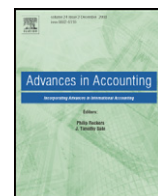




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The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt

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ABSTRACT

This paper assesses the extent of corporate governance voluntary disclosure and the impact of a comprehensive set of corporate governance (CG) attributes (board composition, board size, CEO duality, director ownership, blockholder ownership and the existence of audit committee) on the extent of corporate governance voluntary disclosure in Egypt. The measurement of disclosure is based on published data created from a checklist developed by the United Nations, which was gathered from a manual review of financial statements and websites of a sample of Egyptian companies listed on Egyptian Stock Exchange (EGX). Although the levels of CG disclosure are found to be minimal, disclosure is high for items that are mandatory under the Egyptian Accounting Standards (EASs). The failure of companies to disclose such information clearly shows some ineffectiveness and inadequacy in the regulatory framework in Egypt. Moreover, the phenomenon of non-compliance may also be attributed to socio-economic factors in Egypt. Therefore, it is expected that Egyptian firms will take a long time to appraise the payback of increased CG disclosure. The findings indicate that that—*ceteris paribus*—the extent of CG disclosure is (1) lower for companies with duality in position and higher ownership concentration as measured by blockholder ownership; and (2) increases with the proportion of independent directors on the board and firm size. The results of the study support theoretical arguments that companies disclose corporate governance information in order to reduce information asymmetry and agency costs and to improve investor confidence in the reported accounting information. The empirical evidence from this study enhances the understanding of the corporate governance disclosure environment in Egypt as one of the emerging markets in the Middle East.

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1. Introduction

This paper focuses on one part of the reform process in Egypt—the development of the regulatory framework commencing in the late 1990s to improve corporate governance (CG) practices. Specifically, it is argued, if such practices follow international norms they can mitigate the financial problems of developing nations that include: weak and illiquid stock markets, economic uncertainties, weak investor protection, and frequent government intervention, (Ahunwan, 2002; Gugler, Mueller, & Burcin, 2003; Rabelo & Vasconcelos, 2002; Reed, 2002; Tsamenyi, Enninful-Adu, & Onumah, 2007); poor performance, and high levels of ownership concentration (Ahunwan, 2002;

Rabelo & Vasconcelos, 2002; Tsamenyi et al., 2007); and state ownership of companies, weak legal and judiciary systems, weak institutions, and limited human resources capabilities (Mensah, 2002, Young, Peng, Ahlstrom, Bruton, & Jiang, 2008).

However, *de jure* reform does not necessarily translate into reform of actual practice, and although many researchers have examined corporate governance in developed nations, much less academic study has been made of developing and emerging nations. This is an important omission for a number of reasons. Firstly, globalization, international trade, and international investment practices are creating significant pressures towards the development of corporate governance in these nations (Reed, 2002).

Secondly, developing and emerging countries have tended to mimic the practices of developed nations, despite evidence, for example from Rabelo and Vasconcelos (2002), of the presence of differences between the factors giving rise to the need for corporate governance in developing nations and those in developed nations.

Thirdly, there are structural variations, such as the dominance of government ownership and/or family/close held companies that render the implementation of Western style corporate governance both of questionable value and troublesome (Mensah, 2002).

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Fourthly, developing and emerging nations are not homogeneous. Specifically, there are major differences between the emerging countries of Eastern European and China, as there are between countries in the Middle East, North Africa and sub-Saharan Africa (Euromoney, 2007; Fawzy, 2004). Finally, while there may be increasing convergence among national and international corporate governance codes, there is also significant deviation in terms of disclosure practices and content of disclosure between countries (Bhuiyan & Biswas, 2007).

The paper investigates the determinants of corporate governance voluntary disclosures in Egypt. It contributes to disclosure and governance literature by studying corporate governance disclosure practice in a developing country, which is distinguished from most developed nations by four important characteristics (Fawzy, 2004). Firstly, most companies are closely held, secondly there is considerable state ownership of privatized companies, thirdly that board independence is weak and finally disclosure is not a common practice. While Bremer and Ellias (2007) note that Egyptian businesses are starting to appreciate the need for corporate governance mechanisms, they argue that together with Fawzy's four characteristics, weakness in the economic structure, and lack of awareness of corporate governance concepts and benefits, hinder the development of corporate governance in Egypt. Thus the results of this research may be useful for regulators in developing and emerging nations with similar characteristics as they continue to deliberate appropriate corporate governance requirements in their own nations.

In an Egyptian context, Samaha and Dahawy (2010 and 2011) found that corporate governance mechanisms affect the Egyptian companies' general print-based annual reports voluntary disclosures. They found lower directors ownership, lower blockholder ownership, higher independent directors, and audit committee existence are more properly to monitor the manager's decision to report more voluntary information. Investigating the determinants of corporate governance disclosures in the 2005 annual reports of the top thirty Egyptian-listed companies' (EGX 30), Samaha (2010) found that board independence is positively associated with corporate governance disclosures. This paper extends the work done by Samaha (2010) as follows: firstly, it provides a more recent investigation (year 2009) to help assess developments in corporate governance disclosure. Secondly, it offers a comparative analysis with two international reports on corporate governance disclosure scores conducted by the United Nation Conference on Trade and Development (UNCTAD). Thirdly, the sample companies involve the EGX 70 constitutes along with the EGX 30 constitutes and thus enhancing the generalizability of the empirical results, along with. Finally, this paper introduces a more comprehensive set of corporate governance mechanisms including board size and duality in positions that—to the best of the authors' knowledge—have been not tested before in an Egyptian context in relation to corporate governance disclosure. Our descriptive findings relating to the extent of corporate governance disclosure for 2009 are relatively lower than those reported by Samaha (2010) for a sample of Egyptian firms in 2005, although during this period from 2005 to 2009, many regulation changes have taken place in Egypt such as the formation of the Egyptian Financial Supervisory Authority (EFSA), and the update of the CG code. All these changes aim to enhance CG disclosure and transparency in general; however our paper suggests that CG disclosure by listed Egyptian firms is almost negligible.

2. Corporate governance in Egypt

Corporate governance has many benefits for developing nations like Egypt. It helps developing nations to realize high and sustainable rates of growth, increases confidence in the national economy, and deepens capital market and increases its ability to mobilize savings. In addition, it results in raising investment rates, protecting the rights of the minority shareholders or small investors. Also, it encourages growth of private sector by supporting its competitive capabilities, helping to secure financing for projects, generating profits, and creating job opportunities (Dahawy, 2008).

In recognition of the need to enhance the level of confidence of foreign portfolio investors in the Egyptian capital market, the ministry of investment through the Egyptian Institute of Directors (EIoD) (<http://www.eiod.org>) introduced a corporate governance code in 2005 for companies listed in the stock market, especially those being actively trading. The Egyptian Corporate Governance Code (ECGC) is initially prepared in accordance with the Guidelines on Corporate Governance of State-Owned Enterprises in the Organization for Economic Co-operation and Development (OECD). Subsequently, a team of Egyptian experts drafted the initial code, which was then subjected to in-depth examination and extended discussions. At the end, the code was reviewed by experts from the OECD, the International Finance Corporation (IFC) and also the World Bank.

This code includes many provisions, the objectives of which are to guarantee the rights of all shareholders as well as various stakeholders. Enhancing corporate disclosure transparency is one of the pillars of corporate governance. The introduced ECGC searches for more accuracy of disclosed corporate information organizing the relationship between the shareholders, board of directors and management. However, compliance with the ECGC code is not mandatory.

Actual corporate governance practices of Egyptian-listed companies continue to lag behind the law on the books, in particular for companies outside the EGX 30 (World Bank, 2009). For example, a number of boards do not guide or supervise management by helping them develop and holding them accountable to a set of key performance indicators. Key policies on risk management, internal control and audit processes, and succession planning are often absent. Board nomination processes largely remain opaque and are frequently dominated by majority owners, at times leading to important skills-gaps and insider boards. Although financial reporting has improved markedly in terms of the timeliness and quality of disclosure, non-financial disclosure remains underdeveloped. Few companies publicly disclose their ownership and governance structures, remuneration policies, or foreseeable risk factors online or in their annual reports (World Bank, 2009).

However, the Report on the Observance of Standards and Codes (ROSC): A Corporate Governance Country Assessment for The Arab Republic of Egypt (World Bank, 2009) argued that Egypt can take a major step forward in closing these gaps by:

1. requiring companies to implement the Egyptian Corporate Governance Code (ECGC) on a 'comply-or-explain' basis,
2. amending the ECGC to better meet good practice,
3. strengthening enforcement capacity, and
4. supporting the EIoD to roll-out its director training program, focusing on family-owned businesses outside the EGX 30.

3. Development of hypotheses

Corporate governance mechanisms can be considered as key factors explaining the decisions of corporate voluntary disclosure from agency theory perspectives. Thus, these mechanisms will be examined in this paper. It is also worth noting that very limited research has been undertaken to examine the association between corporate governance mechanisms and corporate governance disclosure. To the best of our knowledge, only five published papers examine this research issue (two of these articles focus on the developed countries, while three focus on the developing countries). For the developed countries, using Canadian firms, Bujaki and McConomy (2002) find that firms with more unrelated directors are more likely to voluntarily disclose more corporate governance information. For a sample of European companies, Bauwhede and Willekens (2008) find that ownership structure affects levels of corporate governance disclosures. In the developing countries, Muhamad, Shahimi, Yahya, and Mahzan (2009) find that corporate governance mechanisms do not affect levels of corporate governance disclosure in Malaysia, while Al-Moataz and Hussainey (forthcoming) find that board independence

and audit committee size are the key incentives for corporate governance disclosures in Saudi Arabia. Samaha (2010) find that board independence affect corporate governance disclosure for a sample of 30 Egyptian companies. To develop our research hypotheses, we review prior research which suggests association between voluntary disclosure and some corporate governance mechanisms. We formulate hypotheses related to board characteristics, ownership structure and the existence of audit committees as follows.

3.1. Board characteristics

3.1.1. Board composition

Fama (1980) argues that the board of directors, which is elected by the shareholders, is the central internal control mechanism for monitoring managers. Fama (1980) and Fama and Jensen (1983), and more recently Chau and Leung (2006) and Weir and Laing (2003) suggest that boards with a higher proportion of outside or independent directors will increase the quality of monitoring over management, because “they are not affiliated with the company as officers or employees, and thus are independent representatives of the shareholders’ interests” (Pincus, Rusbarsky, & Wong, 1989: 246). Beasley (1996) found less likelihood of fraud in financial statements produced by companies with boards with higher proportions of outside directors.

The presence of independent directors on boards may improve the quality of financial statements. For example, they are associated with less earnings management (Peasnell, Pope, and Young (2000); Chtourou, Bedard, & Courteau, 2001; Xie, Davidson, & DaDalt, 2001; and Klein, 2002). Such findings may be attributable to the positive association between the number of independent directors and firms’ discretionary decisions to increase the level of independence on the audit committee above the suggested minimum (Williams, 2002).

Furthermore, non-executive directors may boost monitoring of the quality of financial disclosures, as reported by Chen and Jaggi (2000) in Hong Kong and Cheng and Courtenay (2004) in Singapore. That is, they encourage more voluntary disclosures (Adams & Hossain, 1998), specifically, as reported by Leung and Horwitz (2004), in relation to voluntary segment disclosure. They reduce the benefits from withholding information (Forker, 1992) and, as Dechow, Sloan, and Sweeney (1996) found, firms with boards dominated by management incur more accounting enforcement actions by the SEC. Prior research supports the positive association between voluntary disclosure and board independence (i.e. Abdelsalam & Street, 2007; Adams, Hill, & Roberts, 1998 and Chen and Jaggi (2000)). On the other hand, other studies some researchers, especially in developing nations, do not find a significant relationship between the level of voluntary disclosure and board independence (Ghazali and Weetman (2006), Haniffa and Cooke (2002), and Ho and Wong (2001)). This may be due to the ties that some non-executive directors have to the company that undermines their independence in some countries (Tengamnuay & Stapleton, 2009). Other research supports a substitute relationship. Eng and Mak (2003), Barako, Hancock, and Izan (2006), and Gul and Leung (2004) report a significant negative association between the level of voluntary disclosure and board independence. Al-Moataz and Hussainey (forthcoming) also find a negative association between corporate governance voluntary disclosures and board independence in Saudi Arabia.

In the Egyptian context, Ezat and El-Masry (2008) and Samaha and Dahawy (2010 and 2011) find that the association between board independence and voluntary disclosure in Egypt is positive. Based on these arguments, we set our first hypothesis as follows:

H1. Companies with higher proportions of independent non-executive directors on the board have higher levels of CG disclosures.

3.1.2. Board size

Board size is the number of executive and non-executive directors on company’s board. Agency theory suggests that large boards can play

a crucial role in monitoring the board and in making strategic decisions. In addition, it suggests that large boards are less likely to dominant by the management (Hussainey & Wang, 2010). Furthermore, large boards lead to increase the expertise diversity in the board including financial reporting expertise (Yermack, 1996; Laksmana, 2008). Prior research also finds that there is a negative association between board size and earnings management, suggesting that large board size leads to higher disclosure quality. Therefore, firms with large board size are more likely to voluntarily disclose more information in their annual reports and websites.

On the other hand, Goodstein, Gautam, and Boeker (1994) argue that large board size might have a negative effect of the effectiveness of the board. Members of large boards are more likely to be less motivated to participate in strategic decision making (i.e. the decision to increase voluntary disclosure). As a result, a negative association between board size and disclosure would be expected.

Majority of prior studies find a positive association between board size and voluntary disclosure (Barako et al., 2006; Laksmana, 2008, Hussainey and Al-Najjar (forthcoming)). On the other hand, some studies did not find any association between board size and disclosure (Evans, 2004; Lakhali, 2005; Willekens, Bauwhede, Gaeremynck, Ann, & Gucht, 2005).

In the Egyptian context, Ezat and El-Masry (2008) find that board size is positively associated with levels of corporate voluntary disclosure. Based on these arguments, we set our second hypothesis as follows:

H2. Companies with large board size have a higher level of CG disclosure.

3.1.3. Duality in position

Role duality in position exists when the CEO (Chief executive officer) is also the chairman of the board at the same time. Agency theory predicts that role duality creates individual power for CEO that would affect the effective control exercised by the board. Fama (1980) and Fama and Jensen (1983) argue that independent directors can play a significant role in monitoring the performance of managers and limit their earnings management. In addition, Gul and Leung (2004) argue that firms with large number of independent directors are expected to be more effective in board monitoring and hence in offering more information to the public.

Prior research on the association between duality in position and corporate voluntary disclosure is mixed. Some studies find a negative association between the two variables (Lakhali, 2005; Laksmana, 2008; Forker, 1992, Haniffa & Cooke, 2002; Eng & Mak, 2003; Gul & Leung, 2004). Other studies did not find any significant association between the two variables (Arcay & Vazquez, 2005; Cheng & Courtenay, 2006; Ghazali & Weetman, 2006; Ho & Wong, 2001). In the Egyptian context, Ezat and El-Masry (2008) find that duality in position is negatively associated with levels of corporate voluntary disclosures, but the association is not statistically significant at an acceptable level. Based on these arguments, we set our third hypothesis as follows:

H3. Companies with duality in position have a lower level of CG disclosures.

3.2. Ownership structure

Agency theory suggests that companies will disclose more information where there is diffused ownership (Jensen & Meckling, 1976). Compared to companies with concentrated ownership, there is greater potential for agency conflict with diffuse ownership since the divergence of interests between the contracting parties is likely to be wider. Disclosure may reduce agency costs since it helps solve the monitoring problems experienced by diffuse owners (Schipper, 1981). Haniffa and Cooke (2002) argue that the structure of ownership determines the level of monitoring and thereby the level of disclosure, so that in a widely-held company, managers may provide additional information to signal that they are acting in the best interests of the principles,

whereas highly concentrated ownership may be linked to lower levels of disclosure.

The current paper uses three ownership measures: director ownership (the proportion of ordinary shares held by the CEO and executive directors), blockholder ownership (the proportion of ordinary shares held by substantial shareholders with shareholdings of 5% or more) and the number of shareholders.

3.2.1. Director ownership

A director who owns a substantial portion of the company's shares bears the consequences and reaps the benefits of managerial actions that destroy and create value; thus, agency costs may be reduced by director ownership (Jensen & Meckling, 1976), because it aligns the interests of the agent and shareholder, thereby reducing the need for shareholder monitoring and thus disclosure.

Low director ownership increases agency problems because managers have greater incentives to consume bonuses and lower incentives to maximize job performance (Eng & Mak, 2003), so that, shareholders need to counteract the increase in agency costs (Ghazali & Weetman, 2006). However, as additional monitoring increases the costs of the firm managers have an incentive to provide voluntary disclosures (Eng & Mak, 2003). That is, disclosure is a substitute for monitoring. Furthermore, Kelton and Yang (2008) predict that the need for more monitoring and more transparent disclosure decreases with higher percentages of director ownership, so that, director ownership is a corporate governance mechanism that acts as a substitute for disclosure.

Early empirical evidence supports these arguments in developed nations, for example Ruland, Tung, and George (1990) show director ownership to be negatively related to voluntary disclosure. In developing countries, for example, Eng and Mak (2003) find such an association in Singapore listed companies, as do Ghazali and Weetman (2006) in Malaysian companies.

In an Egyptian context, Samaha and Dahawy (2011) find a negative association between the director ownership and the voluntary corporate disclosures made by the top 30 Egyptian-listed companies. Based on these arguments, we set our fourth hypothesis as follows:

H4. Companies with low percentages of director ownership have higher levels of CG disclosures.

3.2.2. Blockholder ownership

A blockholder is a shareholder with an exceptionally large amount of shares. Early research indicated the presence of a negative relation between blockholder ownership and disclosure in developed countries such as Australia (McKinnon & Dalimunthe, 1993; and Mitchell, Chia, & Loh, 1995), Finland (Schadewitz & Blevins, 1998), and Germany (Marston & Polei, 2004). Mixed results were found in developing countries. In a Malaysian context, for example, Hossain, Tan, and Adams (1994) find a negative association between voluntary disclosure and blockholder ownership, while Haniffa and Cooke (2002) find a positive association. Marston and Polei (2004) argue that investors who own only a small percentage of shares in a company have limited access to information about the company. Therefore, it is likely that firms with a more dispersed ownership of shares will disclose more information to satisfy investors' needs. In contrast, investors with large equity shares in a company can obtain information about the company from internal sources. Therefore, more closely held companies are more likely to disclose less information because their large investors can access internal sources of information.

In an Egyptian context, the findings of Samaha and Dahawy (2010 and 2011) indicate a negative impact for blockholder ownership on voluntary corporate disclosures. Based on these arguments, we set our fifth hypothesis as follows:

H5. Companies with lower percentages of blockholder ownership have higher levels of CG disclosures.

3.2.3. Number of shareholders

Based on the agency theory, Garcia-Meca and Sanchez-Ballestables (2010) argue that information asymmetry between companies and their shareholders increases when ownership is widely dispersed. Therefore, the existence of a higher number of shareholders for a company would increase agency costs. To reduce these costs, firms are more likely to voluntarily disclose more information in their annual reports and/or websites. Prior research, mostly addressing voluntary disclosures in general, supports the agency theory hypothesis that levels of disclosure are positively associated with numbers of shareholders in different countries such as Sweden (Cooke, 1989); USA (Malone, Fries, & Jones, 1993), Japan, (Cooke, 1991) and Hong Kong and Singapore (Chau & Gray, 2002). In an Egyptian context, Samaha and Dahawy (2010 and 2011) did not find any evidence for an association between number of shareholders and the corporate voluntary disclosure level. Based on these arguments, we set our sixth hypothesis as follows:

H6. Companies with greater numbers of shareholders have higher levels of corporate governance (CG) disclosures.

3.3. Audit committee

Historically audit committees were a monitoring mechanism formed voluntarily in high agency cost situations to improve the quality of information flow between principal and agents (Bradbury, 1990). The 1980s and 1990s saw substantial growth in the numbers of audit committees often as a response to financial scandal, and they have received increased awareness in recent years (Mangena & Tauringana, 2008). Agency theory predicts that audit committees should lower agency costs especially if, following best international practice, they consist mainly of non-executive directors. Audit committees may be an important part of the decision control system used by the board of directors to monitor internal control (Fama, 1980), and predicted benefits include ensuring the quality of financial accounting and control systems (Collier, 1993).

Empirical evidence suggests that audit committees play a complementary role to information disclosure (Barako et al., 2006; Foraker, 1992). The Egyptian context empirical results are mixed; Samaha and Dahawy (2010 and 2011) found an audit committee existence complementary effect on the general corporate voluntary disclosures; however Samaha (2010) did not find a significant association with the Egyptian corporate governance disclosures. Based on these arguments, we set our seventh hypothesis as follows:

H7. Companies with audit committees have a higher level of CG disclosure.

4. Research methodology

4.1. Sample and data

The study examines annual reports and websites of the most active 100 Egyptian companies on the Egyptian Stock Exchange as measured by the EGX 100 index at the financial year ends on 2009. The CG disclosure data were measured using a content analysis technique. Data on explanatory variables were found either on the annual reports or on the companies' websites. We limit our analysis to 100 companies due to the fact that measuring corporate disclosure levels by the traditional content analysis requires a considerable time and effort. The sample included the hard copy annual reports for 2009, as well as current CG disclosures on the companies' websites. As a starting point we examined official company websites in order to get information concerning the annual reports for 2009, internet reporting and any CG stand-alone reports for 2009. Annual reports and corporate governance data are purchased from the Egyptian Company for Information Dissemination (EGID) in case the company did not have a website or did not provide its annual

report on the website. Firm characteristics data such as leverage, firm size, profitability and industry types are collected from firms' annual reports or websites.⁴

The study uses a corporate governance checklist developed by the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) that is organized by UNCTAD. The checklist follows ISAR's good guidance practice (ISAR, 2006), which has become its benchmark for conducting the content analysis for the annual reports and websites to identify corporate governance disclosure score for our sample.

4.2. Model specification and variable measurement

To test for an association between CG disclosure levels and CG attributes in Egypt, one overall index (EXTCGDIS) and five sub-indices, corresponding to the five UNCTAD categories, have been calculated. The dependent variables are listed and defined in Table 1 which presents the definition of our dependent variable and the definitions and the source of information for each independent and dependent variable. The scores for the overall and sub-indices are calculated by assigning equal weightings to each item of disclosure, and the indices were derived by computing the ratio of actual scores awarded to the maximum possible score attainable for items that were applicable to each company.

Each item of disclosure was scored without a weighting on a dichotomous basis taking the commonly used approach of giving the item a score of 1, 0, or not applicable N/A (see for example, Ghazali & Weetman, 2006; Chau & Gray, 2002; Cooke, 1989, 1991; Haniffa & Cooke, 2002; and Ho & Wong, 2001). To ensure that companies were not penalized for non-disclosure of irrelevant items each annual report (hard copy or on the companies' websites) was read in its entirety, following Cooke (1989, 1991). Furthermore, all annual reports (hard copy or on the companies' websites) were read twice to ensure consistency in scoring. The second examination was done after analyzing all annual reports in the first round to ensure consistency in scoring. In the few cases where differences existed between the first and second scoring, the annual reports (hard copy or on the companies' websites) were subjected to a third final assessment. We use the following OLS transformed multiple regression model⁵:

$$\begin{aligned} \text{EXTCGDIS} = & \beta_0 + \beta_1 \text{BCOM} + \beta_2 \text{BOSIZE} + \beta_3 \text{DUALT} + \beta_4 \text{DIR} + \beta_5 \text{BLK} \\ & + \beta_6 \text{NS} + \beta_7 \text{ACO} + \beta_8 \text{LVG} + \beta_9 \text{LGSIZE} + \beta_{10} \text{PRO} \\ & + \beta_{11} \text{INDT} + e \end{aligned} \quad (1)$$

We also use the following regression models to examine the association between corporate governance voluntary disclosure subcategories

and corporate governance mechanisms. We use the transformed OLS multiple regression for the following subcategories of corporate governance disclosure (OSE; FT and BM):

$$\begin{aligned} \text{OSE} = & \beta_0 + \beta_1 \text{BCOM} + \beta_2 \text{BOSIZE} + \beta_3 \text{DUALT} + \beta_4 \text{DIR} + \beta_5 \text{BLK} + \beta_6 \text{NS} \\ & + \beta_7 \text{ACO} + \beta_8 \text{LVG} + \beta_9 \text{LGSIZE} + \beta_{10} \text{PRO} + \beta_{11} \text{INDT} + e \end{aligned} \quad (2)$$

$$\begin{aligned} \text{FT} = & \beta_0 + \beta_1 \text{BCOM} + \beta_2 \text{BOSIZE} + \beta_3 \text{DUALT} + \beta_4 \text{DIR} + \beta_5 \text{BLK} + \beta_6 \text{NS} \\ & + \beta_7 \text{ACO} + \beta_8 \text{LVG} + \beta_9 \text{LGSIZE} + \beta_{10} \text{PRO} + \beta_{11} \text{INDT} + e \end{aligned} \quad (3)$$

$$\begin{aligned} \text{BM} = & \beta_0 + \beta_1 \text{BCOM} + \beta_2 \text{BOSIZE} + \beta_3 \text{DUALT} + \beta_4 \text{DIR} + \beta_5 \text{BLK} + \beta_6 \text{NS} \\ & + \beta_7 \text{ACO} + \beta_8 \text{LVG} + \beta_9 \text{LGSIZE} + \beta_{10} \text{PRO} + \beta_{11} \text{INDT} + e \end{aligned} \quad (4)$$

We also use a binary logistic regression model for the CR subcategory of corporate governance disclosure. We use the following model:

$$\begin{aligned} \text{CR} = & \beta_0 + \beta_1 \text{BCOM} + \beta_2 \text{BOSIZE} + \beta_3 \text{DUALT} + \beta_4 \text{DIR} \\ & + \beta_5 \text{BLK} + \beta_6 \text{NS} + \beta_7 \text{ACO} + \beta_8 \text{LVG} + \beta_9 \text{LGSIZE} \\ & + \beta_{10} \text{PRO} + \beta_{11} \text{INDT} + e \end{aligned} \quad (5)$$

For the audit subcategory of corporate governance voluntary disclosure, we could not run the model as this subcategory was scored zero by more than 95% of the sample companies and hence there were not enough variations among the sample companies.

5. Empirical results

5.1. Descriptive analysis

The ISAR checklist examines a total of 53 corporate governance disclosure items, which are normally divided into five categories. For each of these five categories, Tables 2 through 6 present, in the first column, the corporate governance disclosures achieved by the top 100 Egyptian companies, together with comparison figures that show that these disclosure levels are typically lower than those reported by UNCTAD (2006) in its annual international review. The second column of the each table shows the disclosures made by 105 enterprises drawn from both high and low/middle income countries and the third column shows a comparison with 63 enterprises drawn from low/middle income countries only.

Table 2 shows that in line with international experience, all 100 companies disclose the company objectives, and financial and operating results, and that at least two thirds make disclosures about accounting estimates and related-party transactions. These three financial transparency items are required by Egyptian Accounting Standards (EASs).

Table 3 shows that the degree of disclosure relating to OSE is low by international standards, with even the best items attracting only a 37% implementation rate.

As Table 4 shows, by far the most frequent disclosures relating to BM in Egypt are "risk management objectives, system and activities". Again this is an area of mandatory reporting under EASs.

In line with international experience CR and auditing related disclosures are the lowest. Nevertheless, as shown in Table 5 just short of 10% of Egyptian companies do make some environmental and social responsibility disclosures. Least disclosure was evident in the auditing category in Egypt, as Table 6 shows, and in this context it is worth noting that Egypt does not have rules similar to those in the US Sarbanes Oxley Act which prohibit accounting/auditing firms from simultaneously providing both auditing and consulting services to the same client.

⁴ The extant literature identifies several company-specific characteristics as relevant to the voluntary disclosure of financial information. Some variables such as company size are generally found to be significant in prior literature, perhaps because they are politically visible, more exposed to greater regulation, such as price controls, and possibly the threat of nationalization. Therefore, they disclose more information (Eng & Mak, 2003). With respect to other variables, the results are inconsistent across studies, often depending on country and exchange studied. Thus the choice of control variables in the multiple regression models for testing the main hypotheses, shown in Table 1 Panel C, follows the practice in prior research (see for example: Raffournier, 1995; Meek, Roberts, & Gray, 1995; Ho & Wong, 2001; Eng & Mak, 2003; Ghazali & Weetman, 2006 and Aly, Simon, & Hussainey, 2010).

⁵ A multicollinearity test was performed using Pearson's product moment correlations. Our analysis shows that there is no multicollinearity problem between the independent variables. Regression diagnostics were also performed to determine if the assumptions of normality and equal variances were met for all dependent variables. Diagnostics included Q-Q normality plots, examination of histograms of all dependent variables, scatter plots of residuals against the predicted values, and the Kolmogorov-Smirnov Z-test with Lilliefors correction for each independent and dependent variable. This test for each independent and dependent variable indicated that some of the corporate governance independent variables are not normally distributed. Thus, following Cooke (1998), the continuous independent and dependent variables were transformed into ranks based on normal scores before running the regression analysis.

Table 1
Model specification and variable measurement.

Abbreviated name	Full name	Variable description	Predicted sign	Data source
<i>Dependent variables</i>				
EXTCGDIS	Overall CG disclosure index	Percent of overall applicable CG disclosure items supplied/satisfied		Annual reports
OSE	Ownership structure and exercise of control rights disclosure sub-index	Percent of applicable disclosure index items supplied/satisfied for the OSE sub-index		Annual reports
FT	Financial transparency and information disclosure sub-index	Percent of applicable disclosure index items supplied/satisfied for the FT sub-index		Annual reports
AUD	Auditing disclosure sub-index	Percent of applicable disclosure index items supplied/satisfied for the AUD sub-index		Annual reports
CR	Corporate responsibility and compliance disclosure sub-index	Percent of applicable disclosure index items supplied/satisfied for the CR sub-index		Annual reports
BM	Board and management structure and process disclosure sub-index	Percent of applicable disclosure index items supplied/satisfied for the BM sub-index		Annual reports
<i>Independent variables</i>				
BCOM	Board composition	Ratio of the number of non-executive directors to the total number of the directors	+	Ownership structure information (EGID), Board of directors' report (EGID)
BOSIZE	Board size	The number of board members	+	Ownership structure information (EGID), Board of directors' report (EGID)
DUALT	Duality in position	Dummy variable; 1 if company's CEO serves as a board chairman, 0 otherwise	-	Ownership structure information (EGID), Board of directors' report (EGID)
DIR	Director ownership	Percentage of shares owned by the CEO and executive directors to the total number of shares issued.	-	Ownership structure information (EGID)
BLK	Blockholder ownership	Percent of shares owned by the blockholders–shareholders whose ownership $\geq 5\%$ of total number of shares issued.	-	Ownership structure information (EGID)
NS	Number of shareholders	Number of the owners holding the total number of shares issued.	+	Ownership structure information (EGID)
ACO	Existence of audit committees	Dummy variable; 1 if an audit committee, 0 otherwise	+	Board of directors' report (EGID)
<i>Control variables</i>				
LEV	Leverage	Long-term debt/ total assets	+	Annual report: Financial statements
LGSIZE	Firm size	Natural logarithm of total assets	+	Annual report: Financial statements
PRO	Profitability	Net income before tax/ total stockholders' equity.	+	Annual report: Financial statements
INDT	Industry type	Dummy variable; 1 if manufacturing, 0 otherwise	+	EGX Bulletin (December 2009)

The descriptive statistics for the independent variables are shown in Table 7. The average firm size in terms of total assets is 3.7 billion Egyptian pounds (approximately 462 million Euros). The debt: equity (leverage) ratio is on average 57% and there are an average of 17 shareholders, implying that the ownership structure is quite highly geared and highly concentrated in these companies, although there are quite wide distributions in the values of the total assets and the number of shareholders. On average profitability (PRO) indicates that majority of firms are profitable. The mean percentage of independent directors on

the board is 56%. Average board size is 11 members. Mean director ownership is 9%. Twenty two percent of the chosen sample has an audit committee; 61% of company's CEO serves as a board chairman and 55% of our chosen firms are related to manufacturing industry.

Table 8 shows the distribution of the dependent variable. Panel 1 of Table 8 shows that while there are large variations among the sample companies, these indices and their ranges suggest that the overall disclosure level is relatively low, implying that, consistent with Ho and Wong (2001) in Hong Kong, analysts in Egypt may need to search for information outside of the published annual reports. Panel 2 shows the distribution of five sub-indices of information. On average, as in other countries the Egyptian companies perform best on FT, where they provide 50.4% of the items. It is worth noting that Egyptian Accounting Standards require disclosure of five of the nine items in this sub-index and disclosure is checked by the newly formed Egyptian Financial Supervisory Board (EFSA) (<http://www.efsa.gov.eg/>). Failure to disclose results in a warning letter and ultimately could lead to delisting. Disclosure of items in the other four sub-indices, which are generally not required by EASs or followed by the EFSA, are, on average, all below 40%.

5.2. Correlation analysis

Table 9 presents the correlation analysis between the overall corporate governance voluntary disclosure and independent variables. It shows that firms with higher number of shares; large number of independent directors on boards and firms with large size are more likely to provide higher levels of corporate governance voluntary disclosures. It shows that EXTCGDIS is positively correlated with NS (r 0.482), BCOM (r 0.496) and LGSIZE (r 0.547) and these correlations are statistically significant at the 1% level. The table also shows that firms with large block holder ownership and role duality are more likely to provide less corporate governance voluntary

Table 2
Corporate governance disclosure index: Egypt compared with two UNCTAD reports: financial transparency – sub index (FT).

	Corporate governance disclosures		
	Current study Egypt %	UNCTAD All %	UNCTAD L/M income %
	n = 100	n = 105	n = 63
Financial and operating results ^a	100	100	100
Company objectives ^a	100	92	90
Critical accounting estimates ^a	99	90	84
Nature, type and elements of related-party transactions ^a	76	94	90
Disclosure practices on related party transactions where control exists ^a	73	47	43
Board's responsibilities regarding financial communications	4	80	73
The decision making process for approving transactions with related parties	1	53	54
Impact of alternative accounting decisions	1	75	68
Rules and procedure governing extraordinary transactions	0	59	57

^a Mandatory requirements under EAS.

Table 3
Corporate governance disclosure index: Egypt compared with two UNCTAD reports: ownership structure and exercise of control rights – sub-index (OSE).

	Corporate governance disclosures		
	Current study	UNCTAD	UNCTAD L/M
	Egypt %	All %	income %
	n = 100	n = 105	n = 63
Ownership structure	37	90	89
Control rights	37	82	76
Availability and accessibility of meeting agenda	37	78	65
Changes in shareholdings	37	69	65
Process for holding annual general meetings	19	91	87
Control and corresponding equity stake	9	75	67
Control structure	4	86	86
Rules and procedures governing the acquisition of corporate control in capital markets.	2	30	25
Anti-takeover measures	0	30	22

disclosures. It shows that EXTCDIS is negatively correlated with blockholder ownership (BLK) ($r = -0.577$) role duality (DUALT) ($r = -0.620$) and these correlations are statistically significant at the 1% level. Thus the univariate analysis supports H6 and H1 that the number of

Table 4
Corporate governance disclosure index: Egypt compared with two UNCTAD reports: board and management structure and process – sub-index (BM).

	Corporate governance disclosures		
	Current study	UNCTAD	UNCTAD L/M
	Egypt %	All %	income %
	n = 100	n = 105	n = 63
Risk management objectives, system and activities ^a	85	89	83
Composition of board of directors (executives and non-executives)	20	99	98
Independence of the board of directors	16	68	54
Number of outside board and management position directorships held by the directors	9	79	71
Types and duties of outside board and management positions	8	74	62
Existence of plan of succession	8	52	46
Qualifications and biographical information on board members	7	83	81
Determination and composition of directors' remuneration	6	68	54
"Checks and balances" mechanisms	5	88	84
Governance structures, such as committees and other mechanisms to prevent conflict of interest	5	88	81
Composition and function of governance committee structures	4	86	83
Role and functions of the board of directors	4	84	78
Professional development and training activities	4	36	27
Duration of director's contracts	3	76	62
Compensation policy for senior executives departing the firm as a result of a merger or acquisition	1	38	27
Existence of procedure(s) for addressing conflicts of interest among board members	1	67	57
Performance evaluation process	1	67	57
Material interests of members of the board and management	1	57	52
Availability and use of advisorship facility during reporting period	0	41	33

^a Mandatory requirements under EAS.

shareholders and proportion of independent directors are positively correlated with the level of corporate governance disclosure. H5 and H3 are also supported because blockholder ownership and role duality dual is negatively correlated with the level of disclosure. However, neither the correlation between DIR and EXTCDIS nor BOSIZE and EXTCDIS is significant, so that hypotheses H2 and H4 are not supported.

5.3. Regression results

Regression results are shown in Tables 10 and 11. Table 10 shows the cross-sectional OLS regressions for the aggregated score of corporate governance voluntary disclosures score and three subcategories (OSE, FT and BM), Table 11 shows the cross-sectional binary logistic regressions for the CR subcategory.

For the board composition, we find that the coefficient estimate on BCOM is positive and statistically significant with EXTCDIS at the 1% level. This supports hypothesis H1 that companies with a higher proportion of independent directors on the board disclose more CG information in their annual reports. Furthermore, the coefficient estimates on the proportion of independent directors on the board are positive and significant at the 5% level in explaining two types of CG disclosure (OSE and FT). This finding is consistent with the Egyptian studies of Samaha and Dahawy (2010 and 2011) and Samaha (2010).

We find that the coefficient estimates on board size are mixed (positive and negative) and is not statistically significant in any of the corporate governance disclosure models. Therefore we reject H2. These findings are in line with prior research (i.e. Evans, 2004; Lakhali, 2005; Willekens et al., 2005).

We find that the coefficient estimates on role duality are negative and statistically significant for EXTCDIS, OSE and BM. The negative sign on role duality is consistent with prior research (i.e. Lakhali, 2005; Laksmama, 2008; Forker, 1992, Haniffa & Cooke, 2002; Eng & Mak, 2003; Gul & Leung, 2004, Ezat and El-Masry). Therefore we partially accept H3.

Furthermore, director ownership is negatively associated with only one category of CG disclosure (CR), so that hypothesis H4 that CG disclosure increases with decreases in director ownership is not generally supported.

As we find significant negative association between BLK and EXTCDIS, OSE, BM and CR, hypothesis H5 is partially accepted. This finding for Egyptian-listed companies is line with Samaha and Dahawy (2010 and 2011) and consistent with prior research in

Table 5
Corporate governance disclosure index: Egypt compared with two UNCTAD reports: corporate responsibility and compliance – sub-index (CR).

	Corporate governance disclosures		
	Current study	UNCTAD	UNCTAD L/M
	Egypt %	All %	income %
	n = 100	n = 105	n = 63
Policy and performance in connection with environmental and social responsibility	10	91	87
Impact of environmental and social responsibility policies on the firm's sustainability	7	78	71
Mechanisms protecting the rights of other stakeholders in business	2	57	48
A Code of Ethics for the Board and waivers to the ethics code	1	73	63
A Code of Ethics for all company employees	1	72	65
The role of employees in corporate governance	1	25	17
Policy on "whistle blower" protection for all employees	0	50	35

Table 6
Corporate governance disclosure index: Egypt compared with two UNCTAD reports: auditing – sub-index (AUD).

	Corporate governance disclosures		
	Current study	UNCTAD	UNCTAD L/M
	Egypt %	All %	income %
	n = 100	n = 105	n = 63
Board confidence in independence and integrity of external auditors	2	58	41
Process for interaction with external auditors	1	70	57
Process for appointment of internal auditors/scope of work and responsibilities	1	84	76
Internal control systems	1	75	67
Duration of current auditors	1	32	17
Rotation of audit partners	1	21	13
Process for interaction with internal auditors	1	74	60
Process for appointment of external auditors	0	81	75
Auditors' involvement in non-audit work and the fees paid to the auditors	0	56	41

Table 7
Descriptive statistics on the independent variables.

Variable	N	Minimum	Maximum	Mean	Std. dev.
Board composition	100	0.00	0.96	0.5594	0.3554
Board size	100	0.00	30.00	10.4200	5.7738
Duality in position	100	0.00	1.00	0.6100	9.4902
Director ownership	100 ^a	0.00	0.97	0.0896	0.2186
Blockholder ownership	100	0.00	1.00	0.5710	0.3447
Number of shareholders	100	3.00	95.00	16.8400	14.5204
Existence of audit committees	100	0.00	1.00	0.2200	0.4163
Leverage	100	0.00	7.66	0.5708	1.2675
Firm size ^a	100	157	38,000	3,700	6.958E9
Profitability	100	-1.34	1.18	0.2082	0.2776
Industry type	100	0.00	1.00	0.5500	0.5000

^a In million EGP.

developed (i.e. Marston & Polei, 2004) and developing (i.e. Hossain et al., 1994) countries who also found that the level of voluntary disclosure is significantly related with blockholder ownership. Our sixth hypothesis predicts that ownership structure is associated with overall CG disclosure, as well as the various subcategories of information. With respect to the number of shareholders we do not find any significant association between NS and EXTCGDIS, OSE, FT, BM or CR, which indicates that ownership structure is not influencing of CG disclosures in Egypt. Thus, hypothesis H6 is rejected. Our results are consistent with Ghazali and Weetman (2006) found ownership structure is not statistically significant in explaining voluntary disclosure in Malaysia.

Our findings in relation to the existence of an audit committee (ACO) suggest that in order to understand the drivers of CG disclosure

Table 8
Descriptive statistics of dependent variables.

Variable	Range	Minimum	Maximum	Mean	Std. deviation
Panel 1: overall corporate governance score for EGX 100 companies					
Overall corporate governance disclosure index (EXTCGDIS)	0.60	0.06	0.66	0.16	0.1009
Panel 2: corporate governance disclosure sub-indices					
Financial transparency and information disclosure sub-index (FT)	0.56	0.33	0.89	0.50	0.1057
Ownership structure and exercise of control rights sub-index (OSE)	0.78	0.00	0.78	0.20	0.2583
Board and management structure and process sub-index (BM)	0.74	0.00	0.74	0.10	0.1411
Corporate responsibility and compliance sub-index (CR)	0.57	0.00	0.57	0.03	0.1027
Auditing sub-index (AUD)	0.33	0.00	0.33	0.01	0.0464

research should disaggregate the dimensions of CG. ACO is neither significant in explaining overall CG disclosure nor three of the four partial categories of CG disclosure indicating a lack of support for hypothesis H7. We only find a significant positive association between ACO and the CR model ($p < 0.065$). This is a predicted direction which is consistent with Ho and Wong (2001) and Barako et al. (2006) who found the existence of audit committees to be positively significant. This may suggest that audit committees in Egypt play a complementary monitoring role to CR CG disclosure. This finding is line with Samaha and Dahawy (2010 and 2011) in regards to the print-based (hard copy) annual reports voluntary disclosures, however inconsistent with Samaha's (2010) corporate governance disclosures analysis.

In relation to our control variables, we find that leverage is not statistically significant in any of the corporate governance disclosure models. This implies that the level of corporate governance disclosure is not influenced by the agency costs of debt in Egypt. We also find a positive association between firm size and EXTCGDIS, FT and BM at the 1% level. It is usually expected that larger firms arrange for voluntary disclosure more often than smaller ones. This seems reasonable because of financial facilities and benefiting from stronger information systems. Profitability and industry type are only significant in explaining one type of CG information (CR). The coefficient estimates on both variables are positive and significant at the 10% level.

6. Conclusions

The association between corporate governance mechanisms and corporate disclosure has been examined over the last few years. However, limited studies examine the extent to which corporate governance mechanisms affect firms' decisions to voluntarily report corporate governance information in their annual reports. This paper extends and contributes to recent governance and disclosure literature (i.e. Samaha, 2010) by offering empirical evidence on the impact of a comprehensive set of corporate governance variables on corporate governance voluntary disclosure for a large sample of most and less actively traded companies in Egypt, as an example of an emerging economy.

In terms of overall disclosure practice, we find that there are generally low levels of disclosure, except for the items which represent mandatory disclosure as required by Egyptian Accounting Standards. It is interesting to note that in total 41 of the 53 items in the checklist are mandatory because of EGX listing requirements (UNCTAD, 2007), but that levels of disclosure are low on many of the items which EGX requires but EAS does not. This does suggest that enforcement of EGX rules requires tightening. Our descriptive findings on the extent of CG disclosure relating to the year 2009 are relatively similar to Samaha (2010) for a sample of listed Egyptian companies in 2005. The failure of companies to disclose such information clearly shows some ineffectiveness and inadequacy in the regulatory framework in Egypt. Moreover, the phenomenon of non-compliance may also be attributed to the socio-economic factors in Egypt. Given the present unbalanced political situation, prevalent corruption, deteriorating law and order situation and the influence of the social elite, non-compliance to the legal requirements often go unpunished encouraging more

Table 9
Pearson correlation matrix (N = 100).

Variable	EXTCGDIS	NS	BLK	DIR	BCOM	BOSIZE	DUALT	ACO	LEV	LGSIZE	PRO	INDT
EXTCGDIS	1.000											
NS	0.482**	1.000										
BLK	-0.577**	-0.470**	1.000									
DIR	0.025	-0.049	0.015	1.000								
BCOM	0.496**	0.214*	-0.303**	-0.091	1.000							
BOSIZE	-0.035	0.120	0.046	0.056	-0.003	1.000						
DUALT	-0.620**	-0.269**	0.569**	0.081	-0.422**	0.098	1.000					
ACO	0.185	0.053	-0.209*	0.006	0.295**	0.033	-0.219*	1.000				
LEV	0.046	-0.008	-0.069	0.069	0.048	-0.064	-0.060	0.091	1.000			
LGSIZE	0.547**	0.341**	-0.280**	-0.059	0.253*	0.066	-0.214*	0.071	0.132	1.000		
PRO	0.140	0.079	-0.016	-0.038	0.022	0.039	0.038	0.021	-0.267**	0.080	1.000	
INDT	-0.100	-0.049	0.0001	0.071	-0.102	0.063	0.060	-0.102	-0.107	-0.289**	0.031	1.000

*, ** significant at the 0.05 and 0.01 levels (2-tailed) respectively.

Table 10
Ordinary least squares (OLS) regression results of the corporate governance disclosure scores on test and control variables (N = 100).

Dependent variable	Overall corporate governance disclosure index (EXTCGDIS)			Ownership structure and exercise of control rights sub-index (OSE)			Financial transparency sub-index (FT)			Board and management structure and process sub-index (BM)		
	Coeff. Included	t-Statistic	p-Value	Coeff. Included	t-Statistic	p-Value	Coeff. Included	t-Statistic	p-Value	Coeff. Included	t-Statistic	p-Value
Intercept												
H1 – BCOM	0.228	3.065	0.003***	0.186	2.217	0.029**	0.261	2.359	0.021**	0.140	1.577	0.118
H2 – BOSIZE	-0.031	-0.479	0.633	-0.049	-0.684	0.496	0.024	0.252	0.801	-0.022	-0.284	0.777
H3 – DUALT	-0.341	-4.430	0.000***	-0.495	-5.709	0.000***	-0.092	-0.801	0.425	-0.177	-1.932	0.057*
H4 – DIR	0.024	0.370	0.712	-0.013	-0.178	0.859	0.128	1.320	0.190	-0.003	-0.034	0.973
H5 – BLK	-0.230	-2.686	0.009***	-0.202	-2.095	0.039**	-0.003	-0.024	0.981	-0.205	-2.003	0.048**
H6 – NS	0.010	0.122	0.903	-0.065	-0.723	0.472	0.001	0.007	0.995	0.053	0.551	0.583
H7 – ACO	-0.025	-0.370	0.712	0.079	1.042	0.300	-0.132	-1.325	0.189	-0.112	-1.397	0.166
LEV	0.034	0.502	0.617	-0.028	-0.372	0.711	0.077	0.764	0.447	0.011	0.139	0.890
LGSIZE	0.347	4.787	0.000***	0.113	1.391	0.168	0.288	2.673	0.009***	0.419	4.847	0.000***
PRO	0.050	0.782	0.436	-0.013	-0.181	0.857	-0.151	-1.569	0.120	0.075	0.973	0.333
INDT	0.047	0.698	0.487	0.090	1.203	0.232	0.129	1.293	0.199	-0.080	-1.002	0.319
Adj. R ²		61.8%			51.6%			15.4%			45.6%	
F-value		15.56			10.59			2.64			8.56	
p-Value		0.000***			0.000***			0.006***			0.000***	
Durbin Watson		1.756			1.873			1.766			1.876	

*, **, *** significant at the 10%, 5%, 1% level respectively.

non-compliance. Furthermore, this may imply that the learning curve is very slow in developing countries compared to developed countries. In the absence of independent verification, the credibility of CG information disclosed is questionable. To sum up, the reasons for this phenomenon may be attributed to the lack of statutory CG disclosure requirements, less CG awareness, an underdeveloped corporate culture and the relatively new stock market which was activated in

the mid 1990s. In light of the above, it is expected that firms will take a long time to appraise the payback of increased CG disclosure.

Regarding the determinants of corporate governance disclosures, we find that—*ceteris paribus*—the extent of CG disclosure of Egyptian-listed companies: (1) is lower for companies with duality in position and higher ownership concentration as measured by blockholder ownership; and (2) increases with the proportion of independent directors on the board and the firm size. By disaggregating total CG disclosure into the 4 UNCTAD components, we are able to also specify the components of CG impacted by various determinants.

This paper is also subject to a number of limitations. First, we are mainly testing hypotheses on the potential incentives of disclosure on corporate governance that are particularly well grounded in uses of governance in developed countries, but less so in developing environments. In particular, our hypotheses are mainly relating to agency and information asymmetry problems stemming from the relationship between the firm and its external financiers (shareholders or debtholders). A worthwhile avenue for future research could be to test additional hypotheses of the demand for corporate governance disclosure originating from other stakeholders than just shareholders or debtholders. Second, our analysis is limited to a sample of Egyptian companies. However, we believe that the same hypotheses are worth testing outside Egypt, and that it is reasonable to expect a higher level of corporate governance disclosure in other countries with better investor protection and with more developed capital markets.

Despite the limitations, the results of the study support theoretical arguments that companies disclose corporate governance information in order to reduce information asymmetry and agency costs stemming

Table 11
Binary logistic regression results of the corporate governance disclosure scores on test and control variables: corporate responsibility and compliance sub-index (CR) (N = 100).

Parameter	Coefficient	Wald test value	p-Value
Intercept	Included		
H1 – BCOM	3.622	0.835	0.361
H2 – BOSIZE	0.000	0.000	0.999
H3 – DUALT	-0.182	0.011	0.916
H4 – DIR	-4.061	0.868	0.352
H5 – BLK	-4.910	2.615	0.098*
H6 – NS	0.023	0.571	0.450
H7 – ACO	2.133	3.410	0.065*
LEV	-0.113	0.055	0.815
LGSIZE	0.000	0.684	0.408
PRO	3.666	3.034	0.082
INDT	2.617	3.197	0.074*
Pseudo R-square		63%	
Model Chi-square		35.80	
Significance (p-value)		0.000***	
Percentage correctly classified		96	

*, **, *** significant at the 10%, 5%, and 1% level respectively.

from the separation between ownership and control, and to improve investor confidence in the reported accounting information.

It is interesting to consider the costs and benefits of the reform processes that Egypt and other countries are implementing. While the ECGC recommends that actively traded companies should have an audit committee and exploit the knowledge of independent board members, the findings of this study indicate that only three of these new provisions to enhance corporate governance (blockholder ownership; independent directors; role duality) are statistically significant in explaining CG disclosure in Egyptian annual reports. However, this study shows that audit committees' role in Egypt does not comply with the fundamentals of agency theory and that this CG supervisory tool has little role in improved financial disclosure. That is the benefit of audit committees is unclear. This would be an interesting idea for further research. In addition, it would be interesting to examine the stock market reaction to the aggregated and different types of corporate governance disclosures.

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