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The Determinants of Voluntary Disclosure in Emerging Markets: The Case of Egypt

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Abstract
This paper estimates the extent of voluntary disclosure and the impact of a comprehensive set of corporate governance attributes (firm size, firm age, firm profitability, firm leverage, board independent, the existence of audit committee, director ownership, block-holder ownership, Auditor Specialization and Auditor Type) on the extent of voluntary disclosure in Egypt. It is based on the measurement of disclosure to the published data generated from a checklist of 54 items to measure the levels of voluntary disclosure, which had been collected from reviewing manually the financial statements and electronic sites a sample of Egyptian companies listed on the Egyptian Stock Exchange (EGX). We also have level standard ordinary least square (OLS) regression analysis to test for our sample of 100 observations to companies listed on the Egyptian Stock Exchange in 2016. We find that the average level of voluntary disclosure is 18.38%. Our analysis also shows that the size of the firm, firm age, profitability of the firm, auditor specialisation, and ownership of director have a positive impact on voluntary disclosure. However, we find a negative relationship between firm leverage and voluntary disclosure. Our analysis also shows that board independence, audit committee, Block-holder ownership and Auditor Type have no impact on voluntary disclosure. The empirical evidence from this study improves the understanding of the voluntary corporate disclosure environment in Egypt as one of the emerging markets in the Middle East.
Keywords: Corporate Governance, Firm characteristics, Voluntary Disclosure.

1. Introduction

In the business environment, companies are required to disclose minimum levels of information, which is known as mandatory disclosure; if not, they will face sanctions. Therefore, almost all companies comply fully with the minimum levels of the mandatory disclosure (Hassan et al., 2009). However, the current business era makes compliance with this mandatory disclosure neither adequate nor suitable to meet the corporate information users' needs. This raises an urgent need for extra information than is required; this extra information is known as the voluntary disclosure.

Businesses in the current era face information challenge that they never met in the past. First, the current age is the information age, in which information has become a crucial influence. In other words, any piece of information may make a crucial change to the users' investment decisions; therefore, the present limited mandatory information is not sufficient. Second, the separation of the companies' ownership and management creates what is known as the information asymmetry problem. Traditionally, annual reports are used to minimise this information gap. Lev, (1989), and Wallace, (1988), however, argue that financial statements do not provide users with adequate information, which increases the information gap between information suppliers (managers) and information demanders (stakeholders). In addition, nowadays, the nature and extent of information demanded are both different and greater than in the past, which means that information asymmetry is larger than in the past. Therefore, to mitigate this problem, companies need to voluntarily disclose more information. Third, recent decades have witnessed financial scandals resulting in the collapse of long-lived companies. We believe that one of the main reasons for these collapses is the concealing and non-disclosure of relevant information, although the failed companies have been found to comply completely with the minimum levels of mandatory disclosure. Consequently, the need for voluntary disclosure has increased.

However, many researchers have examined corporate governance in developed nations, a much less academic study has been made of emerging nations. This is a significant omission, for many reasons. Firstly, international trade, international investment, and globalisation practices create great pressure on the development of corporate governance in these countries (Reed, 2002).

Secondly, developing and emerging countries have tended to mimic the practices of developed nations, despite the evidence, for example from Rabelo & 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).

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 (MENA) 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 extent of voluntary disclosure and Corporate Governance 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 privatised companies, thirdly that board independence is weak and finally, the disclosure is not a common practice. While Bremer & 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 & Dahawy (2010 & 2011) found that corporate governance mechanisms affect the Egyptian companies' general print-based annual reports voluntary disclosures. They found lower directors ownership, lower block-holder 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 (the year 2009) to help assess developments in corporate governance disclosure. Secondly, it offers a comparative analysis of 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. Theories and Literature Review

2.1 Theories explaining the voluntary disclosure variance

Disclosure studies show wide variances in nature and extent of voluntary disclosure across firms within the same industry and country. Some firms are found to voluntarily disclose large amounts of information, while others do not disclose anymore. Accounting Researchers around the world examine the potential determinants of disclosure extensively and provide many theories to explain the voluntary disclosure variance. These theories include agency theory; legitimacy theory; signalling theory; capital need theory and stakeholder theory.

Agency theory postulates that companies tend to disclose more information voluntarily in order to reduce the agency costs that arise from conflicts between managers and stockholders (Alves et al., 2012; Zayoud et al., 2011; Watson et al., 2002; and Lambert, 2001).

Legitimacy theory argues that firms have a social contract with society, and therefore, firms provide greater levels of voluntary disclosure in order to ensure that they comply with the ethics and regulations of that society, as mandatory disclosure may be insufficient (Mokhtar & Mellett 2013; Cheung et al., 2010).

Signalling theory proposes that firms with large levels of voluntary disclosure intend to reduce the information asymmetry and signal the quality and real value of firms by providing more information to parties who lack information (Morris, 1987; Ross, 1977)

Capital needs theory suggests that firms resort to disclosing more information voluntarily when they need to raise more funds whether from banks or financial markets (Meek, et al., 1995; Hossain, et al., 1994).

Stakeholders' theory assumes that firms should satisfy and meet the interests and the information needs of all stakeholders rather than only the shareholders (Abed, et al., 2014). This theory expects also that large firms are more likely to provide more voluntary information because of the greater stress of a large number of stakeholders. We use these theories in developing our research hypotheses.

2.2 The Literature Review

We review relevant literature that examines the voluntary disclosure in developing countries. Using the Egyptian context, Soliman (2013) examines the association between certain firm characteristics and the extent of voluntary disclosure. He finds that firm size and profitability are positively associated with the extent of voluntary disclosure, while auditor size and firm age do not have any significant association. Samaha, & Dahawy (2011) find that the overall voluntary disclosure level by Egyptian firms was low (13.43%). They also find a positive association between the ratio of independent directors on the board, profitability and internationality and voluntary disclosure level. However, managerial and governmental ownerships, the number of shareholders, auditor type, size, liquidity, leverage, and industry type were found not to affect the voluntary disclosure level. Abdel-Fattah (2008) finds that although the voluntary disclosure level found to be low, there was a gradual increase in the extent of total voluntary disclosure among Egyptian firms over the study years 2003-2006. Furthermore, the findings indicate that board size and board composition do affect the extent of voluntary disclosure. Hassan et al., (2006) find that the sample firms publish 90%, on average, of the mandatory disclosure checklist items and 48%, on average, of the voluntary disclosure checklist items prepared by authors. The results show also a general increase in the disclosure levels over the study period 1995-2002. Moreover, public sector firms appear to disclose less information than private sector firms do. Further, firms that are more profitable found to disclose more information than less profitable firms did and large firms found to disclose more voluntary disclosure and less mandatory disclosure.

Juhmani (2013) examines the association between three ownership structure variables and voluntary disclosure for a sample of 41 firms listed on Bahrain Stock Exchange in the year 2010. The results indicate a negative correlation between block-holder ownership and voluntary disclosure, but there was no correlation found between managerial or governmental ownership and voluntary disclosure. In addition, size and leverage were included as control variables and were found to be positively correlated with voluntary disclosure.

Kolsi (2012) finds that Tunisian firm leverage, audit quality, financial sector and profitability ratio are significant determinants of voluntary disclosure, while ownership structure and firm size have no effect on voluntary disclosure. Htay (2012) finds that Malaysian firms with higher board size, a higher proportion of independent non-executive directors on the board, and a lower proportion of directors' ownership voluntarily disclose more financial accounting information.

Alves et al., (2012) examine the association between corporate characteristics, and corporate governance variables and voluntary disclosure using a sample of 38 Portuguese and 102 Spanish firms in the year 2007. They find that firm size, growth opportunities, organisational performance, board compensation, and the existence of a large shareholder are the main determinants of voluntary disclosure. Furthermore, Bazine & Vural (2011) explore the influence of firm characteristics on voluntary disclosure for a sample of 149 manufacturing firms listed on the Stockholm Stock Exchange across 2001-2009. They find that firm size and industry type affect the extent of voluntary disclosure.

Hossain & Hammami (2009) investigate the voluntary disclosure drivers in Qatar by analysing annual reports of 25 firms listed on Doha Securities Market for the year 2007. The results indicate that firm age, size, complexity, and assets-in-place are significantly correlated with the voluntary disclosure index; however, the profitability variable was found to be insignificantly correlated. Aljifri (2008) examines annual reports of 31 UAE firms, for the year 2003. He finds significant differences among sectors but finds an insignificant correlation between size, debt-equity ratio, and profitability and voluntary disclosure. In addition, Barako (2007) examines the extent to which corporate governance traits, ownership structure, and corporate attributes affect voluntary disclosure for a sample of listed firms in Kenya during the period 1992-2001. The findings indicate a low level of voluntary disclosure; however, there is a gradual increase in voluntary disclosure during the study period. Moreover, He finds that corporate governance traits, ownership structure, and corporate traits (i.e. corporate size and industry) affect voluntary disclosure.

3. Hypotheses Development

3.1 Firm Size

Alves et al., (2012), and Abdel-Fattah, (2008), among others, argue that the larger the firm is the more likely they are to disclose more information voluntarily. The positive relationship between firm size and voluntary disclosure extent may be due to several reasons. First, large firms are more able to afford the additional voluntary disclosure costs than small firms. Second, in the context of stakeholder's theory, large firms have more stakeholders pressurising the management to disclose more information than do small firms. Third, large firms encounter political costs to a greater extent than small firms; therefore, large firms work to reduce political costs through disclosing more information voluntarily (Abdel-Fattah, 2008; Camfferman & Cooke, 2002; Watts & Zimmerman, 1990). Based on these arguments, we hypothesise that:

H1: There is a positive relation between firms' size and voluntary disclosure.

3.2 Firm Age

There is a debate as to the level of influence of firms' age on voluntary disclosure. Sehar et al., (2013) argue that new firms disclose more information voluntarily than do old ones. However, Hossain (2008) documents that it is not possible to conclude that the older firms disclose more information than do new firms. Furthermore, Owusu-Ansah, S., (1998) argues that a considerable portion of the new firms' information is related to research and development, and expenditure; therefore, these firms can encounter a competitive disadvantage if they fail to disclose such information. In this regard, this study argues that new firms lack the financial resources and expertise to organise and disseminate more information than is required and these firms prioritise meeting the large set-up costs rather than incurring the additional costs of voluntary disclosure. In addition, new firms may encounter less pressure from stakeholders for voluntary disclosure compared to older ones. Therefore, we hypothesise that:

H2: There is a positive relation between firms' age and voluntary disclosure.

3.3 Firm Profitability

The majority of disclosure studies propose a positive association between firm profitability and voluntary disclosure. Moreover, this proposition has been justified in each of the four theories' perspectives. First, agency theory argues that managers of high-profit firms will disclose detailed information in order to win personal advantages and to justify the compensation package (Barako, 2007). Second, stakeholder's theory suggests that high-profit firms will disclose more information to satisfy all stakeholders (Abdel-Fattah, 2008). Third, from the political costs theory perspective, Inchausti (1997) argues that the management of profitable firms discloses more information in order to justify these higher profits. Fourth, signalling theory proposes that profitable firms will disclose more information in order to benefit from its success through raising the price and value of their shares (Inchausti, 1997; Foster, 1986). In sum, achieving high profits is a main indicator of the management success. This will provide an incentive for the management to exploit this success in order to gain many benefits through the voluntary disclosure, such as strengthening its position, improving its reputation in the business market, and justifying compensation. Therefore, we hypothesise that:

H3: There is a positive relation between profitability and voluntary disclosure

3.4 Firm Leverage

Despite the conflicting results on the relationship between firm leverage and voluntary disclosure, there are several reasons that justify a positive association. First, high leverage levels raise the agency costs, which encourage managers to disclose more information in order to reduce such costs (Alves et al., 2012). Second, Jensen & Meckling (1976) argue that firms with high debt ratios are subject to high monitoring costs, and therefore, they disclose more information. Third, firms with high debt ratios tend to disclose more information voluntarily in order to reassure their lenders and to prolong or extend the debt contract period. Fourth, firms committed to large debt contracts are often required to comply with certain debt restrictive covenants, and to show their compliance have to disclose more information than is required. Consequently, we hypothesise that:

H4: There is a positive relation between leverage and voluntary disclosure.

3.5 Independent Directors

The large ratio of independent directors to total board size confirms the independence of the board and implies that monitoring results will be more effective as long as the directors are unbiased. Consequently, independent directors may induce the management to disclose more information voluntarily (Abdel-Fattah, 2008). Alves et al. (2012) believe in a positive correlation; however, they could not find empirical evidence to support their hypothesis. Nevertheless, Samaha & Dahawy (2010) and Samaha & Dahawy (2011) do find a positive correlation. Furthermore, Lim et al. (2007) find that firms with higher independent boards disclose more forward-looking and strategic information. However, Soliman (2013) and Al-Shammari & Al-Sultan (2010) find no significant correlation. In sum, this study hypothesises a positive correlation between board independence and the amount of voluntary disclosure, since independent directors should conduct their monitoring tasks more effectively and should ask the management for greater disclosure to the stakeholders. Therefore, we hypothesise that:

H5: There is a positive relation between the ratio of independent directors and voluntary disclosure.

3.6 Audit Committees

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). 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; Forker, 1992). The Egyptian context empirical results are mixed; Samaha & Dahawy (2010 & 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:
H6: There is a high level of CG disclosure with company's audit committees.

3.7 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 maximise 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, the disclosure is a substitute for monitoring. Furthermore, Kelton, & 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 et al. (1990) show director ownership to be negatively related to voluntary disclosure. In developing countries, for example, Eng & Mak (2003) find such an association in Singapore-listed companies, as do Ghazali & Weetman (2006) in Malaysian companies. In an Egyptian context, Samaha & 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:
H7: There is a high level of CG disclosure with low percentages of director ownership.

3.8 Block-holder ownership
A block-holder is a shareholder with an exceptionally large amount of shares. Early research indicated the presence of a negative relation between block-holder ownership and disclosure in developed countries such as Australia (McKinnon& Dalimunthe, 1993; and (Mitchell et al., 1995), Finland (Schadewitz & Blevins 1998), and Germany (Marston, & Polei, 2004). Mixed results were found in developing countries. In a Malaysian context, for example, Hossain et al. (1994) find a negative association between voluntary disclosure and block-holder ownership, while Haniffa & Cooke (2002) find a positive association. Marston & 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 & Dahawy (2010 & 2011) indicate a negative impact for block-holder ownership on voluntary corporate disclosures. Based on these arguments, we set our fifth hypothesis as follows:
H8: There is a high level of CG disclosure with low percentages of block-holder ownership.

3.9 Auditor Specialisation
Auditor specialisation is one of the least examined variables in the context of voluntary disclosure; therefore, this study contributes by its inclusion. Auditor specialisation is one of the main audit quality determinants since specialised auditors should provide high-quality reassurance results, which, in turn, will affect the voluntary disclosure effectively. Furthermore, Peters et al. (2001) document that the literature concludes that auditor specialisation is positively correlated with disclosure quality and transparency. In addition, Peters et al. (2001, p.2) state, "Our evidence supports the view that specialised auditors are employed in order to reduce information asymmetry by lending credibility to firms' disclosure". Therefore, we hypothesise that:
H9: There is a positive relation between the auditor specialisation and voluntary disclosure.

3.10 Auditor Type
Abdel-Fattah (2008, p.198) states, "It has been hypothesised that companies audited by an international big audit firm will disclose more information voluntarily". In addition, Abd-Elsalam (1999) argues that large audit firms work hard to protect their reputation, and they are more independent than small audit firms; therefore, they ask their clients to follow the mandatory disclosure rules, in addition to disclosing more information voluntarily.

Moreover, the authors consider that since management hires the external auditors, if they hire one of the big-four, this reveals that the management is ready to disclose more information and there is no intention to conceal any information. Further, a firm audited by a big four (Big 4) auditor implies that in the client acceptance phase the auditor has concluded, that the client is ready to disclose more information as the auditor requires. Therefore, we hypothesise that:

H10: ***There is a positive relation between the auditor type and voluntary disclosure.***

4. Research methodology

4.1 Sample and data

This study will examine 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 2016. The CG disclosure data were measured using a content analysis technique. Data on explanatory variables were found either in 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 2016, 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 2016, internet reporting and any CG stand-alone reports for 2016. 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.

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 organised 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

The following ordinary least square (OLS) regression model is employed to examine the study hypotheses:

VD-INDEXjt = $\beta_0 + \beta_1$ LogAsst$_{jt}$ + β_2 LogAge$_{jt}$ + β_3 ROA$_{jt}$ + β_4 LEVRG$_{jt}$ + β_5 BrdIndpe$_{jt}$ + β_6 ACO$_{jt}$ + β_7 Dirown$_{jt}$ + β_8 BLKown$_{jt}$ + + β_9 Audspec$_{jt}$ + β_{10} Big4$_{jt}$ + ε

Table 1: Model Variables, Symbols, Definitions, and Measurements

Symbol	Proxy	Measurement
Dependent Variable		
VD-INDEX	Overall Voluntary Disclosure Index	Number of items actually and voluntarily disclosed by a given firm divided by the total number of relevant items that should be disclosed
Independent Variables		
LogAsst$_{jt}$	Firm Size	**LogAsst** is measured as the natural logarithm of the book value of total assets for the firm j and period t.
LogAge$_{jt}$	Firm Age	**Firm Age** is expressed as the natural logarithm of years number since establishment, for the firm j and period t.
ROA$_{jt}$	Firm Profitability.	**ROA** refers to return on assets and is measured as the ratio of net income to total assets for the firm j and period t.
LEVRG$_{jt}$	Firm Leverage	**LEVRG** is measured as long-term debts divided by capital equity.
BrdIndpe$_{jt}$	Independent Directors	**BrdIndpe** is the ratio of independent directors to total board size
ACO$_{jt}$	Audit committees	**ACO** is dummy variable, one if an audit committee, zero otherwise.
Dirown$_{jt}$	Director Ownership	**Dirown** is percentage of shares owned by the CEO and executive directors to the total number of shares issued
BLKown$_{jt}$	Block-holder ownership	**BLKown** is the percent of shares owned by the block-holders shareholders whose ownership ≥5% of a total number of shares issued.
Audspec$_{jt}$	Auditor Specialization	**Audspec** is a dummy variable, which equals one if the auditor is specialised in the client industry, zero otherwise.
Big4$_{jt}$	Auditor Type	**Big4** is a dummy variable, which equals one if the auditor is one of the Big4, zero otherwise.

5. Study Results & Discussion

5.1 Descriptive Statistics

Table 2 shows the descriptive analysis, however, only the noteworthy observations are discussed. First, the table shows that the mean of Overall Voluntary Disclosure Index is 18.38, which indicates that only 18.38%, on average of all the disclosure index items are actually disclosed by the sample firms. Second, Table 2 shows that the mean of leverage is 10.50%, which indicates that the sample firms are not highly leveraged firms, and do not suffer debt problems. In addition, a minimum value of zero and a maximum value of 62.10% reveal a large dispersion in firms' debt ratios. Third, the board independence mean is 52.50 %, which implies that about half of the sample firms' directors are independent. Fourth, the block-holder ownership mean is 57.1%, which implies that about half of the sample firms' directors owned more than 5% of total number shares issued. Fifth, the mean of auditor specialisation is 39.80%, which indicates that specialised auditors, on average, audit about 40% of the sample firms. Sixth, the mean of a Big4 variable is 0.637, which asserts that a Big4 auditor audits 63.70%, on average, of the sample firms. Finally, the mean of director ownership variable is 0.09, which infers that directors own about 9%, on average, of the sample firms. In addition, the minimum value of director ownership variables is zero, which indicates that ownership structure of some sample firms does not include director ownership. In contrast, the maximum value of director ownership variable is 0.97, which indicates that the ownership structure of some sample firms comprises of 97% director ownership.

Table 2: Descriptive Statistics of Model Variables

Variable	Mean	Median	Minimum	Maximum	St. Deviation
VD-INDEX	18.384	17.000	6.000	44.000	7.063
LogAsst	9.242	9.216	7.185	11.047	0.685
LogAge	1.207	1.279	0.000	1.740	0.394
ROA	0.077	0.071	-0.108	0.386	0.094
LEVRG	0.105	0.039	0.000	0.621	0.151
BrdIndpe	0.525	0.500	0.000	1.000	0.223
ACO	0.220	0.395	0.000	1.000	0.416
Dirown	0.089	0.683	0.000	0.970	0.218
BLKown	0.571	0.346	0.000	1.000	0.344
Audspec	0.398	0.000	0.000	1.000	0.491
Big4	0.637	1.000	0.000	1.000	0.481

5.2 Correlation Matrix

Table 3 shows the correlation analysis between the overall voluntary disclosure index and independent variables. It shows that firms with a higher 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 the highest correlation between the independent variables is 50.70%; this is between the firm size and the Big4. The next highest correlation between the independent variables is 47.90%; this is between the firm size and the Leverage. The table also shows that firms with large block holder ownership and leverage are more likely to provide less corporate governance voluntary

Table 3: Correlation Matrix

	VD-INDEX	LogAsst	LogAge	ROA	LEVRG	BrdIndpe	ACO	Dirown	BLKown	Audspec	Big4
VD-INDEX	1.000										
LogAsst	0.408*	1.000									
LogAge	0.014	-0.331*	1.000								
ROA	0.109	0.028*	0.196	1.000							
LEVRG	-0.153*	0.479	-0.356	-0.015	1.000						
BrdIndpe	-0.080	-0.135	0.242*	-0.087	-0.094	1.000					
ACO	0.185	0.071	0.295**	0.021	0.091	-0.102	1.000				
Dirown	0.025	-0.059	0.056	-0.038	0.069	0.071	0.006	1.000			
BLKown	-0.577**	-0.280**	0.069	-0.016	-0.069	0.0001	-0.209*	0.015	1.000		
Audspec	0.238*	0.382*	-0.088	0.113	0.155	0.053	0.053	-0.049	0.039	1.000	
Big4	0.200*	0.507*	-0.305*	0.113	0.343	-0.230*	0.033	0.038	0.021	0.479*	1.000

5.3 Multiple Regression Results

Table 4 summarises the results of OLS regression analysis. It is apparent that the F-value is 9.390 (P=0.000), which indicates that the study model is statistically significant. Moreover, the adjusted value of the determination coefficient (Adj.R2) = 0.445, which implies that the independent variables explain 45.50% of total variation in the voluntary disclosure index. In sum, the model is a statistically effective for explaining the variation in the extent of voluntary disclosure.

Regarding the independent variables' results, Table 4 shows that the firm size is positively and significantly correlated with the voluntary disclosure (significance level is 1%) which is consistent with the first hypothesis. This result is consistent with the results of Soliman (2013), Abdel-Fattah (2008), Wang et al. (2008), Alsaeed (2006), Nasser et al. (2002), and Meek et al. (1995). This result asserts that argument of the stakeholders' theory that large firms are more likely to provide more voluntary disclosure since these firms are under greater pressure from a large number of stakeholders following the large firms.

The table also shows that firm age is positively and statistically correlated with the voluntary disclosure (significance level is 10%). This finding confirms the argument that the older firms have the incentives, resources, and expertise to organise and disseminate more information than do younger firms. Moreover, this argument agrees with that of Soliman (2013), and with the results of Hossain and Hammami (2009).

Moreover, the analysis shows that firm profitability is positively correlated with the voluntary disclosure and statistically significant at 5%, which consistent with the third hypothesis. This result asserts the arguments of agency and political costs theories that managers of high-profit firms will disclose more information to gain personal interests, such as creating a good reputation and to justify the compensation package (Barako, 2007; Inchausti, 1997). Further, the result asserts the signalling theory argument that profitable firms disclose more information to raise their price and value of their shares (Inchausti, 1997; Foster, 1986). This result is consistent with Wang et al. (2008) and Samaha and Dahawy (2011), among others, who argue that higher profits induce managers to supply more information to signal quality. Furthermore, the analysis shows that the firm leverage is negatively and significantly correlated with voluntary disclosure (significance level is 1%). This contradicts the agency theory argument that leveraged firms are more likely to disclose more information to reduce the increased agency costs created because of high debts (Alves et al. 2012). This also contradicts the authors' expectations that highly leveraged firms are more likely to disclose more information voluntarily in order to reassure their lenders that business is stable, renew the existing debts, and signal that they are able to repay the debts whenever due.

We also find an insignificant negative correlation between independent directors' ratio and voluntary disclosure, which inconsistent with our fifth hypothesis that firms with a high ratio of independent directors are more likely to disclose more information. This result contradicts that of Samaha and Dahawy (2011) who find a positive correlation. This result also is inconsistent with the agency theory argument that board independence is an effective corporate governance mechanism that could increase and improve the voluntary disclosure.

Furthermore, director ownership is positively associated with voluntary disclosure, so that our seventh hypothesis that voluntary disclosure increases with decreases in director ownership is not generally supported

As we find a significant negative association between block-holder and voluntary disclosure, therefore; our eighth hypothesis is accepted. This finding for Egyptian-listed companies is line with Samaha and Dahawy (2010 and 2011) and consistent with prior research in 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 to block-holder ownership.

Our findings in relation to the existence of an audit committee suggest that in order to understand the drivers of voluntary disclosure research should disaggregate the dimensions of corporate governance. ACO is insignificant in explaining overall corporate voluntary disclosure. This may suggest that audit committees in Egypt play a complementary monitoring role to corporate governance 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 terms of the quality of auditing environment, we find a positive and significant correlation between auditor specialisation and voluntary disclosure (significance level is 10%). This result is consistent with the sixth hypothesis and the argument of Peters et al. (2001) that firms audited by specialised auditors improve the audit quality, which in turn, increases the level of voluntary disclosure. However, we find a negative and insignificant correlation between auditor type and the voluntary disclosure. This result conflicts with arguments of Abdel-Fattah (2008) and Abd-Elsalam (1999) and the current study's hypothesis that firms audited by one of the Big4 auditors tend to disclose more information voluntarily since a Big4 auditor attempts to guard its reputation and supports stakeholder through extra disclosure. However, this result is consistent with that of Soliman (2013), Samaha and Dahawy (2011), and Alsaeed (2006).

Table 4: Regression Results

Symbol	Explanatory Variable	Coef.	t-value	Sig.	Pred. Sig.	Result
_cons		-29.832	-3.660	0.000		
LogAsst	Firm Size	4.839	5.360	0.000***	+	Accept
LogAge	Firm Age	2.552	1.720	0.088*	+	Accept
ROA	Firm Profitability	9.201	2.230	0.027**	+	Accept
LEVRG	Firm Leverage	-16.870	-5.860	0.000***	+	Reject
Brdindep	Independent Directors	-1.809	-1.140	0.255	+	Reject
ACO	Audit committees	-0.025	-0.370	0.712	+	Reject
Dirown	Director Ownership	0.024	0.370	0.712	+	Accept
BLKown	Block-holder ownership	-0.230	-2.686	0.009***	+	Reject
Audspec	Auditor Specialization	1.839	1.920	0.056*	+	Accept
Big4	Auditor Type	-0.778	-0.740	0.463	+	Reject
F-value	9.390	*	Significant at 10%,			
Prob > F	0.000	**	Significant at 5%, and			
R-squared	0.463	***	Significant at 1%.			
Adj. R^2	0.445					

6. Conclusion

This study investigates the determinants of voluntary disclosure in Egypt in 2016 by analysing the panel data of 100 firm-year observations using both content analysis and OLS regression analysis. Moreover, following Botosan (1997) an Overall Voluntary Disclosure Index consisting of 60 primary voluntary disclosure items was constructed to measure the level of disclosure. Our descriptive analysis shows that voluntary disclosure extent, on average, is 18.38%. This low rate in Egypt is not commensurate with the size and influence of the Egypt economy. The results also provide evidence on the positive significant association between firm size, firm age, firm profitability, auditor specialisation, block-holder ownership, and audit committee, and the voluntary disclosure extent. This result implies that these variables are the main voluntary disclosure drivers in Egypt. However, a negative significant association was found between firm leverage and voluntary disclosure, while no significant association was found between board independence, Big 4, and director ownership, and the voluntary disclosure extent.

Nevertheless, this study has a number of limitations. First, due to data availability, we limit our analysis to ten potential determinants of the disclosure. Second, the firm-year observations examined are only 100 and the study period is the only year 2016, which are small, relative to the size and age of the Egyptian Stock Exchange.

Our study suggests a number of other avenues for future research. It would be interesting to study the tone of voluntary disclosure in annual reports and to explore the extent to which tone disclosure affects the stock market participants in emerging economies. In addition, said Ressas and Hussainey (2014) provide evidence that financial crisis affects the tone of disclosure in annual reports. It might be interesting to examine the impact of financial crisis on the disclosure practice in emerging economies. Finally, it would be interesting to extend the present study by looking at the determinants of individual classes of information in emerging economies (i.e. forward-looking disclosure).This research idea has been extensively explored in a developed economy (i.e. Abed et al, 2014); however, there has been little evidence on the determinants of individual classes of information in emerging economies.

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