

CORPORATE SOCIAL REPORTING IN EGYPT: NATURE AND DETERMINANTS

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Abstract

Purpose: This paper explores the nature and determinants of corporate social reporting (CSR) in Egyptian listed companies using publicly available sources, including annual reports, stand-alone reports and corporate internet disclosures.

Design/methodology/approach: A 55-point content analysis from 6 categories was developed using both Egyptian sustainability reporting guidelines and the Global Reporting Initiative reporting guidelines. Both the index score and number of sentences were used to measure CSR. Multiple OLS regression was used to test the significance of both corporate governance mechanisms and firms' characteristics in explaining the variations in CSR. Mann-Whitney U tests were used to measure the differences between governmental and non-governmental firms.

Findings: The results of descriptive statistics show that 54.8% of the sample reported CSR. Community & social information was dominant under the three disclosure channels. Empirical findings show a significant relationship between CSR disclosure and the existence of a CSR division, the existence of family directors on the board and those companies which are cross-listed. The results do not show a significant relationship between CSR and non-executive directors, CEO duality, institutional ownership, foreign ownership, size, profitability, leverage and audit firm type. The results also show that non-governmental companies use varied channels of disclosure more than government-owned companies.

Originality/value: As the most comprehensive study to date of its kind in an Egyptian context, the paper contributes to investigating empirically the link between CSR and both corporate governance mechanisms and firm specific characteristics.

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Introduction

Egypt's rapid transition towards a market-based economy over recent years has led to the promotion of several reforms and initiatives designed to improve levels of corporate governance, disclosure and transparency. Alongside the introduction of a new code of corporate governance in 2005, the Egyptian stock exchange has established an index of corporate environmental and social governance (ESG) (Egypt Stock Exchange, 2010). The thirty constituents of the index are ranked annually based on their CSR and governance performance. This index is considered one of the pioneer ESG indexes in Africa and the MENA region and the second of its kind in a developing country (MOI, 2011). The Egyptian Ministry of Investment has also initiated new measures in an attempt to improve corporate social reporting (CSR) practices. In 2008, it established the Egyptian Corporate Responsibility Center (ECRC)¹, which has sought to raise awareness of CSR issues and has taken a leadership role in the region in this respect (World Bank, 2009).

The extent to which the pace of economic change in a developing country such as Egypt is impacting on the emergent CSR practices of Egyptian listed companies is a topic worthy of further investigation. In recent years, whilst an increasing number of scholars have explored CSR disclosure in the emerging economies of Asia, comparatively few academic studies have explored CSR disclosures in an Egyptian or a wider Middle-Eastern context (see, for example, Maali et al., 2006; Naser et al., 2006, Kamla, 2007). Early studies of Egyptian CSR found that the quantity of voluntary disclosures was very low, even by comparison with other developing countries (see, for example, Hanafi, 2006; Maali et al., 2006). A similar picture has also emerged from subsequent studies of Egyptian CSR disclosure (Rizk, 2006; Rizk et al., 2008; Salama, 2009; Samaha and Dahawy, 2010, 2011), which suggests that the relative lack of disclosure of Egyptian companies could be partly driven by underlying issues specific to the Egyptian context. However, the conclusions drawn from the few relevant studies conducted to date are mixed. From a more critical perspective, some have argued that increased demands for disclosure and transparency in developing countries such as Egypt are typically driven by a desire to attract foreign investors, and are achieved by importing reporting and governance frameworks from developed countries. This type of approach may not be appropriate given the comparatively weak and ineffective regimes of regulation in place, and may also ignore the different socio-cultural environment of developing countries (Gray et al, 1996; Kamla, 2007; Belal and Momin, 2009). Some empirical studies have therefore drawn attention to broader factors such as the Egyptian culture, and Islamic principles, which may encompass potential determinants of corporate accounting practices (HassabElnaby and Mosebach, 2005; Dahawy and Conover, 2007). Dahawy et al. (2002) conclude that Egypt's business society is generally secretive, a characteristic clearly at odds with increased transparency and accountability, while both Hanafi (2006) and Samaha and Stapleton (2008) found a tendency to defy mandatory disclosure requirements, and a lack of proper enforcement. In another study, Rizk (2006) found that the stage of economic development, religion and culture do not seem to provide significant explanatory power in terms of CSR. Salama (2009) examined the voluntary disclosure of social internet reporting as a determinant to the Egyptian companies

¹The Egyptian Corporate Responsibility Center is an affiliate of the Egyptian Institute of Development (EIOD) offers Corporate Social Responsibility (CSR) services including awareness, training and consulting services and acts as the focal point for the United Nations Global Compact (UNGC) in Egypt. Both bodies operate under the umbrella of the Ministry of Investment (MOI).

communication to stakeholders requirements and reached the conclusion that CSR in Egypt is still far behind stakeholder expectations.

Recently, some more explicitly analytical disclosure studies have examined the role of corporate governance mechanisms as well as corporate characteristics such as size, industry and ownership structure. Rizk et al. (2008) found that industry type and ownership structure were significant determinants, while the most recent (and by far most comprehensive) empirical studies by Samaha and Dahawy (2010, 2011) examined the relationship between CSR disclosure and corporate governance mechanisms. They found that the number of shareholders, ownership structure, board structure, existence of audit committees and liquidity were significant determinants of voluntary CSR disclosure.

In this paper, we aim to further explore the nature and practices of CSR in Egyptian listed companies by investigating the effects of both the company characteristics and corporate governance mechanisms, in an attempt to derive empirical evidence on their relationship to CSR. Specifically, we attempt to find answers to the following questions:

1. What is the level of CSR disclosure in Egyptian listed companies across the three disclosure channels of annual reports, stand-alone reports and company websites?
2. Which areas of CSR do Egyptian companies concentrate on, and which areas are less important?
3. To what extent are various company characteristics and aspects of corporate governance statistically significant in explaining the level of CSR disclosures of listed Egyptian companies?

Egypt has its own social and political aspects that may influence the practices of local companies operating within the country boundaries (Muller and Kolk, 2009); this may not be applicable to the subsidiaries of the multinational corporations (MNCs) operating there, as they may be viewed as facing wider societal concerns (Kolk and Lenfant, 2009). Therefore, this paper employs an initial sample of all 373 companies that were listed on the Egyptian Stock Exchange for the year 2008. This sample includes a mix of state-owned enterprises, subsidiaries of MNEs and non state-owned enterprises to give a comprehensive picture of all practices, and to reveal different pressures on CSR disclosures in listed enterprises.

Since CSR is unregulated in most jurisdictions, companies disclose environmental and social information voluntarily to the public. Gray et al. define CSR as:

“Both self-reporting by organizations and reporting about organizations by third parties; information in the annual report and any other form of communication; both public domain and private information; information in any medium (financial, non-financial, quantitative, non-quantitative). It is not restricted necessarily by reference to selected information recipients; and the information deemed to be CSR may, ultimately, embrace any subject”. (1995b, p.47)

From the above definition, it may be noted that companies make CSR disclosures in different channels. The annual report has been considered the most important tool companies have to disclose CSR (Gray et al., 1995a). Many prior studies used annual reports as a reliable source to collect CSR information for their empirical testing (see for example: Cowen, et al., 1987; Roberts, 1992; Hackston and Milne, 1996; Haniffa and

Cooke, 2005). In addition, however, websites are increasingly used as a low cost means by which companies can disseminate their CSR information (Adams and Frost, 2006). Therefore, studies that focus solely on annual reports have a risk of capturing an incomplete picture on the amount and variety of CSR information (Unerman, 2000). However, Cerin (2002) notes that information presented on the websites were sometimes not up-to-date. Additionally, websites may be modified where available data may no longer exist. At the same time, stand-alone CSR or sustainability reports are becoming a recent source of information that is growing rapidly. A KPMG (2008) international survey of corporate social reporting shows that stand-alone reports increased from 52% to 79% in years 2005 to 2008 using a sample drawn from Fortune 500 compared to 13% in 1993.

In practice, companies do not disclose social information equally and there is no single acceptable format to CSR disclosures (Adams, 2002). Therefore, some companies place their CSR disclosures in the annual reports whereas others disclose the information in a separate report (Idowu and Towler, 2004). Stand-alone reports are also becoming an important source. As a result, this paper relies on all three channels used by the companies to report their CSR information to public, including information in annual reports and stand-alone reports in financial year 2008, and current corporate websites. The disclosure index used in our content analysis was designed to capture the *variety* and *extent* of CSR as well as measuring the news and evidence provided. To explore statistical associations, a multiple OLS regression is used to measure the significance of corporate individual characteristics and corporate governance mechanisms in explaining the CSR disclosures measured using the content analysis.

The remainder of the paper is organised as follows. The next section summarises the literature on disclosure studies and reviews the determinants of CSR disclosures in order to develop the research hypotheses. Section three describes the development of the content analysis approach used to measure the CSR disclosures of the firms. It also identifies the sampling and statistical modeling used to test the hypothesis of the study and includes the descriptive statistics for the sample CSR disclosures. Section four covers the results of the statistical test, which includes the multiple OLS regression, as well as the Mann-Whitney non-parametric test to compare governmental and non-governmental companies. Section five draws conclusions on the themes of CSR disclosures that were revealed in section four descriptive statistics, and summarises the empirical results.

Hypothesis Development

Non-executive directors (NEDs)

Many guidelines have been initiated in developed countries, including the Cadbury Report (1992) and the Hampel Report (1998), which demonstrated the importance of having the majority of board members as non-executives. Recently in Egypt, the Egypt Code of Corporate Governance Guidelines and Standards was published in October 2005 (ECCG, 2005), which asserted that “The Board of Directors should include a majority of non-executive members ... that is of benefit to the board or corporation”. Forker (1992) argues that inclusion of NEDs in the board will lead to enhancing firm’s compliance with the disclosure requirements, which in turn will result in an improvement in the comprehensiveness and quality of disclosures. Furthermore, Andrews (1981) suggests

that outside directors may lead to greater corporate social responsiveness of business organizations. Ibrahim and Angelidis (1995) found that NEDs exhibit greater concern to voluntary social disclosures compared to executives. Therefore, the existence of more NEDs may result in minimizing the legitimacy gap between management and shareholders (Hannifa and Cooke, 2005).

Though such arguments lend support to a positive association between NEDs and CSR, empirical findings are inconclusive. Coffey and Wang (1998), for instance, found a positive association between the NEDs and corporate philanthropy measured as percentage of net income to charitable contributions. Some studies found a positive relation between disclosures and NEDs (Chen and Jaggi, 2000; Cheng and Courtenay, 2006; Huafang and Jianguo, 2007; Ezat and El-Masry, 2008). On the contrary, other studies found a negative relationship (Eng and Mak, 2003; Hannifa and Cooke, 2005; Barako et al., 2006), while others found no decisive evidence (Ho and Wong, 2001; Hannifa and Cooke 2002; Ghazali and Weetman, 2006). In an Egyptian context, Samaha and Dahawy (2010) used a sample of top 30 listed companies in 2006 and found a positive relationship between NEDs and corporate voluntary disclosure. Samaha and Dahawy (2011) later expanded their sample to include the largest 100 firms listed on the EGX in 2006 and found a positive relationship between CSR and NEDs. On this basis the following hypothesis is presented:

H1: There is positive association between the corporate social reporting and non-executive members in the corporate board.

CEO Duality

CEO duality occurs when the CEO (chief executive officer) is also the chairman of the company. Whereas the CEO is responsible for setting and implementing the corporate strategy, the chairman monitors the performance of executive directors including the CEO (Weir and Laing, 2001). Holding both posts together (the CEO and chairman) by one member, therefore creates a “strong individual power base” causing a possibility of less effective control by the board (Gul and Leung, 2004, p. 356). On this basis, the ECCG (2005) advocates the separation of both positions from being held by the same person, while stating the reasons behind combining both posts in the annual report should it take place. Forker (1992) asserts that role duality may impair monitoring quality as well as disclosure quality. Although most arguments are against the role duality, especially in large firms, empirical evidence is inconclusive. Haniffa and Cooke (2002) found a negative association between CEO duality and voluntary disclosure. Consistently, Gul and Leung (2004) and Huafang and Jianguo (2007) found similar results. On the other hand, Cheng and Courtenay (2006) found no association between CEO duality and voluntary disclosure. In an Egyptian study, Ezat and El-Masry (2008) examined the association between corporate governance and the timeliness of corporate internet reporting and found no association between duality and internet reporting. Nevertheless, the following hypothesis is proposed:

H2: There is an association between the corporate social reporting and CEO duality in the corporate board.

Presence of a CSR division

The existence of a CSR division is not generally examined in the literature as a determinant to social reporting. To our knowledge, Cowen et al. (1987) is the only study that examined the existence of a CSR committee effect on social disclosure types. However, it is arguable that the existence of a CSR committee may lead to greater tendency to make more disclosures on social involvement (Cowen et al., 1987). Given this argument it would be thought that companies having such committee may place social reporting as a high priority (ibid.). Cowen et al. (1987) found an association between CSR committee existence and disclosures related to human rights. In Egypt, there is no existence to a CSR committee; however, companies form a CSR division instead. On this basis, the hypothesis is:

H3: There is positive association between the corporate social reporting and the presence of a CSR division in the corporation.

Family directorship

In general terms, the vast majority of listed corporations in the Middle East and Africa regions are family owned (La Porta, et al., 1999)². In Egypt particularly, families control whether directly or indirectly a considerable portion of listed companies (World Bank, 2009). In such firms families may retain the ownership and management of the business (Burkart, et al., 2003). The low separation of ownership and control may raise an agency dilemma, due to the low control of outside shareholders on the business (Eng and Mak, 2003; Ghazali and Weetman, 2006). In such circumstances, low levels of disclosure may result (Fan and Wong, 2002). However, Branco and Rodrigues (2008) argue instead that one of the reasons companies are motivated to engage in CSR practices is the norms and values of the management team. Additionally, Burkart et al. (2003) proposes that family control may lead to influence the social and cultural events in some industries. In Egypt, 43% of the companies listed on S&P EGX/ESG in 2008 were family owned and directed.³ Thus, based on the above discussion the next hypothesis is:

H4: There is a positive association between the corporate social reporting and the existence of family directorship on the company board.

Institutional Ownership

Wahba (2009) suggests that institutional investors may have an intention in CSR activities because they want to protect their investments and legitimize their operations to comply with industry requirements. In an early study, Graves and Waddock (1994) studied whether institutions are likely to invest more in companies engaging in more CSR. The study found a positive significant association between the number of institutional investors and CSR, however the percentage of institutional investment was not found to be a determinant in explaining the relation. The study therefore concluded

² The study also identified that in Western Europe, South and East Asia, the Middle East, Latin America, and Africa, the vast majority of listed firms are family owned and directed.

³ The S&P EGX/ESG 2008 listing was available on URL: <http://www.ecrc.org.eg/Index.aspx>

that any improvements in CSR do not make any consequences on institutional ownership. Consistently, Johnson and Greening (1999) and Cox et al. (2004) found similar results. Cox et al. (2004) located that the existence of long-term institutional investors is positively associated to CSR practices. They also suggest that long-term institutional investors screen and refuse companies with lower CSR. Additionally, Mahoney and Roberts (2007) found a positive relation between the number of institutional investors and certain CSR data themes, regarding product quality.

In Egypt, the relationship between disclosures and institutional ownership is relatively under-researched. Wahba (2009) demonstrated that institutional investors' ownership influenced positively the company's propensity to engage in environmental management standards. Therefore the hypothesis is proposed as:

H5: There is a positive association between the corporate social reporting and the percentage of ownership held by institutions.

Foreign Ownership

Prior literature investigating the effect of foreign investors on CSR is also very limited. While some researchers argue that foreign investors encounter informational disadvantages being compared to local investors (Brennan and Cao, 1997). Other studies show that due to international expertise, foreign investors have informational advantages over local investors (Choe et al., 2005). Agency conflicts might arise due to the separation of ownership and control (Jensen and Meckling, 1976) and induce management to disclose more information voluntarily (Craswell and Taylor, 1992). This pressure may increase when the owners of the corporation are separated geographically (Haniffa and Cooke, 2002). Branco et al. (2006) found a significant positive association between foreign ownership and voluntary disclosure in Kenyan listed firms. Consistently, Hannifa and Cooke (2005) found a significant positive relationship between the percentage of foreign ownership and CSR. Hence,

H6: There is a positive association between the corporate social reporting and the percentage of ownership held by foreign investors.

Size

Firms with different size encounter different risk severity (Kelton and Yang, 2008). Large companies engage in more activities, and also have greater impact on the society (Cowen et al. 1987). On the other hand, the larger the company the more the concern of shareholders and other parties about the social programmes the company engages in (ibid.). This may create a positive association between CSR and firm size, as found by many earlier studies (see for example: Cowen et al., 1987; Belkaoui and Karpik, 1989; Patten, 1991, 1992; Trotman and Bradley, 1981; Hackston and Milne, 1996; Haniffa and Cooke, 2005; Naser et al., 2006). In the Egyptian context, the relationship seems inconclusive. Samaha and Dahawy (2011) found an insignificant positive relationship between size (as measured by total assets) and CSR and insignificant negative relationship between size (as measured by sales) and CSR. However, the hypothesis is proposed as follows:

H7: There is a positive association between the corporate social reporting and the firm size.

Profitability

Empirical findings on the relationship between profitability and CSR are inconclusive (see for example: Patton, 1991; Roberts, 1992; Mangos and Lewis, 1995). While some studies found a positive significant association between CSR and profitability (Cormier and Magnan, 1999; Gray et al., 2001; Haniffa and Cooke, 2005), other studies found no significant relation between both (Belkaoui and Karpik, 1989; Patton, 1991; Branco and Rodrigues, 2008; Samaha and Dahawy, 2011). Branco and Rodrigues (2006) employed a resource-based perspective which contends that CSR involvement by companies lead to better corporate reputation. This reputation in turn makes it more feasible for such companies to enhance their relations with external parties including customers, investors, and suppliers. By so doing those companies are able to achieve better financial outputs. Cornelius et al. (2008, p. 355) states that social ends and profit motives do not contradict each other, but rather have complementary outcomes, and constitute a 'double bottom line'. Additionally, it is argued that the skills needed achieve high financial performance are interrelated to those required by management for social responsiveness (Bowman and Haire, 1976; Belkaoui and Karpik, 1989). Therefore,

H8: There is a positive association between firm disclosure of CSR information and the rate of return it generates.

Leverage

Highly geared companies are perceived to be risky due to their low ability to raise outside financing and grow (Naser, et al., 2006). Debreceeny et al. (2002) observed that an increase in the debt-equity ratio is associated with higher agency costs. Therefore, highly geared companies are more likely to engage in CSR to legitimize their actions to its creditors and shareholders (Haniffa and Cooke, 2005), as CSR is conceived as part of reputation risk management (Bebbington et al., 2008). Hence, a positive significant association was found in many studies between CSR and gearing (Belkaoui and Kahl, 1978; Roberts, 1992; Naser et al., 2006). On the other hand, Haniffa and Cooke (2005) found a negative but insignificant relation between CSR and debt-to-equity ratio in Malaysian listed companies.

In Egypt, Samaha and Dahawy (2010) found a negative insignificant relationship between voluntary disclosure and leverage. In addition, Samaha and Dahawy (2011) found a negative insignificant relationship between CSR and leverage. Ezat and El-Masry (2008) found a positive but insignificant relation between online reporting and leverage, the same result was found by Aly et al. (2010). Hence, the hypothesis is:

H9: There is a positive association between corporate social reporting and the level of company gearing.

Cross-listing

Cross-listed companies may face different pressures from foreign stakeholders due to their diverse needs and power (Hannifa and Cooke, 2005). This may in turn lead cross-listed firms to incorporate some aspects of foreign regulation to its own accounts (Cooke, 1992). Additionally, cross-listed firms have to adhere to international market requirements to be able to raise money at lower costs (ibid.). This may motivate those companies to disclose more information, as compared to domestically listed companies (ibid.). Hence, Hannifa and Cooke (2005) suggest that developed countries embrace more pressure on the companies to legitimize their behaviour as compared to developing countries. Consequently, the hypothesis can be proposed as follows:

H10: There is a positive association between corporate social reporting and the companies cross-listed.

Type of Auditor

It is argued that 'Big 4' firms may have a motive to keep their representation as independent from clients low disclosure practices, in order to avoid any loss of reputation (DeAngelo, 1981; Chow 1982). On the other hand, small audit firms are more responsive to clients' demands due to the economic consequences associated with losing a client (Malone et al. 1993). Therefore, large auditing firms stimulate their clients to disclose more voluntary information publicly in their annual reports (Hossain, et al. 1995). However, the empirical findings are somewhat conflicting. Some studies found that the involvement of large audit firms shows a significant positive association to voluntary disclosure (Singhvi and Desai, 1971; Raffournier, 1995; Hossain, et al. 1995), while others found no significant relationship (Forker, 1992; Wallace et al., 1994) and on the other extreme Wallace and Naser, (1995) found a significant and negative relation between large audit firms and voluntary disclosure in companies listed in the Stock Exchange of Hong Kong. In Egypt, Samaha and Dahawy (2010) found a significant positive relationship between voluntary disclosure and audit firm, while Samaha and Dahawy (2011) found a negative insignificant relationship between CSR and the type of auditor when increasing the sample. Thus, the hypothesis is:

H11: There is a positive association between the corporate social reporting and companies audited by Big 4 auditing firms.

Governmental and non-governmental companies

In Egyptian listed companies, it is particularly useful to differentiate between governmental and non-governmental (fully privately) owned companies (Elsayed and Hoque, 2010). As some studies suggested that governmental companies are likely to publish more information than the non-governmental counterparts (Eng and Mak, 2003; Abd-Elsalam and Weetman, 2003; Hassan et al., 2006). This is because governmental companies are more visible both to the public as well as through government evaluations for privatization programs (Elsayed and Hoque, 2010, p.23). Using a sample of 100 top non-financial listed firms, the latter study found a significant negative association

between governmental ownership and corporate voluntary disclosure. Hence, the study concluded that governmental owned companies disclose a lesser amount of voluntary information to privately owned companies. Likewise, Rizk el al. (2008) used a sample of 60 randomly selected annual reports for Egyptian listed companies in 2002. The study found that only 3 out of 13 companies scoring more than 14 points of the disclosure index was governmental, and all companies scoring zero (9 companies) were also governmental. Thus, the study concluded that privately owned companies disclose better CSR than governmental companies do. On the other hand, additional governmental monitoring may be argued to reduce the need for further public disclosure elsewhere (Ghazali and Weetman, 2006). In an Egyptian context, Samaha and Dahawy (2011) also found a negative though insignificant relationship between the percentage of governmental ownership and CSR, while Samaha and Dahawy (2010) found a positive insignificant relationship between voluntary disclosure and level of governmental ownership. Therefore, the hypotheses are:

H12: Governmental companies reporting CSR differ significantly than non-governmental companies in the extent of CSR.

H13: There is a significant difference between governmental and non-governmental companies in using the different disclosure sources (AR, website and SR)

Research Design

In order to capture a comprehensive picture as possible about CSR practices in companies listed on the Egyptian Stock Exchange (EGX), and satisfy the first research objective, the initial sample included all the companies that were listed on EGX website⁴ in 2008. This amounted to 373 companies grouped in 17 sectors.⁵ The sample included the annual reports and sustainability reports for 2008, as well as current CSR disclosures on the companies' websites. Out of the 373 included in the initial sample, 261 companies were included in the final sample, as described in table 1.

Table 1: Sample

Listed Companies (December 2008)	373 Companies
Deduction due to:	
Missing data ^a	(99)
Same Company ^b	(5)
General CSR reporting ^c	<u>(8)</u>
Final Sample	<u>261 Companies</u>

^a Denotes companies with missing annual reports, stand-alone reports and websites; ^b denotes to the same company having more than one listing in EGX once for common shares, and another for

⁴ This is because we do not want to forfeit any company that discloses CSR. Likewise, Duhb (2007) included two small companies not included in his initial sample -the top 100 companies listed in Switzerland- due to the quality of their CSR disclosure.

⁵ The companies were obtained by contacting the Egypt for Information Dissemination (EGID), URL: <http://www.egidegypt.com/>.

preferred and/or once listed in Egyptian pounds and another listed in US dollars; ^c represents companies with CSR disclosures for the whole group including other countries.

As a starting point we examined official company *websites* in order to get information concerning the annual reports for 2008, internet reporting and any CSR stand-alone reports for 2008. We also used *Thomson One Banker* to get the annual reports, in case the company did not have a website or did not provide its annual report on the website. The corporate social reporting data were measured using a content analysis technique. Data on explanatory variables were found either on the annual reports or on the companies' websites.

In order to measure CSR, many disclosure studies have used a content analysis approach to quantify the CSR financial and non-financial disclosures. Content analysis is defined by Abbott and Monsen (1979, p. 504) as:

"a technique for gathering data that consists of codifying qualitative information in anecdotal and literary form into categories in order to derive quantitative scales of varying levels of complexity."

Early CSR studies and surveys in developed countries constructed their own disclosure indices (see, for example, Ernst and Ernst, 1976; Carroll, 1979; Cowen et al., 1987). On the other hand, recent studies used disclosure indices developed in prior studies with minor modifications to suit each study (Kuasirikun and Sherer, 2004; Haniffa and Cooke, 2005; Naser et al., 2006; Rizk et al., 2008), while other studies utilized readily produced guidelines (Hussey et al., 2001; Morhardt et al., 2002; Stiller and Daub, 2007; Morhardt, 2009; Sun et al., 2010).

This research employs the sustainability report guidelines developed by the UN development programme and the Egyptian Corporate Responsibility Center (ECRC, 2008). This index is comprised of seven categories, six of which cover CSR while the seventh is a financial summary of CSR performance. However, the main problem of this index is the correspondence between some items and more than one disclosure point; this may deliberately bias the resulting score. For example, item 3.7 includes two distinctive points, 1) having a health and safety policy for employees, 2) abiding by OHRAS 18001 Certification. Another problem is that some categories had insufficient coverage, unlike disclosure indices developed in the prior literature about CSR in Egypt⁶. For instance, category 2 (human resources) is only mentioned under one item. Based on these disclosure index drawbacks, namely incompleteness and bias, we recognized that this index could not be used solely to measure the *variety* of CSR in Egypt. Although this index is not useful as a measure for CSR, the items included were of vital importance to Egyptian listed companies, and therefore ought to be included in a better structured index. The study therefore incorporated Global Reporting Initiative (GRI) G3 guidelines published in 2006 with the previous Egyptian reporting guidelines.

GRI is a network-based organization that develops and publishes a set of globally applicable sustainability reporting guidelines to facilitate the voluntary disclosure of economic, social and environmental practices by companies worldwide (Clarkson et al., 2008; Global Reporting Initiative, 2006). Due to the alliance of GRI and UN Global Compact (UNGC) the new generation of the GRI "G3" embraces the 10 UNGC principles (Global Reporting Initiative, 2006). Additionally, G3 is comprised of core indicators,

⁶ See the content analysis developed by Rizk et al. (2008).

which are of interest to most stakeholders and are assumed to be material for all companies, and additional indicators which represent emerging practices and are not necessary for all organizations (ibid.). In an attempt the study incorporated the core performance indicators for environmental, labour, customer (product), human rights and Society as expressed in Appendix 1.

To test the validity of the initial disclosure index, a pilot study comprised 4 companies chosen from the companies listed on ESG 30, using stratified sampling⁷ (i.e. the 4 companies were chosen randomly each from a different sector). Based on the pilot study, five points were added: 1.5 Reporting guidelines, 2.14 Employee communication, 3.3 Initiatives to provide energy-efficient products and services, 4.4 Customer privacy and 6.6 Anti-competitive behaviour, as shown in Appendix 1. This step was undertaken to avoid including an additional point under each category called “other” including any information that falls under a certain category but with no item for it. The final index comprised 55 points in 6 categories or themes, namely: overview (5 points), employee (15 points), environment (14 points), customer (8 points), human resources (6 points), and society (7 points).

The index measures the *variety* of disclosures using an unweighted, dichotomous measure (i.e. allocating an equal weight to each point on the index, giving 1 if the item is disclosed and 0 if not), which is consistent with prior literature (see, for example, Patten, 2002; Hannifa and Cooke, 2005; Branco and Rodrigues, 2008)⁸. The score is calculated as follows:

$$CSRI_j = \sum_{i=1}^N \frac{X_i}{N}$$

Where:

CSRI_j = corporate social reporting index score for company *j*.

N = number of items in the index (i.e. 55)

X_i = 1 if the item is disclosed

0 if the item is not disclosed

0 ≤ *I_j* ≤ 1

The *variety* of items represents the management motivation to provide CSR information generally, and may therefore be a reasonable measure (Bewley and Li, 2000). On the other hand, it is argued that this codification of data does not reveal the importance that companies give to each item (Zéghal and Ahmed, 1990; Deegan and Rankin, 1996; Gray et al., 1995a). Thus, this study also uses the number of sentences as a measure of the extent of disclosure, similar to prior literature (see for example: Hackston and Milne, 1996; Tsang, 1998). Milne and Adler (1999) and Gray et al. (1995a) argue that using the whole sentences to measure the *extent* of CSR disclosure best achieves the understanding of company’s disclosures which in turn will lead to a reliable identification of CSR disclosure; this is unlike counting words which do not convey any meaning to CSR disclosure (ibid.). The major drawback from such quantification methods is that it ignores any non-narrative disclosures as graphs, charts and photographs (see Beattie and Jones, 1992). Additionally, it is argued that the different grammatical structures may lead to using the same number of words and space in writing, while resulting on using different number of sentences (Unerman, 2000). On the other hand, Haniffa and Cooke (2005)

⁷ For more details, see Saunders et al. (2009).

⁸ Other studies used different weights depending on the disclosure type (see: Wiseman, 1982; Sun et al., 2010).

used both sentence and word measurement techniques and found that they were highly correlated.

Unerman (2000) contends that disclosure studies utilizing methods which only capture words and numbers, but ignore graphs, charts and photographs, forfeits proper representation of CSR. For instance, the existence of ISO 9001 certificate on the corporation website will not be scored if the number of sentences was the only method used. Forfeiting the information disclosed in this form may be considered a limitation (Haniffa and Cooke, 2005). Therefore, the study uses the *variety* of disclosure to overcome this aspect of using sentences as a sole measure; as well as using the *extent* of disclosure to overcome the main problem of using the total score of points disclosed as a sole measure due to its ignorance of the stress given to each point which in turn depicts its importance as outlined earlier. Thus, using both measures gives a reasonable identification to the CSR practices; which is consistent with Haniffa and Cooke (2005). However the study is not intended to judge on the quality of CSR⁹, it is intended to provide a clear snapshot of CSR in Egyptian listed firms in 2008. Thus, some attributes of the CSR as type of evidence and news provided were included as discussed in the next two paragraphs.

Some prior literature has discussed the type of evidence provided in the CSR disclosures (i.e. qualitative or quantitative). Gray et al. (1995a) contends that quality of evidence provided may be derived from its type. Wiseman (1982) assigned the highest score to the numerical information as it is more assertive or “hard”, and the least score to the qualitative information. Clarkson et al., (2008) contends that hard or quantitative disclosures are hard to mimic by weak reporting companies, whereas, soft or qualitative information can be easily adopted due to its less affirmative nature. Based on the preceding discussion, this research classifies the information presented as qualitative or quantitative, to classify the types of evidence provided in Egyptian listed companies’ CSR.

King (1996) refers to disclosure quality as the extent of self-interest bias included in the disclosures. In CSR it is proposed that companies have a self-incentive to disclose good (positive) rather than bad (negative) information to legitimise their behaviours and avoid any adverse selection (Verrecchia, 1983; Dye, 1985). Therefore, this research classifies CSR disclosures into positive, negative or neutral (see: Appendix 1); consistent with prior literature (Ernst & Ernst, 1978; Gray et al., 1995a; Hackston and Milne, 1996). To ensure consistency of codification, one of the authors coded the CSR disclosures in all channels based on a set of coding rules. To ensure reliability and validity, the set of coding rules were constructed by relying on the GRI 3 reference sheet¹⁰; this simple rule setting is consistent with Haniffa and Cooke (2005).

The data sources (annual report, website or standalone report) were read entirely before scoring to avoid any biased judgements as applied in literature. Applying the content analysis to the total sample of 261 companies, 143 (or approximately 55%) reported at least one point as shown in table 2.

Table 2: Companies disclosing CSR information

⁹ For more details on how to measure CSR quality see for instance Hasseldine et al (2005).

¹⁰ GRI G3 reference sheet can be viewed at URL:

http://www.globalreporting.org/NR/rdonlyres/DDB9A2EA-7715-4E1A-9047-FD2FA8032762/0/G3_QuickReferenceSheet.pdf [last viewed 30/6/2011].

Final Sample	<u>261 Companies</u>
No disclosure	<u>(118)*</u>
Total companies engaged in CSR	143 (54.79%)

* 118 companies with no disclosure due to: companies with no websites 66, websites under construction 7 and companies having websites with no disclosure 45. These companies did not provide any CSR disclosures in the annual reports as well.

The channels of distribution for CSR disclosure of the 143 companies were presented in table 3.

Table 3: CSR distribution in channels

Total companies engaging in CSR practices	143
Reporting in:	
Annual Reports	43
Website	53
Both (AR and website)	41
Stand-alone Report	3
All sources (AR, website, SR)	3

The composition of the 143 companies engaging in CSR practices by sector was provided in table 4. The explanatory variables and their measures are identified in table 5.

Table 4: Composition of sectors engaging in CSR

Group	Sector	Number of Companies	Percent (n÷143)
Financial (16.78%)	Banks	14	9.79%
	Financial services	10	6.99%
Industrial (69.24%)	Basic Resources	9	6.29%
	Chemicals	6	4.20%
	Construction and Materials	19	13.29%
	Food and Beverage	16	11.19%
	Healthcare and pharmaceuticals	10	6.99%
	Industrial goods	18	12.59%
	Oil and Gas	3	2.10%

Services (13.98%)	Personal and Household Products	16	11.19%
	Utilities	2	1.40%
	Real Estate	9	6.29%
	Retail	2	1.40%
	Travel & Leisure	5	3.49%
	Telecommunications	3	2.10%
	Technology	1	0.70%
	Media	0	0.00%
	Total	143	100%

Table 5: Measurement of explanatory variables

Variable	Measurement
Non-executive directors (NEDs)	Percentage of Non-executive to all directors
CEO duality (CEOD)	1=Duality; 0= No duality
CSR division (CSRD)	1= existence of CSR division; 0 otherwise
Family Directorship (FAMD)	Equals 1 if a member of the controlling family holds a position of a CEO, Honorary CEO, Chairman, or vice-chairman of the board; 0 otherwise. ^a
Institutional ownership (INSOWN)	Percentage of institutional ownership to equity
Foreign ownership (FOROWN)	Percentage of foreign ownership to total equity
Size (STAL)	Natural logarithm of total assets ^b
Profitability (ROA)	Return on assets ^c
Gearing (LTDE)	Long-term debt to equity ^d
Cross listing (CLIST)	1=Multiple listing; 0= Single listing
Auditor Type (AUDIT)	1= Big 4; 0= Non-big 4

^a Based on La Porta, et al. (1999); ^b consistent with Cheung et al., (2010); ^c ROA is calculated by the ratio of net income/total assets (Balkaoui and Karpik, 1989); ^d consistent with (Wallace and Naser, 1995; Haniffa and Cooke, 2005).

Nature of CSR disclosures

To analyse the nature of CSR in listed companies, the study firstly presents the frequencies of CSR index coverage as shown in table 6. The mean score for index coverage is 13.3%, with a standard deviation of 14.6%. This is an improvement by comparison with the very low mean CSR disclosure level of 4.17% found by Samaha and Dahawy (2011), but still remains a very low figure that is comparable to other previous studies in a Middle-Eastern context, such as Maali et al. (2006). 57% of companies made disclosures covering less than 10% of the index, with only 4 companies (i.e. 2.8% of the sample) scoring more than 50% of the index. The maximum coverage was 80% (i.e. 44 points) while the minimum was only 1.82% (i.e. 1 point). Again, these low levels and ranges are broadly consistent with prior studies of Egyptian CSR disclosures.

Table 6: Frequencies of CSR disclosure

Unweighted Score %	No. of Companies	Percent	Cumulative Percent
Less than 10%	81	56.6%	56.6%
10% < 20%	31	21.7%	78.3%
20% < 30%	14	9.80%	88.1%
30% < 40%	4	2.80%	90.9%
40% < 50%	9	6.30%	97.2%
50% < 60%	2	1.40%	98.6%
60% < 70%	1	0.70%	99.3%
70% < 80%	0	0.00%	99.3%
80% < 90%	1	0.70%	100%
N=143			
Mean Score	Minimum	Standard Deviation	
13.26%	1.82%	14.58%	
Median	Maximum		
7.27%	80%		

Table 7 presents the frequencies of each item on the index in terms of both the number of times the item was disclosed, and the total sentences per item from the three data sources (AR, websites, SR). The first category is the overview, which presents the top-level management adherence to CSR. Kolk and Pinkse (2010) argue that many companies have broadened the scope of corporate governance to be as part of the corporate social responsibility. As observed from category 1, 10.3%, 10.3% and 83.3% of the companies the CEO and Chairman are involved in CSR commitment in annual reports, website and stand-alone reports respectively. Also companies were likely to disclose information about awards they achieved. A few companies identified their compliance with one or more CSR guidelines (point 1.5) as follows: GRI, MDG and WBCSD/CRI mentioned once, Equator principles twice and UNGC compliance was stated four times.¹¹ Rizk (2006) found that no company complied with international initiatives in her sample for 2001-2002; this represents an improvement in compliance. Category 2 included employee information. The most frequent item in occurrence in AR was 2.1 general employee data because it is mandatory (see Hanafi, 2006). Companies also disclosed information about employee non-financial benefits, employee training and career development. This is consistent with Rizk et al.'s (2008) findings, and an explanation could be that companies use CSR disclosures to retain talented employees as well as sending signals to potential employees about the company attractiveness (Greening and Turban, 2000). In category 3, companies reported most frequently about their environmental policy, pollution and emissions and waste management; while a lower percentage reported pragmatic programs to preserve environment and the introduction of more energy-efficient products. Very few companies disclosed anything relating to packaging and transportation in addition to total environmental expenditures. The highest occurrence was the reporting of ISO 14001 certification. Under category 4, most companies were reporting the possession of ISO 9000 series, followed by the disclosure of customer satisfaction and complaints. No company disclosed non-compliance with laws to products and services permissions. Very few companies disclosed any human

¹¹ There are a total of 49 companies listed in UNGC in 2010, out of which 4 are listed firms. URL: http://www.unglobalcompact.org/participants/search?business_type=all&commit=Search&cop_status=all&country%5B%5D=53&joined_after=&joined_before=&keyword=&organization_type_id=&page=1&per_page=100§or_id=all [last accessed: 20 August, 2010]

rights aspects outlined under category 5. A large portion of companies reported on community information including descriptions of different donation types (direct, in-kind, zakat¹², medical, or educational). Also some companies reported on their involvement to public policy developments. Reporting on anti-competitive and anti-corruption policies and behaviour was limited.

In general terms, community and social information had the largest extent of disclosures for EGX listed companies in 2008, followed by employee information, then environmental information, customer, overview, while human rights was the least disclosed. According to Hanafi (2006), employee information was most frequently found, followed by both community and environment. This ranking was not found in annual report CSR disclosures, as companies stressed on employee information in the annual reports compared to websites. In stand-alone reports, community information represented 34.9% of the total sentences, followed by environmental information (20.6%), employee (18.5%), overview (15.2%), customer (4.4%) and human rights (2.9%). These findings show that the channel of information disclosure may be a factor in explaining the differences in CSR themes; which is similar to Rizk's (2006) findings. The dominance of community information is all channels is consistent with the notion that CSR in Egypt is "mainly a philanthropic concept" (CSR Navigator, 2007, p.16).

The average number of sentences per company is 14.8 sentences in the AR, 16.7 on the website and 143.3 in stand-alone reports. Additionally, it was found that 71-86% of the information was positively disclosed, depending on the source of disclosure, 11-26% neutral, while negative information was almost negligible (1-3%). This is consistent with Hackston and Milne, (1996). Alternatively, 59-81% of the evidence given was qualitative, whilst 19-41% was quantitative.

Table 7: Descriptive Statistics for dependent variable (per index points)

Disclosure Index (55 points, in 6 categories)	Annual Report(n=87)		Website(n=97)		Stand-alone Report(n=6)	
	N (%)	Sent (%)	N (%)	Sent (%)	N (%)	Sent (%)
Category(1): Overview						
1.1 Chairman, CEO, or equivalent position's Statement on CSR commitment.	9 (10.3%)	20	10(10.3%)	29	5(83.3%)	33
1.2 Short, medium, and long term vision towards environmental and social performance	3 (3.4%)	9	3(3.1%)	17	4(66.7%)	70
1.3 Trends affecting sustainability (incl. macroeconomic or political)	1 (1.1%)	2	0(0.0%)	0	2(33.3%)	14
1.4 Awards received	11(12.6%)	19	17(17.5%)	25	0(0.0%)	0
1.5 Reporting guidelines (incl. GRI, etc)	1 (1.1%)	1	3(3.1%)	6	3(50%)	14
	Total=	51(4.0%)	Total =	76(4.7%)	Total =	131(15.2%)
Category(2): Employee / Labour						
2.1 Number of employees, employment type, and region.	46 (52.9%)	74	22(22.7%)	25	3(50%)	6
2.2 Employee turnover (including gender and age).	3 (3.4%)	3	1(1.0%)	2	2(33.3%)	3
2.3 Rules of layoff	3 (3.4%)	3	2(2.1%)	2	1(16.7%)	1
2.4 Employee non-financial benefits (i.e. insurance, activities, housing, social clubs, etc).	28 (32.2%)	76	21(21.6%)	85	3(50%)	11
2.5 Employee profit sharing	20 (23.0%)	31	5(5.2%)	7	2(33.3%)	2

¹² Zakat is a kind of Islamic tax on accumulated wealth that is given to certain recipients which are mainly the poor and needy (for more details, see: Salim, 2008).

2.6 Employee healthcare	12 (13.8%)	17	17(17.5%)	28	3(50%)	6
2.7 Employee involvement in decision making (employee presentation)	4 (4.6%)	8	6(6.2%)	11	5(83.3%)	9
2.8 Employee career development program (including average hour per emp.)	16 (18.4%)	32	17(17.5%)	50	3(50%)	21
2.9 Health and safety policy for employees	13(14.9%)	64	22(22.7%)	69	4(66.7%)	26
2.10 OHRAS 18001 certification	10(11.5%)	9	21(21.6%)	19	1(16.7%)	1
2.11 Encouraging employee voluntarism	6(6.9%)	17	7(7.2%)	19	3(50%)	14
2.12 Equal opportunity employees (incl. ratio of men to women base salary)	10(11.5%)	21	13(13.4%)	27	4(66.7%)	17
2.13 Employee education/ Training	27(31.0%)	76	29(29.9%)	67	5(83.3%)	15
2.14 Employee communication	7(8.0%)	19	6(6.2%)	20	4(66.7%)	18
2.15 Employment of disabled	3(3.4%)	6	5(5.2%)	9	3(50%)	3
	Total = 456(35.3%)		Total = 440(27.2%)		Total = 159(18.5%)	
Category(3): Environment						
3.1 Environmental policy (incl. environmental protection and investments)	17(19.5%)	44	24(24.7%)	74	6(100%)	38
3.2 Energy consumption	6 (6.9%)	10	8(8.2%)	15	2(33.3%)	10
3.3 Initiatives to provide energy-efficient products and services	8(9.2%)	11	9(9.3%)	18	4(66.7%)	26
3.4 Water usage	3(3.4%)	5	7(7.2%)	10	2(33.3%)	7
3.5 Materials used (incl. recycled input materials)	9(10.3%)	19	10(10.3%)	18	3(50%)	20
3.6 Packaging practices	2(2.3%)	5	2(2.1%)	5	0(0.0%)	0
3.7 Product recycling and waste management	14(16.1%)	26	16(16.5%)	32	4(66.7%)	13
3.8 Product and materials transportation impact	0(0.0%)	0	0(0.0%)	0	1(16.7%)	2
3.9 Preserving environment (greening practices)	6(6.9%)	11	8(8.2%)	21	4(66.7%)	13
3.10 Pollution and emissions (incl. spills, ozone-depleting substances, carbon)	15(17.2%)	45	15(15.5%)	36	3(50%)	36
3.11 ISO 14001 certification	22(25.3%)	20	30(30.9%)	25	2(33.3%)	7
3.12 Crisis management	9(10.3%)	18	7(7.2%)	16	2(33.3%)	3
3.13 Fines for non-compliance with regulations	4(4.6%)	7	1(1.0%)	1	1(16.7%)	2
3.14 Total environmental expenditures and instruments	1(1.1%)	2	0(0.0%)	0	0(0.0%)	0
	Total = 224(17.4%)		Total = 270(16.7%)		Total = 177(20.6%)	
Category(4): Customer and product responsibility						
4.1 Customer satisfaction surveys	10(11.5%)	20	14(14.4%)	26	4(66.7%)	7
4.2 Customer feedback and complaints	7(8.0%)	15	11(11.3%)	17	3(50%)	5
4.3 Customer health and safety	1(1.1%)	2	7(7.2%)	11	4(66.7%)	10
4.4 Customer privacy	0(0.0%)	0	0(0.0%)	0	2(33.3%)	3
4.5 product and service quality (incl. labeling)	6(6.9%)	30	9(9.3%)	14	2(33.3%)	6
4.6 certification regarding product quality (incl. ISO 9000, 9001, six sigma, etc)	25(28.7%)	20	50(51.5%)	56	2(33.3%)	3
4.7 Adherence to laws in advertising and marketing	1(1.1%)	3	4(4.1%)	6	3(50%)	4
4.8 Fines for non-compliance with laws concerning permission and use of products/services	0(0.0%)	0	0(0.0%)	0	0(0.0%)	0
	Total = 90(7.0%)		Total = 130(8.0%)		Total = 38(4.4%)	
Category(5): Human rights						
5.1 Total number of incidents of discrimination and actions taken	1(1.1%)	2	1(1.0%)	2	1(16.7%)	3
5.2 Child labor incidents (incl. efforts to eliminate it)	3(3.4%)	3	5(5.2%)	8	2(33.3%)	2
5.3 Forced labor incidents (incl. efforts to eliminate it)	3(3.4%)	3	4(4.1%)	4	2(33.3%)	2
5.4 Human right screening in investment decisions	3(3.4%)	5	6(6.2%)	12	4(66.7%)	9
5.5 Suppliers screening for human right compliance	5(5.7%)	7	3(3.1%)	5	3(50%)	7
5.6 Employee right to freedom of association and collective bargaining	4(4.6%)	7	3(3.1%)	4	1(16.7%)	2
	Total = 27(2.1%)		Total = 34(2.1%)		Total = 25(2.9%)	
Category (6): Society						
6.1 Policy on community investment	21(24.1%)	67	26(26.8%)	101	5(83.3%)	44
6.2 Amount/ description of direct and in-kind donations (incl. Zakat)	31(35.6%)	100	23(23.7%)	136	5(83.3%)	69
6.3 Amount/ description of medical and health donations	23(26.4%)	94	23(23.7%)	124	4(66.7%)	43
6.4 Amount/ description of education/ training donations	25(28.7%)	119	33(34.0%)	215	4(66.7%)	102
6.5 corruption risk/ anti- corruption policies	2(2.3%)	2	2(2.1%)	2	3(50%)	11
6.6 Anti-competitive behavior	1(1.1%)	2	1(1.0%)	6	1(16.7%)	3
6.7 Participation in public policy development	12(13.8%)	58	15(15.5%)	82	4(66.7%)	58
	Total = 442(34.3%)		Total = 666(44.2%)		Total = 330(34.9%)	
Total	T. sent = 1290		T. sent = 1616		T. sent = 860	
News (p= positive, Ng= negative, Nu= neutral)						
	P	Ng	Nu	P	Ng	Nu
	71.4%	2.4%	26.2%	74.1%	1.7%	24.2%
	85.5%	3.2%	11.3%			
Evidence (qualitative, quantitative)						
	Qual.	Quan.	Qual.	Quan.	Qual.	Quan.
	58.83%	41.17%	73.56%	26.44%	80.6%	19.4%

Research method

Consistent with disclosure study literature¹³, the study uses multiple OLS regression to test the hypothesis developed earlier. Additionally, the relation between the dependant

¹³ See for example (Cowen et al., 1987; Balkaoui and Karpik, 1989; Roberts, 1992; Haniffa and Cooke, 2005; Branco and Rodrigues, 2008).

and independent variables are assumed to be monotonic¹⁴. Therefore, the model is developed as follows:

$$\begin{aligned} \text{CSRI} = & \beta_0 + \beta_1\text{NED} + \beta_2\text{CEOD} + \beta_3\text{CSR D} + \beta_4\text{FAMD} + \beta_5\text{INSOWN} \\ & + \beta_6\text{FOROWN} + \beta_7\text{STAL} + \beta_8\text{ROA} + \beta_9\text{LTDE} + \beta_{10}\text{CLIST} + \\ & + \beta_{11}\text{AUDIT} + \varepsilon_{it} \end{aligned}$$

Where:

CSRI = corporate social reporting index with unweighted categories and channels

NED= proportion of non-executive directors to total board members

CEOD= existence of CEO role duality

CSR D= existence of a corporate social reporting division

FOROWN= proportion of foreign ownership to total ownership

INSOWN= proportion of institutional ownership to total ownership

FAMD= existence of family directorship on the board

STAL = natural logarithm of total assets

ROA= return on assets

LTDE= Long-term debt/total equity

CLIST= Cross listing

Audit= Type of auditor (Big4 and non-big4)

$\beta_0, \dots, \beta_{11}$ = Coefficients to be estimated,

ε_{it} = error term

To ensure the robustness of the results, the study also uses a modified CSRI model in addition to the previously developed model. This method is based on the approach initially developed by Street and Gray (2002), which has been replicated in an Egyptian context by Samaha and Stapleton (2008, 2009) and has been referred to in a separate study by Tsalavoutas et al. (2010) as a ‘partial compliance’ method. Under this ‘PC’ method, instead of assigning an equal weight to each point on the disclosure index, and therefore resulting in categories with different weights dependant on the number of items included under each; the method assigns equal weight to each category, and assumes that each CSR channel is equally important. The method is represented using the equation:

$$\text{CSRI}_j(\text{PC}) = \left[\frac{\left(\sum_{ai=1}^{ni} \frac{X_{ai}}{ni} \right) + \left(\sum_{wi=1}^{ni} \frac{X_{wi}}{ni} \right) + \left(\sum_{si=1}^{ni} \frac{X_{si}}{ni} \right)}{N_c} \right]$$

Where:

$\text{CSRI}_j(\text{PC})$ = the score of company j using the modified PC index

X_{ai} = the score of company j from each category i in the annual report

X_{wi} = the score of company j from each category i in the website

X_{si} = the score of company j from each category i in the stand-alone report

n_i = the maximum possible score under each category i (i.e. 5, 15, 14, 8, 6, 7 respectively)

N_c = the number of disclosure channels (i.e. 3)

¹⁴ A monotonic relationship, monotonic transform is defined by Cohen et al. (2003, p. 676) as “a rescaling in which the rank order of variable values is retained without necessarily retaining the relative spacing of the scores”.

$$0 \leq I_j \leq 1$$

The second multiple OLS regression model is thus stated as:

$$\begin{aligned} \text{CSRI (PC)} = & \beta_0 + \beta_1\text{NED} + \beta_2\text{CEOD} + \beta_3\text{CSR D} + \beta_4\text{FAMD} + \beta_5\text{INSOWN} \\ & + \beta_6\text{FOROWN} + \beta_7\text{STAL} + \beta_8\text{ROA} + \beta_9\text{LTDE} + \beta_{10}\text{CLIST} \\ & + \beta_{11}\text{AUDIT} + \varepsilon_{it} \end{aligned}$$

The existence of multicollinearity may result in serious problems to the outputs of regression models (Belsley, et al., 1980). This study uses the variance inflation factor (VIF) as well as Pearson correlation matrix to check for multicollinearity.¹⁵ Outliers may also lead to unreliable outputs of the regression model, as multiple regression is very sensitive to outliers (Pallant, 2007).¹⁶ The study excludes any outlier values above 3 standard deviations. The study also checked for normality of data using the Kolmogorov-Smirnov test.

In order to test the differences between the two independent samples presented in hypothesis 12 and 13, the study uses a non-parametric Mann-Whitney U test. The study also uses both scoring methods for the CSR (unweighted and modified PC).

Results

Descriptive Statistics of results

Panel A from table 8 provides the descriptive statistics for both dependent and continuous independent variables used for the main results. The number of companies included in final regression model was 55; this is due to the missing disclosures in the annual reports to the explanatory variables. The mean of CSRI is 21.79%, higher than that for the full sample 13.26%; this score drops using the CSRI (PC) method to a mean 9.81. Additionally, LTDE had a minimum score of 0.0% given that two companies did not have long-term debts in their balance sheets. The frequencies of dummy variables were presented in panel B. Interestingly, more than 55% of the companies had role duality, 44% were family directed and 69% of the companies employed a big4 audit firm. Only 9% of the companies had a CSR division, and almost 22% were cross-listed. As shown in table 8, the dependent variable fails Kolmogorov-Smirnov normality test, therefore transformed values will be used in the regression analysis and Mann-Whitney non-parametric model is used for comparing governmental and non-governmental CSR scores.

Table 8

Panel A: Descriptive statistics of dependent and continuous independent variables (N= 55)

¹⁵ As a rule of thumb a value of VIF exceeding 10 causes serious multicollinearity problem (Cohen et al., 2003); in Pearson correlation variables are highly correlated if the correlation is > 0.80 (see: Gujarati and Porter, 2009).

¹⁶ Cohen et al., (2003, p.676) defines outliers as “atypical data points that do not fit with the rest of the data and appear to come from another population”.

Variables	Mean	Median	Std. Deviation	Minimum	Maximum	K-S significance
CSRI	21.79	14.55	18.26	1.82	80.00	0.33**
CSRI (PC)	9.81	6.17	10.05	0.37	46.67	0.54*
NEO	29.26	25.01	28.39	0.00	85.00	
INSOWN	21.14	0.00	32.37	0.00	98.48	
FOROWN	11.45	0.00	22.98	0.00	95.00	
STA ^a	9334819.7	3338581.72	14885279.5	33551.12	57127732.82	
ROA	8.25	6.60	8.62	-12.81	35.90	
LTDE	52.02	23.66	78.60	0.00	476.00	

^a Is the size of total assets in 000s, the natural logarithm is used in the regression model. * significance at 10%, ** significance at 5%.

Panel B: Descriptive statistics of dummy variables (N=55)

		N	Percentage
CEOD	1	30	55.50%
	0	25	44.55%
CSRD	1	5	9.09%
	0	50	90.91%
FAMD	1	24	43.64%
	0	31	56.36%
CLIST	1	10	22.22%
	0	45	77.78%
AUDIT	1	38	69.09%
	0	17	30.90%

Regression Results

Table 9 presents the correlation between dependent and continuous independent variables. The correlation results do not show any multicollinearity concerns.¹⁷ Therefore, no variables required to be omitted. The correlation between both CSR methods is very high 0.955, and significant at 1% level. VIF results outlined in table 4.3 also do not impose multicollinearity as the highest value was 2.749.¹⁸ As previously stated outliers above 3 standard deviations were eliminated.

Table 9: Pearson Correlation matrix

¹⁷ As previously shown the role of thumb is > 0.80 result in multicollinearity concerns (Gujarati and Porter, 2009).

¹⁸ VIF exceeding 10 causes serious multicollinearity (Cohen et al., 2003)

	CSRI	CSRIPC	NEO	INSOWN	FOROWN	STAL	ROA	LTDE
CRRI	1							
CSRIPC	.955**	1						
NEO	.494**	.518**	1					
INSOWN	-.087	-.102	-.312*	1				
FOROWN	.297*	.333*	.122	.430**	1			
STAL	.340**	.368**	.282*	.392**	.490**	1		
ROA	.059	.063	.012	-.245	-.226	-.180	1	
LTDE	.239	.236	.323*	.071	.253	.361**	-.178	1

* Correlation is significant at the 5% level (2-tailed).

** Correlation is significant at the 1% level (2-tailed).

The regression analysis results using both standard and modified (PC) methods are shown in table 10. The R-squared for both models were 0.601 and 0.539 respectively.¹⁹ In terms of corporate governance variables, the existence of non-executive directors was positively related to CSR: however, the results are not material (p-value of 0.271 and 0.281 respectively). This result agrees with Ho and Wang (2001), which found positive insignificant association between NEDs and narratives. A possible explanation would be that while the inclusion of NEDs in the board lead to enhancing firm's compliance with the disclosure requirements (Forker, 1992); still there is a dominance of executives on the boards (median of NEDs 25.01%) this low percentage of NEDs may lumber their monitoring role (Ho and Wang, 2001). Additionally, the Egyptian Center of Economic Studies (2003) reports that the NED concept is still not crystallized in Egyptian companies. However, this result may be contrasted with Samaha and Dahawy (2011) who found that the proportion of independent directors is an important explanatory variable to CSR in Egypt. This may be attributable to the differences in the sample chosen or different years of analysis. The second CG variable, CEO duality was found positive and significant at 5% under both methods. Thus, CEO duality is found to be significant, and this can be attributed to the ability of powerful CEOs to pursue a CSR agenda more easily (Barnea and Rubin, 2010, p.79)

As hypothesized, the existence of the CSR division was found to be positive and significantly related with CSR at 5%; this is in line with Cowen et al. findings (1987). This could be attributed to the higher propensity to report CSR in companies having CSR divisions (ibid.). Moreover, the existence of a CSR division may be derived from the company's social concern. Family directorship was found to have a positive and significant relationship to CSR at 1% with CSRI and 5% with CSRI (PC). This result is consistent with AbdelFattah, et al. (2008), where they found a significant positive relation to voluntary disclosures of Egyptian listed firms. This is likely due to the need to protect family image and reputation in addition to family assets (Dyer and Whetten, 2006); given the agency problems to those firms (Burkart, et al., 2003). Another possibility is the need to secure the necessary funds from different sources (AbdelFattah, et al., 2008).

Table 10: Multiple regression results using both CSRI and CSRI (PC) methods

Method	CSRI	CSRI (PC)
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¹⁹ A very high R² above 0.9 results in multicollinearity concerns (Gujarati and Porter, 2009).

Variables	Expected Sign	Coefficient	t-statistic	Sig t	Coefficient	t-statistic	Sig t	VIF
Intercept			-3.205	.003***		-2.596	.013**	
NED	+	.144	1.115	.271	.152	1.092	.281	1.802
CEOD	±	.249	2.341	.024**	.279	2.433	.019**	1.224
CSRD	+	.286	2.327	.025**	.265	2.151	.037**	1.529
FAMD	±	.361	2.787	.008***	.371	2.664	.011**	2.749
INSOWN	+	.198	1.241	.221	.239	1.391	.171	1.711
FOROWN	+	.148	1.178	.245	.111	0.822	.416	1.624
STAL	+	.122	.852	.399	.117	0.759	.452	1.480
ROA	+	.093	.866	.391	.089	0.769	.446	1.617
LTDE	+	-.142	-1.208	.234	-.115	-0.909	.368	1.952
CLIST	+	.281	2.295	.027**	.237	1.799	.079*	1.241
AUDIT	+	-.052	-.389	.699	-.082	-0.569	.572	2.220

$R^2=0.601$, Adjusted $R^2= 0.499$, F -statistic= 5.892 , $p=0.000$ ***

$R^2= .539$, Adjusted $R^2=.429$, F -statistic= 4.571 , $p= 0.000$ ***

* denotes significance at 10% level

** denotes significance at 5% level

***denotes significance at 1% level

The results of the multiple regression shows a positive insignificant relationship to ownership structure, measured by proportion of institutional ownership and proportion of foreign ownership. This result suggests that institutional ownership and foreign ownership as a proxy to powerful shareholder influence do not seem to impact on CSR.

Unexpectedly, both methods show a positive and insignificant relationship to firm total assets (as a proxy to firm size). Size was identified to be an important variable in explaining CSR in some prior literature (see Adams, 2002). However, the same result was found by Elsayed and Hoque (2010) on Egyptian non-financial listed firms. On the other hand, Samaha and Dahawy (2011) found that size did not explain variations in CSR. Therefore, size may have limited influence on CSR. The results also show that ROA (as a proxy to profitability) does not explain CSR. This is consistent with Cowen et al., (1987) but incompatible with (Roberts, 1992; Naser, et al., 2006). Samaha and Dahawy (2010, 2011) used ROE as a proxy to profitability and found similar findings. Long-term debt to equity (as a proxy of leverage) was found to have a negative insignificant relation to CSR. This is consistent with Haniffa and Cooke (2005) and Samaha and Dahawy (2010, 2011). Cross-listing was significant at a 5% in explaining the variations in CSR when using CSRI (weighted) and 10% under the unweighted method. This result is consistent with (Hackston, and Milne, 1996; Haniffa and Cooke, 2005; Hassan et al., 2006; Aly et al. 2010) and inconsistent with Elsayed and Hoque (2010). Hence, it could be concluded that cross-listed firms face more international regulations to the local listed firms and would therefore have a higher motive to local listed firms (Cooke, 1992). Finally, audit firm size (big 4 and non-big 4) did not seem to help explain CSR, which is consistent with Forker (1992) and Samaha and Dahawy (2011), but not Samaha and Dahawy (2010). Given that Samaha and Dahawy (2010) used the largest 30 companies in EGX and found a positive significant relationship between voluntary disclosure and type of auditor, this might suggest that the decision to appoint a Big 4 audit firm is unrelated to the decision to report social and environmental information in smaller listed firms.

Table 11 shows the comparison of the two samples, governmental and non-governmental, using the full sample of 143 companies (41 governmental and 102 non-governmental).²⁰ The mean score for non-governmental companies is 14.93% (i.e. above the mean of the sample 13.26%). Conversely, the mean of 8.77% for governmental companies is below the overall mean. Mann-Whitney tests using the standard unweighted CSRI shows a significant difference between both groups. Thus, hypothesis 12 could not be rejected at 5% level, and can conclude that the mean for non-governmental companies is significantly higher than governmental. Consistently, similar results were found using the modified CSRI (PC) method. Therefore, it could be interpreted that there are satisfactory evidence at 5% level that non-governmental companies utilizes channels of CSR better than governmental companies do. These results agree with Elsayed and Hoque (2010) who found a significant negative relation. One explanation may be the lower threats to legitimacy facing Egyptian governmental companies, as they are able to secure the required funds from state-owned banks and government (Hassabelnaby, et al., 2003), while not resorting to issuing new shares (Abd-Elsalam and Weetman, 2003).

Table 11: Comparing Governmental and non-governmental companies CSR

Method	CSRI		CSRI (PC)	
	Gov.	Non-gov.	Gov.	Non-gov.
<u>Mann-Whitney U test</u>				
Mean (St. deviation)	8.77%(10.23%)	14.93%(15.83%)	3.00%(3.51%)	6.29%(8.38%)
z-value	-2.314		-2.282	
Significance ¹	0.020*		0.022*	
¹ Two tailed test		N= 143		
* Significance at 5% level		N (Gov)= 41 N (Non-gov)= 102		

Summary and Conclusions

Employing a sample of 261 listed companies, it was found that a ratio of 54.8% (i.e. 143 companies) engaged in CSR disclosures. The CSR of the 143 companies from three sources (annual report, website and stand-alone report) was analysed using a disclosure index, which included 55 points from 6 categories, that is: overview, employee/labour, environment, customer/product, human rights and society. The index was initially built from the sustainability report published by the Egyptian Corporate Responsibility Center and was then refined using the Global Reporting Initiatives latest version G3. This index measures the *variety* and *extent* of disclosures in addition to the news and evidence provided.

The descriptive analysis results of the 143 companies showed that 56.6% of the companies covered less than 10% of the index; which implies that CSR disclosures remains very low, even by comparison with other developing countries (Belal and Momin, 2009). The analysis of scores by index showed that community and society information dominated CSR in Egyptian listed companies. On the contrary, human rights received very limited attention by listed companies. A possible reason is the low attention given by the Egyptian sustainability reporting guidelines to human rights issues. Between

²⁰ Information about the company background and legal form is mandatory disclosed at the footnotes; therefore the full sample of companies engaged in CSR was used.

the two extremes, companies most frequently reported employee information, followed by environmental, customer and overview information respectively. Moreover, the relative importance of a category may change from channel of disclosure to another. Additionally, there were a large number of positive disclosures, fewer neutral disclosures and almost negligible negative news disclosures. The disclosures also tended to be declarative (qualitative).

The study compared governmental and non-governmental CSR using Mann-Whitney U tests. The results indicate that both groups are different in CSR disclosures. Moreover, non-governmental companies use more channels of disclosure than governmental companies do. This implies that governmental companies suffer lower legitimacy threats as they are able to secure their financial needs using state-owned banks (Hassabelnaby, et al., 2003).

To explore the CSR determinants; that is: corporate governance mechanisms and firm characteristics, the study employed the multiple OLS regression using both standard and modified unweighted scoring methods to measure the dependent variable. The results showed that the existence of a CSR division, family members on the board, CEO duality and cross-listing helped in explaining the variability of the CSR from the three channels in Egyptian listed companies. Other variables: proportion of NEDs, institutional ownership and foreign ownership, as corporate governance variables did not affect CSR. Firm characteristics not seeming to explain CSR were size, profitability, leverage and type of audit firm.

The significant positive relationship between existence of a CSR division and CSR disclosure implies that companies having CSR divisions have a greater tendency to engage in CSR which comes from the company's interest in fulfilling its social concerns; this is consistent with managerial legitimacy theory. The significant positive relationship between family directorship and CSR implies that family-owned businesses in Egypt are very keen to protect their image and reputation by conceiving CSR as part of their reputation risk management. Likewise, cross-listing has a significant positive relationship which implies that international regulations imposed on cross-listed firms will derive them to report more CSR than domestic listed ones. CEO duality has positive relationship which suggests that powerful CEOs can pursue CSR agendas (Barnea and Rubin, 2010), given that CEOs are deeply involved in promoting the image of their respective firms through social responsibility (Waldman, et al., 2006). Moreover, Adams et al. (2005) contend that power centralised in the hands of the CEO can lead to infusing firms' outcomes and activities more directly.

The regression model was constrained by incomplete data availability of the explanatory variables. We were therefore able to collect full data for only 55 companies out of 143 companies disclosing CSR. Therefore, the 88 missing cases may have an effect on the accuracy of output. The study provides a snapshot on the CSR practices by employing one year's (2008) data to test the hypothesis. Therefore, it is difficult to generalize the results over other periods. A longitudinal study may be required in the future to test the robustness of the results and observe the CSR change over time, particularly in light of the pace of reform and change within Egypt. Due to the diverse nature of the companies included in the sample from state-owned, non state-owned, multinational subsidiaries, family controlled entities and other, a more in-depth primary empirical study would provide more understanding of the CSR motives and influences of those various types of listed firms in Egypt.

One of the main advantages of this paper is its broad coverage of the nature and attributes explaining CSR practices in Egypt. At the same time however, the research does not investigate the effects of individual managers' norms and values, as formal education, professionalism and professional communication networks on the actions and internal motives of managers in the face of societal expectations (Belal and Momin, 2009). Thus, it is possible that further in-depth analysis would be undertaken to discover those internal attributes effect on CSR. Future research should also, in our view, investigate the effect of media, international influences, culture and religion to explain the motives and norms of CSR in Egypt (Kamla, 2007).

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Appendix 1: Content Analysis

Content Analysis (6 Categories, 55 Binary disclosure points)	Sources: (1) Sustainability report (SR), (2) GRI, (3) S&P EGX ESG index	Score (0, or 1)	# of sentences	Type (qualitative, quantitative)	News (+ve, -ve, or neutral)
Category(1): Overview					
1.1 Chairman, CEO, or equivalent position's Statement on CSR commitment.	SR 1.1, GRI 1.1				
1.2 Short, medium, and long term vision towards environmental and social performance	GRI 1.1				
1.3 Trends affecting sustainability (incl. macroeconomic or political)	GRI 1.1, 1.2				
1.4 Awards received	SR 1.2				
1.5 Reporting guidelines (incl. GRI, etc)	S&P index (item added)				
Category(2): Employee / Labour					
2.1 Number of employees, employment type, and region.	GRI LA1, LA13				
2.2 Employee turnover (including gender, age and region).	GRI LA2				
2.3 Rules of layoff	SR 3.5				
2.4 Employee non-financial benefits (i.e. insurance, activities, housing, social clubs, etc).	SR 3.3				
2.5 Employee profit sharing	SR 3.6				
2.6 Employee healthcare	SR 3.4, GRI LA7, LA8				
2.7 Employee involvement in decision making (employee presentation)	SR 3.2				
2.8 Employee career development program (including average hour per emp.)	SR 3.1, GRI LA12				
2.9 Health and safety policy for employees	SR 3.7, GRI LA7, LA8				
2.10 OHRAS 18001 certification	SR 3.7				
2.11 Encouraging employee voluntarism	SR 3.10				
2.12 Equal opportunity employees (incl. ratio of men to women base salary)	SR 3.8, GRI LA14				
2.13 Employee education/ Training	SR 3.1, GRI LA10				
2.14 Employee communication	S&P index, Rizk et al., (2008)- (item added)				
2.15 Employment of disabled	SR 3.8, GRI LA13				
Category(3): Environment					
3.1 Environmental policy (incl. environmental protection and investments)	SR 4.1, GRI EN26				
3.2 Energy consumption	SR 4.3, GRI EN3, EN4				
3.3 Initiatives to provide energy-efficient products and services	GRI EN5, EN6 (item added)				
3.4 Water usage	SR 4.4, GRI EN8				
3.5 Materials used (incl. recycled input materials)	SR 4.4, GRI EN1, EN2				
3.6 Packaging practices	GRI EN27				
3.7 Product recycling and waste management	SR 4.4, GRI EN21, EN22, EN23				
3.8 Product and materials transportation impact	SR 4.6, GRI EN24, EN29				
3.9 Preserving environment (greening practices)	SR 4.7				
3.10 Pollution and emissions (incl. spills, ozone-depleting substances, carbon)	SR 4.2, GRI EN (16,17,19,20)				
3.11 ISO 14001 certification	SR 4.5				
3.12 Crisis management	SR 4.8				
3.13 Fines for non-compliance with regulations	GRI EN28				
3.14 Total environmental expenditures and instruments	GRI EN30				

Category(4): Customer and product responsibility					
4.1 Customer satisfaction surveys	SR 5.1				
4.2 Customer feedback and complaints	SR 5.2				
4.3 Customer health and safety	GRI PR1				
4.4 Customer privacy	GRI PR8 (item added)				
4.5 product and service quality (incl. labeling)	GRI PR3				
4.6 certification regarding product quality (incl. ISO 9000, 9001, six sigma, etc)	SR 5.3				
4.7 Adherence to laws in advertising and marketing	SR 5.4, GRI PR6				
4.8 Fines for non-compliance with laws concerning permission and use of products/services	GRI PR9				
Category(5): Human rights					
5.1 Total number of incidents of discrimination and actions taken	GRI HR4				
5.2 Child labor incidents (incl. efforts to eliminate it)	SR 2.1, GRI HR6				
5.3 Forced labor incidents (incl. efforts to eliminate it)	SR 2.1, GRI HR7				
5.4 Human right screening in investment decisions	GRI HR1				
5.5 Suppliers screening for human right compliance	GRI HR2				
5.6 Employee right to freedom of association and collective bargaining	GRI HR5				
Category (6): Society					
6.1 Policy on community investment	SR 6.1, GRI SO1				
6.2 Amount/ description of direct donations (incl. in-kind and Zakat)	SR 7.1, 7.2				
6.3 Amount/ description of medical and health donations	SR 6.4				
6.4 Amount/ description of education/ training donations	SR 6.2				
6.5 corruption risk/ anti- corruption policies	GRI SO (2,3,4)				
6.6 Anti-competitive behaviour	GRI SO7 (item added)				
6.7 Participation in public policy development	SR 6.3, GRI SO5				
Total					