui & Kahl, 1978; Buckland et al., 1998) used a matched-pair statistical procedure to test for difference between the mean disclosure indexes of two or more groups of sample firms. More recent studies, starting with Chow and Wong-Boren (1987), have used a variation of a multiple regression procedure.

For example, some researchers use dummy variable manipulation procedures within a stepwise multiple Ordinary Least Squares (OLS) regression analysis (Cooke, 1989a, 1989b; Haniffa & Cooke, 2002), while others use rank regression procedures (Land and Lundholm, 1993; Wallace et al., 1994; Naser, 1998; Chen & Jaggi, 2000; Chau & Gray, 2002) or a meta-analysis technique (Ahmed & Courtis, 1999). Wallace et al. (1994), Haniffa and Cooke (2002), and Archambault and Archambault (2003) used two regression models, reduced regression and full regression, to deal with the possibility of collinearity. In this research, both descriptive statistics and multiple regression analyses are used to test the relationship between the characteristics of UAE firms and the extent of their disclosure.

### Descriptive Statistics

Two types of descriptive statistics were conducted. The first was a descriptive analysis which includes the mean and standard deviation. The second test was a correlation test which highlights the relationship between a single explanatory variable and the extent of disclosure by UAE firms.

### Multiple Regression Analysis

One of the main problems that confronts researchers using the OLS regression is when the dependent variable is constrained to range between zero and one. The estimation of the regression model can, however, lie outside this range. This is because the standard OLS presumes an unconstrained dependent variable. Hence, the standard OLS estimates may be unreliable (Hanushek & Jackson, 1977; Ahmed & Nicholls, 1994; Greene, 2003). Consequently, the suggestion to transform the dependent variable was adopted (Hanushek & Jackson, 1977; Wallace e. al., 1994; Ahmed & Nicholls, 1994; Fox, 1997; Inchausti 1997; Naser & Al-Khatib, 2000; Greene, 2003; Makhija & Patton, 2004; Al-Shaimmari 2005).

This approach also has the advantage that such transformation might result in normally distributed errors (Cooke, 1998). The transformation was done by taking the logarithm of the total disclosure index for each

firm. Then, the transformed total disclosure index (TTDI) was regressed against the eight specified variables by applying OLS regression procedures. The regression model is expressed as follows:

$$TTDI = \alpha + \beta_1 indtype_i + \beta_2 indtype_i + \beta_3 indtype_i + \beta_4 indtype + \beta_5 listing_i + \beta_6 ROE_i + \beta_7 liquid_i + \beta_8 marcap_i + \beta_9 foreign_i + \beta_{10} board_i + \beta_{11} audit_i + \varepsilon \quad (4)$$

where:

*TTDI* = Transformed Total disclosure index (actual score awarded to each firm/maximum score)

$\alpha$  = Intercept

*indtype* = Industry type (*indtype*<sub>1</sub> = Banking; *indtype*<sub>2</sub> = Insurance; *indtype*<sub>3</sub> = Services; *indtype*<sub>4</sub> = Industrial)

*listing* = Listing status

*ROE* = Return on equity

*liquid* = Liquidity

*marcap* = Market capitalization

*foreign* = Foreign ownership

*board* = Board composition

*Audit* = Audit committee.

$\varepsilon$  = Error term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}, \beta_{12}$ , = slope coefficients of the model.

## RESULTS

### Descriptive Analysis

Table 5 provides descriptive analysis for the dependent variable and the explanatory variables. In general, the extent of corporate disclosure varies from 23% to 70%. The overall mean value of disclosure is 57% with standard deviation of 9%, reflecting a low to moderate level of disclosure among the 113 sample firms.

Table 5: Descriptive analysis of the Dependent and Independent Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
Total Disclosure	113	0.57	0.09	0.23	0.70
Listing Status	113	0.94	0.24	0.00	1
Net Income/Equity (ROE)	113	0.21	0.13	- 0.01	0.55
Liquidity	113	3.85	8.66	0.39	86.33
Market Capitalization (million dirham)	113	7,894	17,836	20	133,811
Foreign Ownership	113	0.26	0.32	0.00	100.00
% of outside directors	113	0.93	0.10	0.60	100.00
Audit Committee	113	0.53		0	1
Banks	25	0.22		0	1
Industrial	30	0.27		0	1
Insurance	24	0.21		0	1
Services	34	0.30		0	1

*This table provides a descriptive statistics of the dependent and independent variables. It shows the extent of corporate disclosure varies from 23% to 70%. The overall mean value of disclosure is 57%.*

An examination of Table 5 shows that 94% of the sample companies are listed on the UAE securities market and the mean value of return on equity (ROE) for the 113 companies is 21%. The overall liquidity (current ratio) is 3.85 which is well above the rule of thumb of 2:1. The mean value of foreign ownership among the firms is 26% while non-executive directors constitute about 93% of the sampled boards. Fifty-three percent of the firms have audit committees, which indicates that good corporate governance is not widely practised and that further enforcement is needed from the UAE authorities.

Correlation Analysis

To assess the relationship between the total disclosure index (TDI) and the characteristics of the firms, a Pearson Product-Moment correlation matrix was used to examine the correlation between the dependent variable (TDI) and each of the independent variables used in this study. The Pearson Product-Moment correlation matrix for the dependent and independent variables is presented in Table 6. The statistical results show that significant positive relationships were found to exist between the extent of disclosure and banking industry ( $r = 0.347$ ) and listing status variables ( $r = 0.288$ ) at the  $P < 0.01$  level. These results support hypotheses H1, which states that there is a significant relationship between corporate disclosure and industry type, and H2, which states that there is a significant relationship between corporate disclosure and listing status. However, no significant correlation was found between other industry types and the extent of disclosure.

No other statistically significant correlations were found. Return-On-Equity ( $r = -0.074$ ,  $P = 0.434$ ) and liquidity ( $r = -0.001$ ,  $P = 0.992$ ) appear to be negative but not influentially correlated with the extent of disclosure. The most interesting result is that size measured by market capitalization was found to be negative but not significantly correlated with corporate disclosure ( $r = -0.028$ ,  $P = 0.772$ ). On the other hand, the relationship between the extent of disclosure and foreign ownership ( $r = 0.079$ ,  $P = 0.408$ ), composition of board of directors ( $r = 0.107$ ,  $P = 0.258$ ), and audit committee ( $r = 0.111$ ,  $P = 0.241$ ) was found to be positive but also not significantly correlated. These results do not appear to support hypotheses H3, H4, H5, H6, H7, and H8.

Multiple Regression Analysis

This subsection describes the results of running the ordinary least square (OLS) regression with log transformation analysis with all company variables using SPSS. All variables were entered into the model simultaneously. The purpose is to test whether the specified independent variables contribute significantly to the prediction of the disclosure level of firms in the UAE. The results of the multiple regression analysis are presented in Table 7. Results of the multiple regression analysis of the association between company variables and the extent of disclosure in the annual reports of the sample companies are shown in Table 7. As can be seen, the coefficient of determination R<sup>2</sup> is equal to 33% and the adjusted R<sup>2</sup> is equal to 26% where the P-value < 0 .01 and the F test statistics (10, 102) = 4.95.

Table 6: Correlation Analysis

	Total Disclosure	Listing Status	ROE	Liquidity	Market Capitalization	Foreign Ownership	% of outside directors	Audit Committee	Banks	Industrial	Insurance	Service	
Total Disclosure	Person Correlation	1	0.288*	-0.074	-0.001	-0.028	0.079	0.107	0.111	0.347*	-0.115	-0.091	-0.122
	Sig. (2 tailed)		0.002	0.434	0.992	0.772	0.408	0.258	0.241	0.000	0.224	0.339	0.200
	N	113	113	113	113	113	113	113	113	113	113	113	113

Listing Status	Person												
	Correlation	0.288	1	0.198*	0.042	0.110	0.143	0.053	0.053	-0.128	-0.095	0.044	0.169
	Sig. (2 tailed)	0.002		0.035	0.661	0.245	0.130	0.578	0.579	0.175	0.317	0.646	0.074
	N	113	113	113	113	113	113	113	113	113	113	113	113
ROE	Person												
	Correlation	-0.074	0.198*	1	-0.142	0.056	-0.064	-0.139	0.107	-0.03	-0.184	.291*	-0.055
	Sig. (2 tailed)	0.434	0.035		0.132	0.559	0.499	0.142	0.259	0.751	0.051	0.002	0.565
	N	113	113	113	113	113	113	113	113	113	113	113	113
Liquidity	Person												
	Correlation	-0.001	0.042	-0.142	1	-0.044	0.090	-0.002	-0.015	-0.136	-0.020	-0.049	0.186*
	Sig. (2 tailed)	0.992	0.661	0.132		0.643	0.343	0.982	0.877	0.152	0.837	0.605	0.049
	N	113	113	113	113	113	113	113	113	113	113	113	113
Market Capitalization	Person												
	Correlation	-0.028	0.110	0.056	-0.044	1	0.019	-0.033	0.282*	0.197*	-0.169	0.186*	0.150
	Sig. (2 tailed)	0.772	0.245	0.559	0.643		0.839	0.729	0.003	0.036	0.074	0.048	0.113
	N	113	113	113	113	113	113	113	113	113	113	113	113
Foreign Ownership	Person												
	Correlation	0.079	0.143	-0.064	0.090	0.019	1	-0.127	-0.044	-0.183	0.103	-0.270*	0.306*
	Sig. (2 tailed)	0.408	0.130	0.499	0.343	0.839		0.179	0.647	0.053	0.276	0.004	0.001
	N	113	113	113	113	113	113	113	113	113	113	113	113
% of outside directors	Person												
	Correlation	0.107	0.053	-0.139	-0.002	-0.033	-0.127	1	0.067	0.082	0.000	0.087	-0.152
	Sig. (2 tailed)	0.258	0.578	0.142	0.982	0.729	0.179		0.484	0.387	0.999	0.359	0.108
	N	113	113	113	113	113	113	113	113	113	113	113	113
Audit Committee	Person												
	Correlation	0.111	0.053	0.107	-0.015	0.282**	-0.044	0.067	1	0.287**	-0.238	-0.119	0.075
	Sig. (2 tailed)	0.241	0.579	0.259	0.877	0.003	0.647	0.484		0.002	0.011	0.210	0.428
	N	113	113	113	113	113	113	113	113	113	113	113	113
Banks	Person												
	Correlation	0.347**	-0.128	-0.03	-0.136	0.197*	-0.183	0.082	0.287*	1	-0.320*	-0.277*	-0.350*
	Sig. (2 tailed)	0.000	0.175	0.751	0.152	0.036	0.053	0.387	0.002		0.001	0.003	0.000
	N	113	113	113	113	113	113	113	113	113	113	113	113
Industrial	Person												
	Correlation	-0.115	-0.095	-0.184	-0.020	-0.169	0.103	0.000	-0.238*	0.320*	1	-0.312*	0.394*
	Sig. (2 tailed)	0.224	0.317	0.051	0.837	0.074	0.276	0.999	0.011	0.001		0.001	0.000
	N	113	113	113	113	113	113	113	113	113	113	113	113
Insurance	Person												
	Correlation	-0.091	0.044	0.291*	-0.049	-0.186	-0.270*	0.087	-0.119	-0.277*	-0.312*	1	0.341*
	Sig. (2 tailed)	0.339	0.646	0.002	0.605	0.048	0.004	0.359	0.210	0.003	0.001		0.000
	N	113	113	113	113	113	113	113	113	113	113	113	113
Service	Person												
	Correlation	-0.122	0.169	-0.055	0.186*	0.150	0.306*	-0.152	0.075	-0.350*	-0.394*	-0.341*	1
	Sig. (2 tailed)	0.200	0.074	0.565	0.049	0.113	0.001	0.108	0.428	0.000	0.000	0.000	
	N	113	113	113	113	113	113	113	113	113	113	113	113

*This table presents the Pearson Product-Moment correlation matrix for the dependent and independent variables. The statistical results show that significant positive relationships were found to exist between the extent of disclosure and banking industry ( $r = 0.347$ ) and listing status variables ( $r = 0.288$ ) at the  $P < 0.01$  level. The correlations are for selected variables used in the analysis. \*, \*\* indicate significance at the 1 and 5 percent. levels respectively.*

These results show that approximately 26% of the variation in disclosure level scores between the companies can be explained by the eight independent variables included in the model. According to Anderson et al. (1993) and Abd-Elsalam and Weetman (2003), an explanatory y power of 20% is considered useful in social science research.

The results show that listing and industry type (banking sector) variables were positively and significantly associated with the extent of disclosure of the sample companies at the 1% level. Also, market capitalization was significant but with a negative coefficient at the 5% level. The model indicated that the other variables did not seem to be the main determinants of variations in the extent of disclosure of the sample companies.

Table 7: Summary of the Results of OLS Regression with Log Transformation

Variable	$\beta$	$t$	Sig. $t$	VIF
Listing	0.3268	5.03	0.000	1.13
ROE	-0.1650	-1.34	0.183	1.24
Liquidity	0.0004	0.23	0.820	1.07
Market Capitalization	-1.8500	-2.06	0.042	1.17
Foreign Ownership	0.0850	1.65	0.102	1.21
Non-Executive Directors	0.0622	0.41	0.685	1.09
Audit Committee	0.0174	0.53	0.594	1.21
Banks	0.1939	4.28	0.000	1.62
Industrial	0.0055	0.13	0.896	1.56
Insurance	0.0502	1.04	0.299	1.78
Constant	-0.9863	-6.43	0.000	-
$R^2 = 0.3268$	$F(10, 102) = 4.95$		Mean VIF = 1.31	
Adj. $R^2 = 0.2608$	Sig. $F = 0.0000$			

*This table summarizes the results of OLS regression with Log Transformation. It shows that listing and industry type (banking sector) variables were positively and significantly associated with the extent of disclosure of the sample companies at the 1% level.*

## DISCUSSIONS AND CONCLUSIONS

This paper analyses the possible impacts of eight specific company variables on the extent of disclosure by UAE firms. The descriptive analysis revealed that the overall mean value of disclosure in the UAE is 57%, reflecting a low to moderate level of disclosure. The major conclusion that can be drawn from the regression analysis is that the industry type, listing status and the size of firm (market capitalization) are the most powerful explanatory variables when related to the variation in compliance with regulations that specify mandatory disclosure on the part of UAE firms. With regard to the other variables, the model showed that these variables did not seem to be the main determinants of variations in the extent of disclosure of the sample companies.

This finding can be explained on the grounds that listed firms are exposed to more disclosure requirements stipulated by the UAE securities market. Similarly, unlike the other sectors, the banking sector is the most regulated sector by the Central Bank of the UAE. The results also showed that market capitalization was significant at the 5% level, but with a negative coefficient. This result provides unexpected evidence and is inconsistent with H5, which states that big firms tend to disclose more information than firms with small firms. This can be attributed to the fact that big firms have more social and political influence to avoid compliance with mandatory disclosure requirements.

The results of this study have extended the understanding of how characteristics of a firm help to explain the variability in disclosure. The extent of disclosure was found to be significantly associated with listing status, industry type, and size of firm. This finding not only provides support for previous studies, but is also of relevance to those in the UAE who want to understand corporate disclosure. A possible policy implication of this finding is that unlisted large firms need closer scrutiny by the regulatory authorities.



The UAE authorities need to evaluate the efficacy of the regulatory requirements and also to introduce more effective monitoring and enforcement mechanisms.

The findings of the study should also be of interest to UAE user-groups. As firms with small market capitalization, banking sector firms, and listed firms on the UAE securities market disclose more information in their annual reports, users should be cautious when dealing with large and unlisted firms and may have to consider different sources of information in addition to annual reports. This study also reveals that external auditors in the UAE provide unqualified reports without mentioning any departure from compliance with mandatory requirements of the UAE securities market or IFRS. This raises a question about the quality of auditing practices in this country and requires more attention from the authorities concerned.

Currently the UAE Accountants and Auditors Association (AAA) has no authority to regulate the profession. Cooperation between government authorities and this accounting body is crucial in order to regulate financial reporting effectively (Craig & Diga, 1996). Consequently, UAE authorities should give more responsibility and support to the AAA, which can play an important role in increasing awareness among its members about disclosure requirements, as well as ensuring that only qualified auditors are licensed.

This study provides some insights into the determinants of disclosure level in the UAE. However, the findings of this study should be interpreted with care as several limitations are associated with this kind of research. The first limitation relates to the use of the chosen index to measure the extent of disclosure. Although the disclosure index is considered the most suitable methodology to test the extent of disclosure (Marston & Shrides, 1991; Botosan, 1997; Prencipe, 2004), the interpretation of these results is constrained by the validity and reliability of the disclosure index used in the study. The level of corporate disclosure may be affected by the subjective selection of items for information disclosure. While the disclosure items included in the index were carefully selected, they may not fully encompass all possible items that need to be included in the assessment of corporate reporting practices. Wallace and Naser (1995) pointed out that the results of using a disclosure index may be different if the number or nature of items was changed. Also, the evaluation process was limited to mandatory items only as it was not possible to include voluntary disclosure items. Consequently, using a disclosure index with non-mandatory items may reveal quite different results from the present study. The subjectivity problem inherent in scoring the annual reports of the sample companies may not have been completely eliminated and hence, there is an unavoidable subjectivity in the scoring process (Owsus-Ansah, 1998b). Consequently, the comprehensiveness of corporate disclosures may not have been fully and/or properly captured by the disclosure index used in the study.

As the economy of the UAE advances through time, more research will be needed in the future in order to gain further understanding of corporate disclosure. The current study examined the relationship between mandatory disclosure and certain company characteristics in a single period. Further research might attempt to extend this examination to include two or more periods, such as before and after the establishment of the official securities market, or a comparative study of firms before and after they are listed.

In examining the explanatory power of company characteristics, it is possible that other variables, which have an impact on the extent of disclosure in the UAE, have not been included in the present study. Consequently, future research should investigate the effect of other variables, such as the qualifications of audit committee members and cultural factors, on the level of disclosure. Moreover, as the government moves towards the privatization of government-owned companies, a future research project could examine the impact of privatization on the disclosure behaviour of such companies.

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