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On-line Corporate Social Responsibility Disclosures: The Case of the Gulf Cooperation Council (GCC) Countries

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The main objectives of this study are: (1) to evaluate the level of on-line corporate social responsibility (CSR) disclosure of companies listed in the stock markets of the Gulf Cooperation Council (GCC)[3] countries; (2) to investigate the impact of a number of company characteristics to explain the variation in the on-line CSR disclosure level among the sample companies; (3) to test if there are significant differences among the GCC countries in on-line CSR disclosure level. To achieve these objectives, a disclosure index was developed and applied to evaluate CSR for 163 companies listed in the GCC stock markets. The findings indicated that only 24.5% of sampled companies received disclosure scores of 50 percent or more. On average, an industrial company disclosed about 17 items of the 47 included in the index with a percentage of about 37.0%; while a non-industrial company disclosed about 14 items with a percentage of 29.4%, indicating that industrial companies are more involved in the on-line CSR. The results also indicated that there is considerable variation in the disclosure of each group of CSR (environmental, employee, community and social involvement and product). Among the six countries comprising the GCC, Qatar and the Kingdom of Saudi Arabia (KSA) out-scored other countries in on-line CSR disclosure. The results of the multiple regression analysis revealed that all models were significant except the model related to community and social involvement. The results also showed variations in explanatory power of all regression models of on-line CSR types as measured by the adjusted R^2. Significant results were found in four models for firm ROE (FROE) and firm type (FTYPE). Finally, the non-parametric test, Kruskal-Wallis, showed significant differences among the six GCC countries in their on-line CSR disclosure. The Mann-Whitney test showed that there is a significant difference between the two groups of companies, industrial and non-industrial.

Keywords: Corporate social responsibility (CSR), disclosure, Internet web-site, company characteristics, disclosure index and GCC countries*.*

1. Introduction

Nowadays, corporations have become more responsible by focusing on activities that benefit the community, such as considering the environment, sponsoring students for higher education, product quality, safety and so on. Corporate social responsibility (CSR) is regarded as a means by which firms improve their image and maintain their license to operate. Indeed, it can be viewed as a promotional campaign to enhance corporate regulations and public relations (KPMG, 2005).

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[3] GCC countries comprise six countries; namely, Kingdom of Bahrain, Kingdom of Saudi Arabia (KSA), Kuwait, Oman, Qatar and the United Arab Emirates (UAE).

CSR disclosure is indicated in the literature as increasing competitive advantage (Bansal and Roth, 2000). It is defined as open and transparent business practices that are based on ethical values and respect for the community, employees, environment, shareholders and their stakeholders (Bursa Malaysia, 2008).

The development of the Internet has substantially increased the amount of information available to stockholders and the ease with which information can be displayed and accessed has enhanced the stockholders' abilities to keep track of the activities of the corporation. Corporations throughout the world have used the Internet increasingly as a fundamental mechanism of communication to the extent that their web-sites have been established as a crucial element of corporate image (Budisusetyo and Almilia, 2008). The awareness and placement of CSR as a significant part of the corporate agenda is a good indicator that the company is not just poised for large profit but is also focusing its strategies on benefits of socially and environmentally responsible investing. In today's businesses, ignoring the importance of CSR in business endeavors will give a bad impression, not only to the public but also to the image of the shareholders and investors. There are market benefits and competitive advantages for those companies whose business policies integrate CSR (Ogrizek, 2004). Thus, the rapidly changing business environment is forcing firms to develop reporting strategies that assist in creating competitive advantages for themselves (Burrus 1997). Increasingly, stakeholders' pressure is causing companies to use communication channels other than paper-based reporting, such as the Internet.

The use of the Internet considerably enhances a corporation's ability to convey its strategies and other relevant information directly to its key stakeholders. The Internet website benefits from having a clear structure and links which prevent the user from getting lost within the website (Walton et al., 1997). Companies aiming to encourage interaction with their stakeholders should make it easy to get in touch with relevant people within the organization by providing contact details in the environmental reporting web-site.

Several drivers prompt companies to use the Internet as a disclosure channel including cost saving, disseminating information to a larger number of users and introducing new technologies for reporting. It is suggested that adopting the Internet may enhance the company's ability to raise capital at the lowest cost possible (Healy and Palepu 1993; Lev 1992). It is argued in the literature that the Internet has expanded the amount of information available to interested parties, has allowed delivery of such information at no cost or very low cost, speeds delivery, increases the frequency, quantity and relevancy of both financial and non-financial disclosure and provides ease of access to information (FASB, 2000). Wanderley et al. (2008), argue that the Internet has become one of the main tools for CSR disclosure, allowing companies to publicize more information less expensively and faster than ever before.

In order to increase the focus on the GCC countries' stock markets as important avenues for attracting foreign investments and to encourage local residents to invest in shares, GCC companies may engage in on-line CSR disclosure as a tool to enhance the value of their stocks. The issue of environmental reporting is relatively new in GCC companies and very few studies have been conducted in this context in general and the online CSR in particular. This is the main limitation of the past studies conducted in GCC countries. To the authors' best knowledge, all of these studies have investigated the CSR through traditional annual reports; therefore, a gap exists in the literature on the on-line CSR studies. In addition, the current study may be considered as the first survey which includes all GCC countries regarding the status of on-line CSR disclosure. In light of this, this study attempts to address this gap in the literature by investigating the extent of on-line CSR of GCC listed companies and this is what distinguishes our paper from the previous studies conducted in GCC countries.

Thus, the main objectives of the current study are to evaluate the on-line CSR of companies listed on GCC stock markets and to examine the impact of a number of company characteristics in explaining variations in the extent of disclosure of this information among the sample companies.

The remainder of the paper consists of seven sections. Section 2 discusses the on-line CSR disclosure; Section 3 provides a literature review on CSR relevant to the current study; Section 4 discusses development of research hypotheses; Section 5 describes the research methodology; Section 6 presents research findings and discussion. Section 7 provides a summary and conclusions. Finally, Section 8 lists the references.

2. Environmental Reporting on the Internet

A number of surveys, either in the GCC countries or in other parts of the world, have identified growth in the number of companies reporting on the Internet (Ismail 2002; Melarvizhi et al. 2008; Lakatos et al. 2011; and Hassan et al. 2012). It has become increasingly important to strengthen the company's communication abilities not only on environmental performance and results but also including social responsibility (Nielsen 2001).

The possibility to disseminate information to a wider spectrum of users has been a key feature that firms have conferred to the Internet regarding hard copy format. In general, the use of the Internet may provide a company many advantages. For instance, it can make corporate reporting globally accessible to all types of users within and beyond national boundaries. Perhaps easy accessibility to the information makes the Web the best medium to meet the needs of stewardship and management disclosures of the entities, for financial as well as non-financial reporting (Lymer 1997 and Wallman 1995).

The Internet has been recognized as a means of communication to respond in a timely manner and to create a comprehensive and transparent data-base (Lakatos et al. 2011). Andrew (2003) added that the Internet is uniquely placed to enhance corporate transparency and, therefore, to support the corporate governance objectives of an organization. The Internet is an expanding medium through which corporate stakeholders are more often gathering and disseminating information about their companies' activities to a global audience. It seems that the Internet will become another important medium through which to communicate environmental information, especially as there are no space restrictions (Jones et al., 1999).

The web-site has allowed firms to meet, in a more efficient way, most stockholders' needs, offering a higher flexibility in the quality of and manner in which information is supplied. Firms have different motives to engage in on-line financial reporting (OFR) due to the variation in the costs and benefits associated with supplementing their traditional financial reports on their web-sites. For instance, OFR can reduce firms' information dissemination costs and allows firms to communicate information to unidentifiable consumers (Ashbaugh et al. 1999). OFR can facilitate the dissemination of firms' financial information via internet tools that facilitate idiosyncratic information retrieval and analysis by diverse decision makers (Ashbaugh et al., 1999). It becomes important to save large quantities of paper, staff time and money (Lakatos et al. 2011) and potentially provides consumers with a mechanism by which they can down-load financial information for their own analysis (FASB, 1998). OFR improves financial disclosure by providing more timely information. For example, many companies provide daily share price and weekly production information. The internet offers dynamic up-dating potential (addressing timeliness implications) (Lymer and Tallberg 1997), and timely information accelerates decision-making processes and adds value to the information (Lakatos et al. 2011). OFR has fewer constraints on presentation flexibility than traditional paper versions; offers access to greater volumes of data than previously possible and allows users to export data for manipulation (Lymer and Tallberg 1997).

However, many difficulties and barriers are associated with OFR. Some are related to regulations and standards and others are related to non-technological factors such as lack of information skills and capabilities in using the internet. Other problems associated with environmental reporting are related to measurement. KPMG (2005) argue that the measurement of social and environmental performance is rather a complex task.

3. Literature Review

Most general corporate OFR and social and environmental reporting studies found in the literature were confined to the developed countries (Belal, 2000). In addition, the majority of such studies have focused primarily on conventional print media, especially annual reports, as a disclosure medium (Lodhia, 2005). Jones et al. (1999) investigated on-line environmental reporting practices by 275 companies from 21 countries which were analyzed against content and design criteria to assess the effectiveness of an environmental reporting web-site. The study also reveals that there is a need for the scope of an environmental reporting web-site to be considered more fully in relation to span, costs, opportunities, policing and evaluation. Furthermore, the study concluded that current approaches are not flexible enough to incorporate internet-based environmental reporting.

Patten (2002) examined insurance firms using the Web for information disclosure and companies that are industry leaders with respect to Web innovation for product marketing to determine if they are leaders in using the Web for information disclosure. The study shows that financial disclosure for the overall sample is at best moderate. On average, the study reveals that the disclosure of social responsibility information on these web-pages is quite low. In Qatar, Al-Khater and Naser (2003) investigated the perception of four different users groups of corporate reports about the notion of the accountability process and the possibility of widening the scope of current corporate reports in Qatar to include CSR information. It was revealed that most participants expressed their interest to include CSR, either in a separate section or as part of the directors’ report.

Bolivar and Garcia (2004) examined the practices of corporate environmental disclosures of the IBEX 35 Spanish firms on their web-sites. The study found that environmental disclosures made by firms presented a slight concentration of the data;

financial environmental reporting disclosed in the financial statements was quite limited and there was a need to link non-financial environmental reporting and financial reporting so that the users of information could have greater details of the influence of environmental concerns in the management of the firm. Cormier and Morgan (2004) conducted a study to assess the extent of web-based environmental disclosure as well as its determinants and to compare the determinants of print- and web-based environmental reporting. It revealed that information costs and a firm's proprietary costs, as well as its level of media exposure, are the key determinants of both print- and web-based environmental disclosure. The study also revealed that environmental disclosure is determined by a firm's context (age of fixed assets, size, SEC regulations) with industry – with wide trends and practices playing an important role in explaining both print and web environmental disclosure.

Naser et al. (2006) investigated theories employed in the literature to explain variation in the extent of corporate voluntary disclosure within the CSR context. The study used corporate reports of 21 Qatari companies listed in the Doha Stock Exchange. They concluded that there were variations in CSR disclosure by the sampled companies. These variations were associated with some firm characteristics such as firm size and firm leverage. Adams and Frost (2006) examined the use of the web as a means of stakeholders' engagement and as part of a strategy for communicating with stakeholders, particularly on social and environmental performances. The study revealed that there was limited understanding of the advantages of using the web as part of a communication strategy on all aspects of corporate performance. It also found that the lack of resources made available for web-based communication limited its potential.

Dutta and Bose (2007) investigated the utilization of the internet for communicating corporate environmental information by the listed companies of Bangladesh. The sample of the study consisted of 268 companies listed on both the Dhaka Stock Exchange (DSC) and the Chittagong Stock Exchange (CSE). The study showed that web-based corporate environmental reporting in Bangladesh is still in its infancy. A web-variation in the level of on-line corporate reporting across 15 sectors was found. The highest rankings were for the banking, leasing and finance sectors. Branco and Rodrigues (2008) conducted a study to examine social responsibility disclosure (SRD) on the internet by Portuguese banks in 2004 and 2005. The study explored size-related proxies for public visibility. The results of the study revealed that the adopted perspective explained SRD by Portuguese banks and that the new measure proposed should be explored further in SRD empirical research. The results also suggested that banks with higher visibility attributed greater importance to SRD as part of their reputation management strategies when compared with banks with lower visibility.

Bolivar (2009) investigated the extent to which firms are using the internet to communicate their corporate environmental reporting as a transparency information policy to manage corporate legitimacy. The study aimed to explore the environmental on-line disclosures made by Spanish publicly listed companies. The results indicated differences between sample industries' internet disclosures and the lack of a standardized framework for corporate environmental reporting.

Cho and Hong (2009) conducted a study to investigate how the on-line readers interpreted the CSR activities, looking at the effect of CSR types, situations and the degree of corporate fame. The study found that readers tend to be cynical towards CSR activities after a crisis and a CSR of a monetary donation type.

Ponnu and Okoth (2009) investigated CSR practices in Kenya by studying the disclosure practices of companies listed on the Nairobi Stock Exchange. Both disclosure practices in annual reports and web-sites of the companies across different industry groups were investigated to determine the relationship between company size and CSR disclosure and to examine the following themes, environment, community involvement and product and consumer disclosure. They concluded that CSR disclosure received only modest attention and community involvement is the most commonly disclosed. The study also revealed that there is no significant relationship between firm size and CSR disclosure in Kenya. In Egypt, Desoky (2009) conducted a study to examine the OFR by listed companies in the Egyptian Stock Exchange. The study used content analysis of web-sites of the 88 most active companies. The results showed a positive significant association between company characteristics (e.g., size, profitability, foreign listings and ownership structure) from one side and OFR from the other.

Aiming to extend reviews of CSR literature to emerging economies, Belal and Momin (2009) concluded that most CSR research in emerging economies has concentrated on the Asia-Pacific and African regions and are descriptive in nature, used content analysis methods and measured the extent and volume of CSR. Shirley et al. (2009) studied the incidence of CSR reporting in companies' web-sites listed in the Second Board of Bursa Malaysia to examine the theme of CSR web-reporting. The study aimed to determine the extent of on-line CSR as measured by the number of sentences and to determine the location of CSR web-reporting within the annual reports. The findings suggested that on-line CSR focused more on community than any other areas like market-place. It was also revealed that the paid-in capital, revenue and profit of the company did not have any influence on the on-line CSR.

Khasharmeh and Suwaidan (2010) evaluated the CSR in the traditional annual reports by manufacturing listed companies in GCC countries and examined the impact of company variables in exploring variations among the sampled companies in this type of disclosure. They investigated a total of 60 annual reports issued by listed companies in the GCC. The study concluded that, on average, sampled companies provided only 26% of 45 items included in the indices with only 8 companies receiving disclosure scores of 40% or more. Further, it was revealed that the UAE out-scored other countries in CSR disclosure and firm size and audit firms were found as major variables in explaining the variation on CSR disclosure between the GCC countries.

Ramdhony et al. (2010) investigated the motives for and obstacles faced by firms in environmental reporting and further examined whether firms are in favour of mandatory environmental reporting. The findings indicated that the annual report was the main reporting medium. The majority of companies in the study was opposed to mandatory reporting of environmental information, while respondents believed that reporting on environmental aspects can contribute towards sustainable development of the country. In the USA, Razeed (2010) examined determinants of voluntary environmental disclosure practices over the internet versus hard copy reports of a sample of resource companies listed on the New York Stock Exchange over the 2000, 2004 and 2008 fiscal years. The results of the study indicated that US resource companies favour the internet over hard copy annual and sustainability reports for dissemination of environmental information.

In Malaysia, Zakaria and Dewa (2010) conducted a study about corporate social reporting in six Malaysian financial institutions. They used the content analysis method to identify and describe CSR patterns in web-sites and annual reports. The study found that most banks under study disclosed information related to products and consumers, employees and community involvement. The results provided further evidence that CSR disclosures in Malaysia are ad hoc, general and self laudatory. In India, Chaudhri (2011) examined communicating the on-line CSR and reported that the number of companies with CSR information on their web-sites was low and that these leading companies did not leverage the web-sites to their advantage in terms of the quantity and style of CSR communication.

Using content analysis and scoring techniques, Pozniak et al. (2011) identified determinants of on-line CSR communication of 41 Belgian companies. The study estimated the degree of web-site information disclosure of companies' involvement with CSR. It was concluded that firm size and listed status are positively related to the level of on-line CSR. However, the study found that profitability of the firm and sector are not significant.

Hassan et al. (2012) investigated the extensiveness of and the potential factors that may influence on-line CSR by listed companies in Malaysia. The study concluded that the internet has yet to be utilized fully and effectively as a medium for disclosing social responsibility information by companies in Malaysia. In the same country, Homayoun et al. (2012) conducted a study about the on-line CSR disclosure among Malaysian listed companies. It examined the type and quantity of CSR disclosure practices among a sample of 100 top companies listed on the Bursa Malaysia by market capitalization for the financial year ended 2007. The study concluded that Malaysian regulators may be promoted to specify the means by which Malaysian listed companies are to disclose transparent, credible information.

In light of the above discussion, it is necessary to discuss the reasons this research should be applied to the six GCC countries with emerging stock markets. For example, most of the prior studies in the field of CSR focused on developed countries (Bolivar and Garcia 2004; Branco and Rodrigues 2008; Bolivar 2009; Razeed 2010 and Pozniak et al. 2011). However, some of the previous studies that are related to developing countries have considered only firms from one country at the time (Dutta and Bose 2007; Melarvizhi and Yadav 2008; Ponnu and Okoth 2009; Zakaria and Dewa 2010; Chaudhri 2011 and Hassan et al. 2012). The review shows that the on-line CSR practice has been increasing, especially in emerging economies and the results vary across countries. The review shows that very few studies (Al-Khater and Naser 2003; Naser et al. 2006; Khasharmeh and Suwaidan 2010) were carried out in the GCC countries. However, to the best knowledge of the researchers, none investigated the on-line CSR in this area of the world. As a result, there is an increasing need to investigate the on-line CSR of companies in the GCC countries. To this end, this study makes a considerable contribution to our understanding of CSR disclosure practices in these developing countries with emerging stock markets.

Furthermore, the empirical part of this study may provide benefits to both regulators and investors, particularly to individuals who are interested in investing in one or more of the countries included in the current study. The current study is one of the first studies to design a comparative study of the GCC on-line CSR practices. In addition to investigating the effect of firm characteristics on the on-line CSR disclosure, this study explores the significant differences among the GCC countries in the on-line CSR disclosure practice on one side and between industrial and non-industrial companies on the other. The current study is derived from the authors' desire to add an interesting dimension to the literature by conducting a comparative study in a number of developing countries (i.e., GCC countries) and the researchers believe this may distinguish the current study from other previous studies. In addition, there are very few comparative studies about the CSR in developing countries (Andrew et al. 1989).

To the best of the researchers' knowledge, the current study may be considered as the first survey which includes all GCC countries regarding the status of on-line CSR disclosure. The GCC countries share a number of specific structural economic features. Key common features include a high dependency on oil; young and rapidly growing national labor forces; and heavy reliance on expatriate labor in the private sector. In addition, listed companies are subject to very similar reporting requirements. For these reasons, the researchers believed that it was very important to conduct a study in this area to investigate the GCC on-line CSR practices.

This particular feature adds an interesting dimension to the literature by conducting a comparative study in a number of developing GCC countries and it may distinguish the current study from other previous studies. Such comparison is considered as a useful factor as investing companies are becoming more global as financial markets integrate. It is expected that the results of the current study will expand the knowledge about how listed companies in the GCC countries reflect or communicate their social responsibility role through their on-line reporting practices and facilitate a comparison on CSR practice among these countries.

It is noted that the studies reviewed by the authors of this paper provide evidence which is consistent with the proposition that there is considerable variation in CSR practice. In order to explain such variations among GCC companies, this study examines the impact of certain company characteristics on the level of the on-line CSR disclosure. As Craven and Marston (1999) reported, theories explaining voluntary disclosure may be relevant in the context of the on-line disclosure and can be used to develop the hypotheses which are tested empirically in the current study. In this context, a number of independent variables are employed to explain the variations on the on-line CSR of companies in the GCC countries.

4. Development of Research Hypotheses

To accomplish the objectives of this research, a series of research hypotheses is formulated. Various findings drawn from previous studies, together with what has been discussed above, are used in formulating hypotheses for the current study. In the light of that, research hypotheses are developed based on the following discussion.

4.1 Firm Size

The literature review in the on-line general disclosure or on-line CSR disclosure reveals that firm size has been proposed by many scholars and adopted as an important variable in explaining variation in the disclosure practices of companies. The majority of studies found a significant positive association between firm size and the extent of on-line general disclosure and on-line CSR disclosure (Hossain and Adams 1995; Ismail 2002; Suwaidan et. al. 2004; Spanos 2006; Barako et al. 2006; Hancock and Izan 2007; Almilia 2009; Desoky 2009; Reverte 2009; Khasharmeh and Suwaidan 2010; Pozniak et al. 2011). However, some studies found no significant association (Ng 1985; Barako et al. 2006; Smith et al. 2007; Ponnu and Okoth 2009; Shirley et al. 2009). Different measures for firm size are adopted in the literature such as total assets, number of shares, market capitalization and sales. Consistent with previous studies (Ismail 2002; Aly and Simon 2008; Desoky 2009), the current study uses total assets as a measure of size. Thus, the following hypothesis is developed to test the relationship between firm size and CSR disclosure.

H1: Firm size is positively associated with the CSR disclosure of companies in the GCC countries.

4.2 Firm Profitability

Profitability has been employed in the literature as an explanatory variable for social responsibility disclosure. Many studies found a significant positive association between profitability and the extent of voluntary general OFR and CSR disclosure (Gray et. al. 2001; Juhmani 2008; Almilia 2009; Desoky 2009). However, other studies found no significant association between the profitability of the company and the level of CSR disclosure (Baraco et al. 2006; Smith et al. 2007; Shirley et al. 2009; Pozniak et al. 2011). Different measures of profitability were used in the literature such as return on assets (ROA); return on equity (ROE); earnings per share (EPS); and net profit margin. Consistent with previous studies (Aly and Simon 2008; Khasharmeh and Suwaidan 2010), the current study uses ROE as a measure of profitability. Thus, the following hypothesis is tested regarding firm profitability.

H2: Firm profitability is positively associated with the CSR disclosure of companies in the GCC countries.

4.3 Audit Firm

An auditing firm may have a significant role to play with respect to the amount of information disclosed by the company. It is argued that the type of audit firm (whether or not one of the big four) may explain variation in disclosure in general and CSR disclosure, in particular, among companies (Hossain et al. 2006, Khasharmeh and Suwaidan 2010). The impact of the audit firm on disclosure may vary from one country to another. On the other hand, other studies found that audit firm size does not have a significant influence on the level of voluntary disclosure (Barako et al. 2006). In countries where professional standards are set by the accounting profession, it is expected that standardized practices across different audit firms will be apparent. This may explain, to a large extent, why mixed results were reported with respect to the influence of audit firm size on disclosure in countries in which professional standards are at a high level (e.g., Firth 1979; Malone et al. 1993). However, where such professional standards are not at a high level, the auditing firm is more likely to have an impact on the disclosure, particularly, on disclosure of CSR (Khasharmeh and Suwaidan, 2010). Thus, the following hypothesis is formulated.

H3: Audit firm is associated with the CSR disclosure of companies in the GCC countries.

4.4 Firm Risk

Firm risk has been used in the literature as an explanatory variable for social disclosure (Suwaidan et al. 2004; Khasharmeh and Suwaidan 2010). Risk is a variable that is related to uncertainty about outcomes of future events. Companies with a high risk ratio are expected to disclose more social information to divert attention from their risk levels (Barako et al. 2006). In addition, companies with higher disclosures are perceived to have a better image and are regarded by investors, lenders and banks to be subject to lower risk. As a result, these companies can have easier access to capital (i.e., they can borrow at a lower rate with more lenders willing to lend (Moussavi and Evans 1986). However, other studies reveal that there is no significant association between the level of risk and the level of social responsibility disclosure. As indicated in the literature (Khasharmeh and Suwaidan, 2010), the ratio of total liabilities to total assets is used in this study as a measure of risk. The following hypothesis is tested regarding the risk.

H4: Firm risk is associated with the CSR disclosure of companies in the GCC countries.

4.5 Firm Type

Industry type is one of the key potential factors that may affect CSR practices (Hackston and Milne, 1996). It has been argued in the literature that companies in some industries were socially more exposed to public scrutiny (Branco and Rodrigues 2006). These companies were adjudged to have faced greater political and social pressure to “clean up” their CSR practices and, hence, were expected to act in a socially desirable manner (Hassan et al. 2012). This association between industry type and CSR disclosure has been testified to in a number of empirical studies (Hackston and Milne 1996; Ramasamy and Ting 2004; Haniffa and Cooke 2002; Boesso and Kumar 2007; Smith et al. 2007). Some of the studies show that there is a significant relationship between on-line disclosure and type of business activity (Ashbaugh et al., 1999; Brennan and Hourigan, 2000; Bonsón and Escobar, 2002; Ismail, 2002; Boesso and Kumar 2007; and Ezat and El-Masry, 2008). However, other studies show an insignificant relationship (Craven and Marson 1999; Ramasamy and Ting 2004; Debreceny and Rahman, 2005 and Pozniak et al., 2011). The following hypothesis is tested.

H5: Firm type is associated with the CSR disclosure of companies in the GCC countries.

4.6 Board Leadership

In general, the literature has argued that the separation between CEO and chair-person positions can improve corporate performance. When the Chairman of the Board of Directors also takes the role of CEO, the effectiveness of the Board to monitor top management is decreased (Firth et al. 2007). Practically, the positions of the Chairman and the CEO might be held by different persons (dual leadership structure) or by one person (unitary leadership structure). Forker (1992) presented evidence of a relationship between disclosure quality and the Board leadership structure (measured as CEO and Board Chairman combined). Furthermore, Haniffa and Cooke (2002), Gul and Leung (2004) and Samaha et al. (2012) found that Board leadership structure is associated significantly with a lower level of voluntary disclosure. However, other studies show no significant association between the Board leadership structure and level of voluntary disclosure (John and Senbet 1998; Baraco et al. 2006). Based on the above arguments, the following hypothesis is tested regarding the Board leadership.

H6: Board leadership is associated with the CSR disclosure of companies in the GCC countries.

5. Research Methodology

5.1 The Sample

The population of this study consists of all publicly traded industrial and non-industrial companies listed on the stock markets of the six GCC countries. Table 1 presents information about the sampled companies and their distribution within GCC countries. Banking and insurance listed companies are excluded from the sample because they have a specific nature and characteristics which are different from industrial and non-industrial companies. As shown in Table 1, 163 companies were selected and examined. The original number of companies was 171 from the six countries; however, 8 companies were excluded (one company from KSA, 3 companies from Kuwait, 2 companies from Oman and other 2 from UAE) because none of them provided a single item of CSR information. Among the 163 selected companies, 109 (66.9%) representing industrial companies and 54 (33.1%) representing non-industrial companies from the six GCC countries were used in the analysis. To obtain the information required, the web-page of each company (including a soft copy of the company's annual reports for the financial period of 2011) was visited and examined in detail. Because company web-pages are dynamic, the objective was to collect data on these pages within a specific time period, September - December 2012. Standard web-page browsers were used for the purpose of data collection. Companies were searched by name and the company code used by that country's stock market. In addition to the stock market web-site in each country, other related web-sites, which include data-bases of listed companies in the GCC (www.argaam.com; www.mubasher.net; and www. gulfbase.com) were used in collecting data.

Companies were randomly selected from the most active listed companies in each country. Sample selection included 10 companies (6.1%) from Bahrain; 44 (26.9%) from KSA; 42 (25.8%) from Kuwait; 28 (17.2%) from Oman; 16 (9.8%) from Qatar; and 23 (14.2%) from the UAE. The selection was restricted to companies with accessible corporate web-sites at the dates of data collection.

Table 1: Distribution of sample companies used in the study

Sector	No. of listed companies		Companies included in the study		Industrial companies	Non-industrial companies	Total
	N	**%**	**N**	**%**	**N**	**N**	**N**
1- Bahrain	49	6.8	10	6.1	2	8	10
2- KSA	150	20.9	44	26.9	44	0	44
3- Kuwait	216	30.2	42	25.8	24	18	42
4- Oman	130	18.2	28	17.2	20	8	28
5- Qatar	42	5.9	16	9.8	7	9	16
6- UAE	129	18	23	14.2	12	11	23
Total	716	100	163	100	109 (66.9%)	54 (33.1%)	163 (100%)

Note 1: In some countries, the total number of industrial companies is low (e.g., in Bahrain only 2 companies).
2: A full list of companies included in the study is available upon request from the corresponding author.

5.2 Disclosure Index Construction

The current study used content analysis as a technique to identify and describe the on-line CSR disclosure practices of the sampled companies. Content analysis is a research tool focused on the actual content and internal features of media. It is used to determine the presence of certain words, concepts, themes, phrases, characters or sentences within text or texts and to quantify this presence in an objective manner (Palmquist, 1980).

A disclosure index is used (similar to other studies conducted in this area of accounting research) to provide an evaluation of the on-line CSR disclosure. Consistent with other studies (Ettredge et al. 2002; Aly & Simon 2008; Desoky 2009), an un-weighted disclosure index, which treats all items equally with a dichotomous procedure in which an item scores (1) if it is disclosed and (0) otherwise, was adopted in this study, implying that all items are equal in importance.

This approach, based on un-weighted items, has become the norm in disclosure studies because it reduces subjectivity (Ahmed & Courtis 1999). The first step in applying this approach is the selection of items of CSR information that could be disclosed in companies' web-sites, including a soft copy of the company's annual reports. Because there is no generally agreed upon accepted model for the selection of items of CSR information to be included in a disclosure index, the researchers based the selection of disclosure items on an extensive review of the relevant literature (Jones et al. 1999; Ettredge et al., 2002; Suwaidan et al., 2004; Hossain et. al 2006; Khasharmeh and Suwaidan 2010; Hassan et al. 2012).

In order to increase the reliability of the index and to improve the previous studies and models used, all possible efforts were made in its construction by using the following steps. First, a careful review of previous research was undertaken to develop items included in the final index which included 47 items of CSR information. For an item to be included in the index, it must have been used in at least one previously published research article. Second, the initial list of items of information was applied to the sampled companies and filtered for non-applicable items (items that have never been disclosed by the sampled companies over the research period of study). During this step, it was required that the index item included in the list had to be disclosed at least by one or more of the sampled companies over the period of study. The items included in the disclosure index were categorized into four types as shown in Appendix (A).

5.3 Dependent and Independent Variables

As the focus of this study is the on-line CSR disclosure by companies listed in GCC stock markets, the dependent variable (continuous variable) is the extent of the on-line CSR disclosures made by these companies on their web-sites. The overall total score (OVETSC), the primary measure in this study, was computed according to information items provided in a particular company's web-site with a maximum value of 47 points (100%) and a minimum value of 0 point (0%) for each company. As mentioned previously, the items were divided into four main categories: (1) Environmental information (ENVISC) with 10 items; (2) Employee information (EMPLSC) with 15 items; (3) Community involvement and social information (CISOSC) with 15 items; and (4) Products information (PRODSC) with 7 items. The total un-weighted index for each company is calculated as the total scores awarded to a particular company divided by the maximum number of applicable items of information.

Based on the literature and objectives of the current study, the following firm characteristics (independent variables) and their related proxies are summarized as shown in Table 2.

Table 2: Independent variables and their related proxies

Variable	Predicted sign	Related proxy
1- Firm size (FSIZE)	+	Firm total assets
2- Firm profitability (FROE)	+	Return on equity
3- Audit firm (AUDITF)	+ or -	Is the audit firm one of the big four? (a dummy variable)
4- Firm risk (FRISK)	+ or -	Total liabilities / total equity
5- Firm type (FTYPE)	+ or -	If the firm is industrial or non-industrial. (a dummy variable)
6- Board leadership (BOARDL)	+ or -	If the chairman is the same as the CEO

Note 1: Sources of needed data were companies' web-sites including their annual reports of the year ended Dec. 31, 2011, third party web-sites and the Bahrain Stock Exchange.
Note 2: For (FSIZE), a transfer of GCC countries' currencies was made to US dollars using the current exchange rates at the period of data collection.

5.4 Data Analysis

The Statistical Package for Social Sciences (SPSS) was used in the data analysis. In addition to the descriptive statistics and a multivariate analysis, the non-parametric tests (the Mann-Whitney U test and the Kruskal-Wallis Test) were carried out. Independent variables in this research include 3 continuous variables (FSIZE, FROE and FRISK) and 3 non-continuous variables (AUDITF, FTYPE and BOARDL).

Five linear regression models with enter method were performed for 5 continuous dependent variables (OVETSC, ENVISC, EMPLSC, CISOSC, and PRODSC) and 6 independent variables. The regression equation used is as follows:

$$Y = \beta_0 + \beta_1 FSIZE + \beta_2 FROE + \beta_3 AUDITF + \beta_4 FRISK + \beta_5 FTYPE + \beta_6 BOARDL + \varepsilon$$

Where Y = the dependent variable (i.e., total CSR disclosure index or OVETSC); β_0 is a constant; β_i, I =1, …, 6, are parameters; and ε is the error term. By using the "enter" method (a standard regression), the models involve all of the 6 independent variables being entered into the equation at once and a probability of $F \leq 0.05$ is included in the model. Regression diagnostics were applied to test for multi-collinearity between the independent variables.

Furthermore, the Kruskal-Wallis Test, which is a non-parametric alternative to a parametric one-way analysis of variance, was used to test for significant differences among more than two independent groups. This test has been adopted for this study to determine whether there are differences in the on-line CSR disclosure among the six independent companies from GCC countries. The Mann-Whitney U Test, which is a non-parametric alternative to a parametric T test, was used to determine whether there are differences in the on-line CSR disclosure between two independent groups of companies, industrial and non-industrial. The use of the two tests was based on the nature of the data collected. Non-parametric techniques are ideal for data that are measured on nominal and ordinal scales (Pallant 2007), the case of the current survey.

6. Findings

6.1 Descriptive Statistics

In general, the descriptive statistics show variations in the level of on-line CSR disclosure among sampled companies. This result coincides with results of other studies (e.g., Budisusetyo and Almilia 2008; Khasharmeh and Suwaidan 2010; Hassan et al. 2012). Table 3 presents the 5 highest items of on-line CSR disclosure and the 5 lowest that are provided by sampled companies.

Table 3: Lists of highest and lowest 5 items of the on-line CSR (overall results)

Items	Extent of disclosure
Top 5 items	
1- Product quality	74.8%
2- Human resource development (e.g., training program/scheme)	62.0%
3- The company's policy toward the environment	61.3%
4- Compliance with environmental regulations and requirements	61.3%
5- Research projects set up by the company to improve its product in any way	56.4%
Lowest 5 items	
1- Transportation for the employees' children	4.9%
2- Special loan interest rate	8.0%
3- Employee share purchase scheme	10.4%
4- Recreation clubs and public libraries	11.0%
5- Public hall and/or auditorium	11.7%

It is clear from the results in Table 3 that 74.8% of the sampled companies provided information on "product quality" in their web-sites and it was the highest item. This was followed by "human resource development" with 62% of the sampled companies. The lowest item disclosed was "transportation for the employees' children", with only 4.9% followed by "special loan interest rate" item with 8%.

Table 4 presents descriptive findings about the level of disclosure of the on-line CSR for each category at an overall level and for each type of industry (industrial and non-industrial). It shows that industrial companies disclosed more items than non-industrial companies in total CSR and in each type of CSR. Table 4 shows that across the 109 industrial companies included in the sample, the mean score for the on-line CSR disclosure (OVETSC) is 37.0% (an average of 17.42 items of the 47 items included in the index with a standard deviation of 10.849), while the highest total score achieved is 80.85% (a total of 38 of 47 items); and the lowest score is only 6.38% (a total of 3 of 47 items). Furthermore, it shows that across the 54 non-industrial companies included in the sample, the mean score is 29.4% (13.83 items of the 47 items included in the index with a standard deviation of 7.830), while the highest total score achieved is 68.09% (a total of 32 of 47 items); and the lowest score is only 2.13% (a total of 1 of 47 items). These results may suggest that GCC industrial companies are more involved in on-line CSR in their web-sites and confirm that companies in the GCC countries are now more engaged in the CSR disclosure, especially the on-line. For instance, Khasharmeh and Suwaidan (2010) who investigated the CSR disclosure in the traditional annual reports in the same GCC countries, reported that, on average, sampled companies provided only 26% of 45 items included in their index.

Table 4: Descriptive statistics of the dependent and continuous independent variables

Variables	No. of companies	Minimum no. of items	Maximum no. of items	Mean (%)	Std. D.
Dependent variable					
1- Overall total (47 items)					
Industrial	109	3	38	17.42 (37.0)	10.849
Non-industrial	54	1	32	13.83 (29.4)	7.830
2- Environmental total (15 items)					
Industrial	109	0	10	4.25 (28.3)	3.080
Non-industrial	54	0	10	2.89 (19.3)	2.500
3- Employees total (15 items)					
Industrial	109	1	14	5.83 (38.9)	4.251
Non-industrial	54	0	11	4.69 (31.3)	3.070
4- Community and social total (10 items)					
Industrial	109	1	12	3.76 (37.6)	3.294
Non-industrial	54	0	12	3.43 (34.3)	2.969
5- Products total (7 items)					
Industrial	109	1	7	3.59 (51.3)	2.377
Non-industrial	54	1	7	2.83 (40.4)	2.143
Scaled independent variables:					
1- FSIZE ($000)	163	3399	88682397	2085494	7681163
2- FROE	163	-7.63	44.7	12.76	11.07
3- FRISK	163	0.86	1375.67	106.15	168.73
Categorical variables:		**Yes**		**NO**	
4- FTYPE	163	109 (66.9%)		54 (33.1%)	
5- AUDITF	163	109 (66.9%)		54 (33.1%)	
6- BOARDL	163	162 (99.4%)		1 (0.6%)	

Note 1: FSIZE is the total assets in $ (000), end of 2011.
2: FRISK and FROE were computed from annual reports of 2011.

The Table shows varying results across industrial and non-industrial companies from one side and across different types of CSR from the other. Similar findings were reported in other developing countries such as Kenya by Ponnu and Okoth (2009). In general, the results indicate that there is a high variation in the on-line CSR practice of the sampled companies and may suggest that the on-line CSR practice by listed companies is fairly poor in GCC countries (mean scores of less than 50%) as compared to other countries, especially those with advanced capital markets. A number of previous studies reported nearly the same results (in Spain, Bolỉvar and Garcia 2004; in Qatar, Naser et al. 2006; in Bangladesh, Dutta and Bose 2007; in Kenya, Ponnu and Okoth 2009; in GCC, Khasharmeh and Suwaidan 2010; in India, Chaudhri 2011).

Regarding firm size (FSIZE), it can be seen that $3.399 million was the minimum and $88,628 million was the maximum total assets. The average ROE for the total sample was 12.76%, with a standard deviation of 11.07%. Of the 163 sampled companies, 109 (66.9%) companies are audited by one of the big firms, while 54 (33.1%) are not. Also, the average firm risk (FRISK) for the total sample was 106.15%, with a standard deviation of 168.73. Moreover, in the majority of the firms (162 of 163 sampled companies representing 99.1%) the Chairman is not the same individual as the CEO. This means that most firms in GCC countries have a separate Chairman and CEO.

Table 5 presents disclosure scores for sampled companies. It indicates that the level of on-line CSR disclosure is generally low. It shows that 31.3% of sampled companies disclosed ≤ 25% of total items (47 items); 44.2% of sampled companies disclosed between 26%-50%; and 24.5% of sampled companies disclosed >51%. Also, the disclosure score for each group of CSR information is presented. These results suggest that there is room for GCC companies to improve significantly the level of CSR disclosure in general; and for community and social involvement, environmental and employees' information in particular.

Table 5: Disclosure scores[a] for sampled companies

Disclosure score (%)	Overall total		Environmental total		Employee total		Community & social total		Products total	
	No.	%	No.	%	No.	%	No.	%	No.	%
≤ 25	51	31.3	62	38.0	52	31.9	86	52.8	40	24.5
26-50	72	44.2	48	29.5	62	38.1	55	33.7	51	31.3
51-75	33	20.2	33	20.2	38	23.3	19	11.7	38	23.3
>75	7	4.3	20	12.3	11	6.7	3	1.8	34	20.9
Total	163	100	163	100	163	100	163	100	163	100

[a] Disclosure score is computed as the total disclosure score obtained by a company expressed as a percentage of the maximum possible score.

Table 6 reached almost the same results presented in Table 5. For example, the level of disclosure is generally low. It shows the mean score and percentage for overall and each type of CSR for each country of the GCC. At the overall level, surprisingly, the UAE has a mean score of only 18.2% of the 47 items included in the index and ranked as the lowest GCC country in the on-line CSR. However, Khasharmeh and Suwaidan (2010), who investigated the CSR disclosure in the traditional annual reports, reported that the UAE out-scored other countries.

Table 6: Disclosure scores for sampled companies in GCC countries

Country		Mean	Std, deviation	%
Bahrain	Overall total	13.90	11.200	29.6
	Environmental total	1.60	3.026	16.0
	Employee total	5.20	3.676	34.7
	Community & social total	5.00	4.397	33.3
	Products total	2.10	2.470	30.0
KSA	Overall total	21.86	8.730	46.5
	Environmental total	5.30	2.775	53.0
	Employee total	7.70	3.495	51.3
	Community & social total	4.80	3.548	32.0
	Products total	4.07	1.993	58.1
Oman	Overall total	16.54	12.787	35.2
	Environmental total	3.54	3.305	35.4
	Employee total	5.64	4.946	37.6
	Community & social total	3.11	3.166	20.7
	Products total	4.25	2.939	60.7
Kuwait	Overall total	12.50	7.712	26.6
	Environmental total	3.07	2.463	30.7
	Employee total	3.50	2.550	23.3
	Community & social total	2.64	2.555	17.6
	Products total	3.29	1.967	47.0
Qatar	Overall total	22.50	4.336	47.9
	Environmental total	5.44	2.065	54.4
	Employee total	8.62	2.125	57.5
	Community & social total	4.63	2.500	3.9
	Products total	3.81	1.834	54.4
UAE	Overall total	8.57	6.280	18.2
	Environmental total	2.39	2.536	23.9
	Employee total	2.35	2.014	15.7
	Community & social total	2.70	2.458	18.0
	Products total	1.13	1.140	16.1

Similarly, at the individual level of disclosure, 23.9% of the environmental items, 15.7% of employee items, 18% of community and social items and 16.1% of product items, are disclosed by UAE companies. On the other hand, at the overall level, Table 6 shows that the highest mean score of on-line CSR disclosures are reported for Qatar and the KSA. Nevertheless, these results suggest that there is significant room for GCC companies to improve the level of their on-line CSR disclosure.

6.2 Multiple Regression Models

Table 7 shows the results of the regression analysis. Four of the five models showed almost similar results with regard to the significance levels (*p* value ≤ .05). The results show the explanatory power of the five models as measured by the adjusted R^2, which provides a better estimation of the true population value, especially with a small sample (Tabachnick and Fidell 1996) and the F value which is used to test the overall fit of the model (Field 2005).

Table 7: Regression models

	OVETSC	**ENVISC**	**EMPLSC**	**CISOSC**	**PRODSC**
No. of obs.	163	163	163	163	163
R^2	.306	.194	.241	.171	.234
Adjusted R^2	.193	.117	.148	.099	.141
F value	4.216	2.282	6.639	1.841	4.055
P value	.000*	.031*	.000*	.083	.000*

Note 1: * Model is significant at the 0.05 level; 2: Full regression models in Appendix C
3: OVETSC: Overall total; ENVISC: Environmental total; EMPLSC: Employees total; CISOSC: Community & social total; and PRODSC: Products total

In general, all regression models are significant (*p* value ≤ .05) except those related to community and social (CISOSC) with a *p* value of .083. The results also showed variations in explanatory power of all on-line CSR types as measured by the adjusted R^2. Values of the adjusted R^2 are .193, .117, .148, .099 and .141, respectively, for the five models OVETSC, ENVISC, EMOLSC, CISOSC and PRODSC, all with an F value of more than 1 which indicates that all are good models. According to Field (2005), a good model should have an F-ratio greater than1. The above results are consistent with previous studies in the voluntary on-line general or CSR disclosure which reported various results for the adjusted R^2. For example, values of the adjusted R^2 were 0.257 (Bollen et al. 2006); 0.175 (Ettredge et al. 2002); 0.312 and 0.600 (Marston and Polei 2004); 0.653 and 0.614 (Aly and Simon 2008); 0.400, 0.374 and 0.377 (Desoky 2009).

Concerning the overall total (OVETSC), the model is significant (*p* value of .000) with an adjusted R^2 of .193 which means that about 19.3% of the variation in the overall on-line CSR disclosure scores between companies can be explained by the six independent variables included in the model. Significant results are found in four models (OVETSC, EMOLSC, CISOSC and PRODSC) for firm ROE (FROE). The above finding suggests that companies with profits are more likely to engage in the on-line CSR practice and there may be an effect on firm profitability based on the extent of its on-line CSR disclosure. Consequently, H2 can be accepted.

Similarly, firm type (FTYPE) was negatively significantly associated with four types of the on-line CSR disclosure (OVETSC, ENVISC, CISOSC and PRODSC). This supports the acceptance of H5. Furthermore, firm size (FSIZE) and firm risk (FRISK) contribute to the prediction of the dependent variable, the on-line CSR disclosure. The above result is consistent with those reported by Naser et al. (2006) and Khasharmeh and Suwaidan (2010) who concluded that firm size (FSIZE) is associated with the CSR through the traditional annual reports. However, it is inconsistent with those reported in Kenya by Ponnu and Okoth (2009) and in Malaysia by Shirley et al. (2009). The results also show that the lowest contribution to the prediction of the dependent variables comes from audit firm (AUDITF) and board leadership (BOARDL) as they show the lowest Bata values in most of the five models (see Appendix B).

6.3 Further Analysis

Table 8 below shows results of Kruskal-Wallis test and indicates that there are statistically significant differences as all probability values are significant ($p < 0.05$), between the six GCC countries for all dependent variable. Therefore, it can be concluded that there are significant differences between GCC countries concerning on-line CSR disclosure.

Table 8: Kruskal-Wallis test results for difference among countries:

CSR	Chi-square	Df	Asymp. sig.
Overall total	43.098	5	**.000**
Environmental total	29.870	5	**.000**
Employees total	52.147	5	**.000**
Community & social total	14.585	5	**.012**
Products total	33.464	5	**.000**

Similarly, the Mann-Whitney test was also used to examine differences between the groups of companies, industrial and non-industrial. As shown in Table 9, the results indicate that there are statistically significant differences in only two dependent variables, namely, overall total (OVETSC) and environmental total (ENVISC) as probability values are significant ($p < 0.05$). Accordingly, it is possible to conclude that firm type (FTYPE) affects overall total (OVETSC) and environmental total (ENVISC) variables of the on-line CSR disclosure. However, no significant differences are shown in the other three dependent variables. It can be said that the results from the non-parametric tests provide some support to the results which were already obtained from the regression models.

Table 9: Mann-Whitney test results of difference among company types:

CSR	Mann-Whitney U	Wilcoxon W	Z	Asymp. sig.
Overall total	2328.500	3813.500	-2.168	**.030**
Environmental total	2171.000	3656.000	-2.750	**.006**
Employees total	2482.000	3967.000	-1.633	**.103**
Community & social total	2825.000	4310.000	-0.420	**.675**
Products total	2421.000	3906.000	-1.858	**.063**

6. Summary and Conclusions

The objectives of this study are (1) to evaluate the level of on-line CSR disclosure of companies listed in the stock markets of the GCC countries; (2) to investigate the impact of a number of firm variables (characteristics) in explaining variations in the disclosure of this information between the sample companies and (3) to investigate if there are significant differences among the GCC countries in on-line CSR disclosure level. To achieve these objectives, a disclosure index incorporating 47 items of CSR information was applied to web-sites including soft copies of the annual reports of 163 companies listed on the stock exchanges of these countries. The findings indicate that, on average, a company disclosed about 17.42% of the 47 items included in the index with only 24.5% of sampled companies receiving disclosure scores of 50% or more. Further, the analysis revealed that both environmental and product information were the least disclosed or covered areas of information in the annual reports of the sample companies. In addition, there was considerable variation in the disclosure of social responsibility information among companies. This suggests that there is room for significant improvement in the level of CSR disclosure in general and for environmental and product information in particular.

Concerning regression models, all models were significant except the model related to community and social. The results also showed variations in explanatory power of all regression models of on-line CSR types as measured by the adjusted R^2. Values of the adjusted R^2 were .193, .117, .148, .099 and .141, respectively, for the five models OVETSC, ENVISC, EMOLSC, CISOSC and PRODSC. Significant results were found in four models (OVETSC, EMOLSC, CISOSC and PRODSC) for firm ROE (FROE). The above finding supports the idea that firm profitability is positively associated with the extent of on-line CSR disclosure. Firm type (FTYPE) was negatively significantly associated with four types of the online CSR disclosure (OVETSC, ENVISC, CISOSC and PRODSC). Furthermore, firm size (FSIZE) and firm risk (FRISK) contribute to the prediction of the dependent variable, the on-line CSR disclosure. Moreover, it can be concluded that there were significant differences between GCC countries concerning on-line CSR disclosure. Concerning firm type, the result of Mann-Whitney test showed that firm type (FTYPE) affects only overall total (OVETSC) and environmental total (ENVISC) variables of the online CSR disclosure. It can be said that the results from the non-parametric tests provide some support to the results which were already obtained from the regression models.

An implication of the study is that company managements must link social and environmental responsibility with financial success, concentrate upon operational cost savings through environmental efficiency measures; enhance their reputation through positive responses to stakeholders' concerns; increase their ability to recruit and retain staff; sharpen anticipation and management of risks; and improve their capacity to innovate.

The current study has a number of limitations. First, the scope of this study is limited to industrial and non-industrial companies and it does not represent all listed companies of GCC countries. Second, the findings of such a study may not be generalized to different countries at different stages of development or with different business environments and cultures. A comparative study of the CSR practice for different countries with emerging capital markets might also be fruitful. Therefore, it would be interesting to replicate this study in other Middle Eastern countries. Third, as this study focused on the extent of CSR disclosure by listed companies in the GCC, further research may be directed towards the accuracy and reliability of information presented in the companies' web-sites. Fourth, while an un-weighted disclosure index was used in this study, the findings might be different if a weighted disclosure index which assesses the importance of each item in accordance with specific user group' perspective were used. Fifth, the explanatory power (adjusted R^2) in regression models ranged between .099 and .193, which means that the multiple regression models which consist of six variables, explain about .099 - .193 of the variation in the CSR. However, variables other than those included in the study may affect the extent of CSR. Future study may be needed to investigate the impact of other potential explanatory variables such as those related to corporate governance (e.g., audit committee; board size, composition and compensation) and government ownership which are excluded from this study.

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Appendix A

Items of information and their extent of disclosure

Items	No. of companies disclosing the item	Extent of disclosure the item (%)
A. Environmental information		
1. The company's policy toward the environment.	100	61.3
2. Contribution in the environment protection programs.	79	48.5
3. Conservation of natural resources.	69	42.3
4. Recycling plant of waste products.	41	25.2
5. Financing and using equipment which protect the environment.	64	39.3
6. Green building.	20	12.3
7. Disposal of waste in a proper manner.	49	30.1
8. R&D for the environment.	54	33.1
9. Compliance with environmental regulations and requirements.	100	61.3
10. Energy saving.	43	26.4
B. Employee information		
11. Human resource development (e.g. training program/scheme).	101	62
12. Education facilities.	64	39.3
13. Health arrangements.	74	45.4
14. Safety arrangement	78	47.9
15. Holidays and vacations.	49	30.1
16. Recreation clubs and public libraries.	18	11
17. Special loan interest rate.	13	8
18. Labor rights.	64	39.3
19. Establishment of training centers.	60	36.8
20. Policies for the company's remuneration package/scheme.	63	38.7
21. Number of employees in the company.	54	33.1
22. Qualifications of employees recruited.	88	54
23. Employee share purchase scheme.	17	10.4
24. Stability of the workers' job and company's future.	71	43.6
25. Pensions schemes.	74	45.4
C. Community involvement information		
26. Donations to the charity, arts, sports, etc.	71	43.6
27. Relation with local population.	79	48.5
28. Sponsoring educational seminars and conferences.	51	31.3
29. Transportation for the employees' children.	8	4.9
30. Establishment of educational institution(s).	30	18.4
31. Medical establishment.	22	13.5
32. Corporate gifts.	32	19.6
33. Public Hall and/or auditorium.	19	11.7
34. Sponsoring education and scholarship for students.	53	32.5
35. Providing job opportunities and helping in reducing the unemployment rate.	70	42.9
36. Contribution toward community serving programs.	28	17.2
37. Conducting projects in poor areas.	22	13.5
38. Cash rewards.	30	18.4
39. Financial assistance.	31	19
40. Participating and financing community celebration.	49	30.1
D. Products information on:		
41. Developments related to the company's products including its packaging.	83	50.9
42. Research projects set up by the company to improve its product in any way.	92	56.4
43. Product quality.	122	74.8
44. Responsiveness to customer complaints.	71	43.6
45. The company's role in controlling prices and optimizing profits.	69	42.3
46. Compliance with customer protection legislation.	55	33.7
47. Customer service programs, market, research, product, warranty, educate customers about goods being sold.	52	31.9

* Percentage of companies disclosed the item to total sampled companies of 163.

Appendix B

Regression models in details

	Overall total			Environmental total			Employees total			Community & social total			Products total		
	B	Beta	t	B	Beta	t	B	Beta	t	B	Beta	t	B	Beta	t
(Constant)	32.613		3.217*	9.116		2.942*	12.250		3.130*	2.584		0.769*	8.664		3.693*
FTYPE	-1.988	-0.093	-1.213*	-1.173	-0.187	-2.342*	-0.473	-0.057	-0.747	0.146	0.022	0.268*	-0.488	-0.099	-1.286*
FSIZE	3.553E-8	0.102	1.324	1.096E-8	0.106	1.335	1.070E-8	0.079	1.03	1.093E-8	0.099	1.228	2.934E-9	0.036	0.472
FROE	0.141	0.155	2.029*	0.024	0.091	1.152	0.052	0.146	1.934*	0.019	0.066	0.827*	0.046	0.217	2.836*
AUDITF	1.004	0.047	0.621	-0.106	-0.017	-0.215	1.025	0.123	1.644*	0.424	0.063	0.791	-0.339	0.069	-0.907
FRISK	0.007	0.109	1.418	0.001	0.072	0.893	0.003	0.109	1.423	0.002	0.080	0.989	0.001	0.090	1.157
BOARDL	-11.775	-0.092	-1.225	-3.667	-0.097	-1.248	-5.552	-0.111	-1.496	1.454	0.036	0.456	-4.010	-0.135	-1.803
No. of Obser.		*163*			*163*			*163*			*163*			*163*	
R^2		*.306*			*.194*			*.241*			*.171*			*.234*	
Adjusted R^2		*.193*			*.117*			*.148*			*.099*			*.141*	
F value		*4.216*			*2.282*			*6.639*			*1.841*			*4.055*	
P value		*.000*			*.031*			*.000*			*.083*			*.000*	

* Significant at the 5% level ($p < .0$)