

## **THE RELATIONSHIP BETWEEN FIRM CHARACTERISTICS AND MANDATORY DISCLOSURE LEVEL: WHEN EGYPTIAN ACCOUNTING STANDARDS WERE FIRST ADOPTED**

**Nermeen F. Shehata\***

*Faculty of Commerce, Cairo University, Cairo, Egypt*

**Khaled Dahawy**

*School of Business, American University in Cairo, Cairo, Egypt*

**Tariq Ismail**

*Faculty of Commerce, Cairo University, Cairo, Egypt*

### **ABSTRACT**

Egypt witnessed continuous developments in accounting regulations which led to a comprehensive set of Egyptian Accounting Standards (EAS) in June 2006, to be implemented starting 2007. It is expected that complying with high quality accounting standards would result in more adequate information disclosure. This research aims to identify companies' disclosure level after compliance with the newly issued EAS, and test the relationship between firm characteristics and mandatory disclosure level in the Egyptian context. Firm characteristics have been divided into three groups: market-related, structure-related and performance related characteristics. The research used annual reports of 39 listed companies for the year ended December 2007. Findings reveal that the average mandatory disclosure level was 74%, while the maximum disclosure level was 83%. Results indicate that the firm characteristics with a positive significant relationship with disclosure level are company size, and auditor type, while the factor that had a negative relationship is liquidity.

### **INTRODUCTION**

Globalization of financial markets has occurred extensively since the last decade. Investors move large sums of money with very high speed all around the world. The fast flow of foreign capital into the emerging markets leads to impressive growth in these markets' economies as well as a boom in their stock markets. Investing in emerging markets is accompanied with several risks including political, economic, and structural problems. However, difficulty in obtaining adequate reliable financial information which is required to evaluate investment opportunities and threats in these markets represents another risk (Saudagaran and Diga, 2003). This occurs due to the differences in financial accounting reporting practices that lead to misunderstanding problems and uncertainties (Owusu-Ansah, 1998; Chamisa, 2000; Taplin et al., 2002). Accordingly, high quality comparable financial information is needed (Jones, 2005; Joshi et al., 2008).

Financial reporting is one of the main tools used to acquire information and is an important source that can create investor confidence in a market. Financial reporting and disclosure reduce information asymmetry that exists in capital markets between managers and other stakeholders (Healy and Palepu, 2001). In the past, disclosure level has been criticized as being low in the Egyptian environment among all studies investigating disclosure level in Egypt (Dahawy et al., 2002; AbdElsalam and Weetman, 2003; Samaha, 2004; Hassan et al., 2006; AbdElsalam and Weetman, 2007; Dahawy and Conover, 2007; Hassan et al., 2009).

Egypt witnessed changes in accounting regulations ended by releasing the Egyptian Accounting Standards in June 2006, to be implemented by companies starting from the fiscal year 2007. Presence of high quality accounting standards should increase the possibility of having more adequate information disclosure. Accordingly, it is expected that after the release of the comprehensive set of the Egyptian Accounting Standards, information disclosure would be enhanced. Previous studies have indicated that disclosure level is affected by country environment and company characteristics. The change in the Egyptian accounting environment provides an opportunity to assess that impact on disclosure level.

This paper has two objectives; first, identifying companies' disclosure level after the compliance with the newly issued Egyptian Accounting Standards, and second, assessing the relationship between firm characteristics and mandatory disclosure level in the Egyptian environment.

This paper is organized as follows; the next section discusses the literature review on disclosure and firm characteristics, followed by the hypotheses development, then the methodology. Finally, findings and analyses, summary and conclusions are presented respectively.

### LITERATURE REVIEW

Research related to disclosure and firm characteristics can be divided into four groups. The first relates mandatory disclosure level and firm characteristics (Table 1a). The second group includes studies examining the relationship between firm characteristics and voluntary disclosure level (Table 1b). The third group relates overall disclosure level and firm characteristics (Table 1c) and the final group relates certain types of disclosure to firm characteristics (Table 1d). It should be noted that through the analysis, variables that have a marginally significant relationship with disclosure level are assumed as not significant. This is to differentiate between two categories only; significant and non significant variables.

Table 1a: Results regarding mandatory disclosure and firm characteristics

Study	Country	Examined variables	Significance of variables
Wallace et al. (1994)	Spain	<p><b>Structure-related variables:</b></p> <ol style="list-style-type: none"> <li>1. size</li> <li>2. gearing ratio</li> </ol> <p><b>Performance-related variables:</b></p> <ol style="list-style-type: none"> <li>3. earnings return</li> <li>4. profit margin</li> <li>5. liquidity ratio</li> </ol> <p><b>Market-related variables:</b></p> <ol style="list-style-type: none"> <li>6. industry type</li> <li>7. listing status</li> <li>8. auditor type</li> </ol>	<p>+</p> <p>None</p> <p>None</p> <p>None</p> <p>-</p> <p>None</p> <p>+</p> <p>None</p>
Ahmed and Nicholls (1994)	Bangladesh	<ol style="list-style-type: none"> <li>1. company size</li> <li>2. total debt</li> <li>3. multinational company influence</li> <li>4. professional qualifications of the principal accounting officer</li> <li>5. audit firm size</li> </ol>	<p>None</p> <p>None</p> <p>+</p> <p>None</p> <p>+</p>
Wallace and Naser (1995)	Hong Kong	<p>Listing on foreign stock exchange</p> <p><b>Structure-related variables:</b></p> <ol style="list-style-type: none"> <li>1. leverage</li> <li>2. size</li> <li>3. proportion of shares held by outsiders</li> </ol> <p><b>Performance-related variables:</b></p> <ol style="list-style-type: none"> <li>4. profit margin</li> <li>5. earnings return</li> <li>6. liquidity ratio</li> </ol> <p><b>Market-related variables:</b></p> <ol style="list-style-type: none"> <li>7. market capitalization</li> <li>8. scope of business operations</li> <li>9. auditor type</li> </ol>	<p>None</p> <p>None</p> <p>+</p> <p>None</p> <p>-</p> <p>None</p> <p>None</p> <p>None</p> <p>+</p> <p>-</p>

Owusu-Ansah (1998)	Zimbabwe	<ol style="list-style-type: none"> <li>1. company size</li> <li>2. quality of external audit</li> <li>3. ownership structure</li> <li>4. industry type</li> <li>5. company age</li> <li>6. multinational corporation affiliation</li> <li>7. profitability</li> <li>8. liquidity</li> </ol>	<p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">+</p> <p style="margin: 0;">+</p> <p style="margin: 0;">+</p> <p style="margin: 0;">None</p>
Street and Gray (2002)	32 countries	<ol style="list-style-type: none"> <li>1. listing status</li> <li>2. company size</li> <li>3. profitability</li> <li>4. industry type</li> <li>5. auditor type</li> <li>6. country of domicile</li> <li>7. multinationality</li> <li>8. size of home stock market</li> <li>9. the way in which a company refers to using IAS</li> <li>10. type of accounting standards used</li> <li>11. type of auditing standards used</li> </ol>	<p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p> <p style="margin: 0;">+</p> <p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p> <p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p>
Ali et al. (2004)	Pakistan, India and Bangladesh	<ol style="list-style-type: none"> <li>1. company size</li> <li>2. leverage</li> <li>3. multinational company influence</li> <li>4. auditor size</li> <li>5. profitability</li> </ol>	<p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">+</p>
Akhtaruddin (2005)	Bangladesh	<ol style="list-style-type: none"> <li>1. company size</li> <li>2. company age</li> <li>3. industry type</li> <li>4. profitability</li> </ol>	<p style="margin: 0;">None</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p>
Aljifri (2008)	UAE	<ol style="list-style-type: none"> <li>1. industry type</li> <li>2. company size</li> <li>3. debt equity ratio</li> <li>4. profitability</li> </ol>	<p style="margin: 0;">+</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p> <p style="margin: 0;">None</p>

The second group comprises studies examining the relationship between firm characteristics and voluntary disclosure level, as shown in Table 1b.

Table 1b: Results regarding voluntary disclosure and firm characteristics

Study	Country	Examined variables	Significance of variables	
Hossain et al. (1994)	Malaysia	1. company size 2. ownership structure 3. leverage 4. assets-in-place 5. audit firm type 6. foreign listing status	+	- None None None +
Hossain et al. (1995)	New Zealand	1. company size 2. leverage 3. assets-in-place 4. audit firm 5. foreign listing status	+	+
Camfferman and Cooke (2002)	UK and Netherlands	<b>Market-related variables:</b> 1. industry type 2. auditor type <b>Performance-related variables:</b> 3. liquidity 4. profitability 5. return on equity <b>Structure-related variables:</b> 6. company size 7. leverage	<u>UK</u>	<u>Netherlands</u>
			+	+
Haniffa and Cooke (2002)	Malaysia	<b>Performance-related variables:</b> 1. profitability <b>Market-related variables:</b> 2. industry type 3. multiple listing 4. auditor type <b>Structure-related variables:</b> 5. company size 6. gearing 7. assets-in-place 8. diversification 9. complexity 10. ownership structure	None	+
			+	None
Leventis and Weetman (2004)	Greece	<b>Performance-related variables:</b> 1. profitability 2. liquidity <b>Market-related variables:</b> 3. industry type 4. listing status 5. share return <b>Structure-related variables:</b> 6. company size 7. gearing	None	None
			None	None
Alsaeed (2006)	Saudi Arabia	<b>Structure-related variables:</b> 1. company size	+	None

		2. firm age 3. ownership dispersion <b>Performance-related variables:</b> 4. profit margin 5. return on equity <b>Market-related variables:</b> 6. industry type 7. audit firm size	None None None None None None
Barako et al. (2006)	Kenya	1. ownership structure  2. company size 3. leverage 4. liquidity 5. profitability 6. auditor type	- (held by 20 shareholders) + (foreign and institutional ownership) + + None None None
Agca and Onder (2007)	Turkey	1. company size 2. ownership structure 3. leverage 4. profitability 5. auditor type 6. multinationality	- None None + + None
Tsamenyi (2007)	Ghana	1. ownership structure 2. dispersion 3. company size 4. leverage	- + + None

The third group presents studies concerning the relationship between firm characteristics and the overall disclosure level, as shown in Table 1c.

Table 1c: Results regarding overall disclosure and firm characteristics

Study	Country	Examined variables	Significance of variables
Inchausti (1997)	Spain	1. company size 2. stock exchange cross listing 3. profitability 4. audit firm size 5. industry type 6. dividend pay-out	+ + None + None None
Naser (1998)	Jordan	<b>Market-related variables:</b> 1. auditor firm size 2. market capitalization 3. industry type <b>Performance-related variables:</b> 4. profit margin 5. return on equity 6. liquidity <b>Structure-related variables:</b> 7. company size 8. leverage 9. ownership structure	None None None None + None + + None

Ahmed and Courtis (1999)	Meta analysis of 29 studies	1. company size 2. leverage 3. audit firm size 4. profitability 5. listing status	+ + None None +
Naser et al. (2002)	Jordan	<b>Market-related variables:</b> 1. company size 2. audit firm status 3. industry type <b>Performance-related variables:</b> 4. profit margin 5. return on equity 6. liquidity <b>Structure-related variables:</b> 7. gearing <b>Ownership structure</b>	+ + None + None - + None
Archambault and Archambault (2003)	37 countries	<b>Financial factors:</b> 1. ownership 2. exchange listing 3. dividends 4. auditor size 5. leverage <b>Operating factors:</b> 6. company size 7. number of industries 8. foreign sales	None + + + None None + +

Finally, the fourth group includes studies regarding the relationship between firm characteristics and disclosure level in respect to certain types of disclosure. For example segment reporting and interim data (Hossain and Mitra, 2004), corporation type; such as multinational corporations (Meek et al, 1995), board of directors' statement (Naser and Al Khatib, 2000), and certain type of information, such as the disclosure of intangibles' information comprise (Oliveira et al., 2006). Those studies are shown in Table 1d.

Table 1d: Results regarding firm characteristics and disclosure in respect to certain type of information

Study	Country	Examined variables	Significance of variables
Meek et al. (1995)	USA, UK, Continental Europe	1. company size 2. country of origin 3. industry type 4. leverage 5. multinationality 6. profitability 7. international listing status	+ + None None None None +

Naser and Al-Khatib (2000)	Jordan	<p><b>Company size variables:</b></p> <p>1. assets</p> <p>2. number of employees</p> <p><b>Profitability variables:</b></p> <p>3. profit margin</p> <p>4. return on equity</p> <p><b>Ownership variables:</b></p> <p>5. government ownership</p> <p>6. individual ownership</p> <p><b>Capital structure variables:</b></p> <p>7. gearing</p>	<p>None</p> <p>+</p> <p>+</p> <p>None</p> <p>None</p> <p>-</p> <p>+</p>
Hossain and Mitra (2004)	USA	<p>1. company size</p> <p>2. leverage</p> <p>3. assets-in-place</p>	<p>+</p> <p>+</p> <p>-</p>
Oliveira et al. (2006)	Portugal	<p><b>Structural variables:</b></p> <p>1. company size</p> <p>2. leverage</p> <p>3. auditor type</p> <p>4. ownership concentration</p> <p><b>Performance variables:</b></p> <p>5. profitability</p> <p><b>Market variables</b></p> <p>6. listing status</p> <p>7. industry type</p> <p>8. foreign activity</p>	<p>+</p> <p>None</p> <p>+</p> <p>+</p> <p>None</p> <p>+</p> <p>+</p> <p>None</p>

### HYPOTHESES DEVELOPMENT

Several studies classified firm characteristics into structure-related, performance-related, and market-related characteristics. This classification of firm specific characteristics was pioneered by Lang and Lundholm (1993), who classified firm characteristics into three groups as follows: 1. Performance variables; include returns and analyst forecast errors, 2. Structural variables; comprise company size, the relationship between annual returns and earnings, and return variability, and 3. Offer variables; refer to the activeness of a firm's securities issuing.

However, Wallace et al. 1994 have used the same classification, but the offer variables group has been replaced by a market-related group. This was followed by Wallace and Naser (1995), Naser (1998), Naser et al. (2002), Camfferman and Cooke (2002), Haniffa and Cooke (2002), Alsaeed (2006), and Oliveira et al. (2006).

Amongst those studies; structure-related variables are considered stable and constant overtime, while performance-related variables provide external users with the required information, in addition to being time specific variables. Finally, market-related variables can be considered stable over time or time period specific.

#### Structure related variables:

Variables under this category are considered stable over time (Lang and Lundholm, 1993; Wallace et al., 1994). This group comprises company size, leverage, assets-in-place and company age.

#### Company size

Alsaeed (2006), Camfferman and Cooke (2002) and Wallace et al. (1994) argued that the direction of the relationship between company size and disclosure level may be either positive or negative. Negative relationship is supported by the fact that large companies may be subjected to political attacks such as the threat of nationalization where those companies will be forced to disclose less detail in their annual reports in order to reduce the likelihood of political action.

On the other hand, large companies may disclose more information as they are more likely subject to scrutiny by the public than small companies (Camfferman and Cooke, 2002). Also large companies may reduce their cost of capital through increased disclosures (Lang and Lundholm, 2000). Moreover, large companies can disclose

more information at low costs as they have enough resources to collect and analyze data (Alsaeed, 2006). Accordingly, empirical research assumes that large firms may be influenced to disclose more information than small companies.

Company size can be proxied by total assets (Wallace et al., 1994; Wallace and Naser, 1995; Naser, 1998; Camfferman and Cooke, 2002; Haniffa and Cooke, 2002; Alsaeed, 2006; Oliveira et al., 2006), total sales (Wallace et al., 1994; Wallace and Naser, 1995; Naser et al., 2002). Accordingly, the authors will use both proxies. Based on the above discussion, the following hypothesis is formulated:

H<sub>1</sub>: There is a significant relationship between company size and disclosure level.

### **Leverage**

Companies depending on debts should satisfy the needs of creditors through disclosing more information about the company's performance. Accordingly, companies with high leverage levels are likely to disclose more information than less leveraged one. Leverage has been measured by debt ratio; total liabilities to total assets (Alsaeed, 2006), and debt to equity ratio (Wallace et al., 1994; Wallace and Naser, 1995; Naser, 1998; Camfferman and Cooke, 2002; Haniffa and Cooke, 2002; Oliveira et al., 2006). Accordingly, the following hypothesis is formulated:

H<sub>2</sub>: There is a significant positive relationship between leverage and disclosure level.

### **Assets-in-place**

Assets-in-place represent the ratio of fixed assets to total assets. This variable has not been widely investigated (Hossain et al., 1994; Hossain et al., 1995; Haniffa and Cooke, 2002; Hossain and Mitra, 2004). It can be said that total assets consist of assets-in-place, and future investment assets (Myers, 1977).

A firm with more future investment assets is more likely to have more agency problems. Since disclosure is one of the means to reduce agency problems, consequently, firms with high future investment assets will disclose more information, and firms with high assets-in-place will disclose less information (Chow and Wong-Boren, 1991; Hossain and Mitra, 2004). Therefore, the following hypothesis is formulated:

H<sub>3</sub>: There is a significant negative relationship between assets-in-place and disclosure level.

### **Company age**

Company age as well has been assessed in few studies (Owusu-Ansah, 1998; Akhtaruddin, 2005; Alsaeed, 2006). Older companies are more likely to disclose information than new one, because of the ease and low cost of collecting and analyzing data, presence of track records for old companies, and companies' stability in a market; for example, old companies will disclose information about research and development unlike new companies that might fear competitive disadvantage which may result (Owusu-Ansah, 1998). Akhtaruddin (2005) classified companies into three groups; very old, old and new. However, the authors will follow Alsaeed (2006) in referring to firm' age since establishment till 2008; year of conducting the study. Accordingly, the following hypothesis is formulated:

H<sub>4</sub>: There is a significant positive relationship between company age and disclosure level.

### **Performance related variables:**

Those variables differ by time and allow identifying a firm's performance (Lang and Lundholm, 1993; Wallace et al., 1994). This category includes profitability and liquidity.

#### **Profitability**

High profitability might force a company's management to disclose more information to show the public how they were performing well, in addition to clarifying how management maximized shareholders' value to increase management compensation (Sighvi and Desai, 1997; Alsaeed, 2006). Almost all the studies use return on equity and return on sales/profit margin as a measure of profitability (Wallace et al., 1994; Wallace and Naser, 1995; Camfferman and Cooke, 2002; Camfferman and Cooke, 2002; Alsaeed, 2006). Return on assets is used by Oliveira et al. (2006). Accordingly, the following hypothesis is formulated:

H<sub>5</sub>: There is a significant positive relationship between profitability and disclosure level.

#### **Liquidity**

Companies with high liquidity levels are more likely to disclose more information to show their superior performance to investors, regulatory authorities and lenders, that they can fulfill their short term obligations. However, companies with low liquidity levels may also disclose more information to avoid shareholders claims, and



to prove that management is aware of the company's problems (Wallace et al., 1994; Wallace and Naser, 1995; Alsaeed, 2006). Majority of prior studies mentioned above investigate liquidity using the current ratio. Accordingly, the following hypothesis is formulated:

H<sub>6</sub>: There is a significant relationship between liquidity and disclosure level.

### Market related variables:

Market related variables include industry type, auditor type and foreign activity. This category can be considered stable and/or time specific (Lang and Lundholm, 1993; Wallace et al., 1994).

#### Industry type

Manufacturing companies are considered larger than service companies, since they have more assets, turnover and need huge amounts of capital investments. Accordingly, manufacturing companies will disclose more information than service companies (Naser et al., 2002). Consequently, the following hypothesis is formulated:

H<sub>7</sub>: There is a significant positive relationship between industry type and disclosure level.

#### Auditor type

Large audit firms are more likely to deal with several clients and are not dependent upon one or few clients as small audit firms, where large firms in this case exert pressure on companies to disclose more information. Moreover, as large audit firms have major concerns about their reputation, they will not associate except with those companies that reveal more information in their financial reports (Alsaeed, 2006). Accordingly, local audit firms affiliated with one of the Big-4 audit firms (KPMG, Ernst and Young, PricewaterhouseCoopers, Deloitte and Touche) will disclose more information than those with no foreign affiliation (Wallace and Naser, 1995). Therefore, the following hypothesis is formulated:

H<sub>8</sub>: There is a significant positive relationship between auditor type and disclosure level.

#### Foreign activity

Companies involved in foreign activities; especially foreign sales are more likely to disclose more information (Haniffa and Cooke, 2002; Archambault and Archambault, 2003; Oliveira et al., 2006). Therefore, the following hypothesis is formulated:

H<sub>9</sub>: There is a significant positive relationship between foreign activity and disclosure level.

In order to test the research hypotheses, the following regression model is used:

$$DISL = \beta_0 + \beta_1 SIZ + \beta_2 LEV + \beta_3 AIP + \beta_4 COAGE + \beta_5 PROF + \beta_6 LIQ + \beta_7 BUSS + \beta_8 ADTR + \beta_9 FORN + \varepsilon$$

where:

*DISL* = Disclosure level

$\beta_0$  = Constant

*SIZ* = Company size measured by:

1. Assets (ASS): log of book value of total assets.
2. Sales (SALES): log of sales

*LEV* = Leverage measured by:

1. Debt ratio (DR): ratio of total liabilities to total assets.
2. Debt to equity ratio (DEQ): ratio of long term debts to equity.

*AIP* = Assets-in-place measured by ratio of fixed assets to total assets.

*COAGE* = Company age calculated as the difference between the year 2008 and the year of establishment.

*PROF* = Profitability measured by:

1. Return on equity (ROE): ratio of earnings before tax to outstanding equity.
2. Return on assets (ROA): ratio of earnings before tax to total assets.
3. Profit margin (PM): ratio of earnings before tax to net sales

*LIQ* = Liquidity measured by ratio of current assets to current liabilities.

- BUSS* = Type of business. It is a dummy variable: 1= manufacturing company, 0=non-manufacturing company
- ADTR* = Auditor type. It is a dummy variable: 1= external auditor is one of the Big4, 0= external auditor is a local one
- FORN* = Foreign activity. It is a dummy variable. 1= company is involved in foreign transactions, 0= company is not involved in foreign transactions
- $\varepsilon$  = error

## RESEARCH METHODOLOGY

A checklist developed by the Egyptian Capital Market Authority (2000) is used to measure the mandatory disclosure level. The checklist reviews the compliance of companies to disclosure and transparency requirements in their financial statements. It is divided into six sections as follows: general information, accounting policies implemented, balance sheet items, income statement items, owners' equity statement items and cash flow statement items.

The annual report is perceived as the most important source of information to many users (Epstein and Pava, 1993; Abu Nassar and Rutherford, 1996; Bartlett and Chandler, 1997; Naser et al., 2003; Akhtaruddin, 2005). Studies conducted in three developing countries: Saudi Arabia, Kuwait, and Iran indicate that external users rely primarily on the annual reports and the financial statements in the decision making process, specifically the income statement (Naser et al., 2003; Naser and Nuseibeh, 2003; Mirshekary and Saudaugran, 2005).

Mandatory disclosure is considered low in Egypt (Dahawy et al., 2002; AbdElsalam and Weetman, 2003; Dahawy and Conover, 2007). In an environment where mandatory disclosure is low, voluntary disclosure is not favorable to be examined. Accordingly, disclosure level that will be assessed in this paper is the mandatory level. As indicated in section 2; since the Egyptian accounting environment was dramatically developed after the introduction of a comprehensive set of the Egyptian Accounting Standards. Accordingly, it is expected that disclosure level will increase. In addition, studies assessing mandatory disclosure conclude that the disclosure level differs with different company characteristics (Ahmed and Nicholls, 1994; Wallace and Naser, 1995; Owusu-Ansah, 1998; Ali et al., 2004).

Disclosure level revealed in the annual reports will be identified based on the compliance level of the disclosed information with a set of requirements; this approach is commonly used in the literature (Patton and Zelenka, 1997). The Egyptian Accounting Standards represent the set of requirements. The relevant index approach will be used in scoring, where an item is assign a '1' if disclosed, '0' if not disclosed, or 'NA' if it is not applicable. Through this method, the possibility of penalizing a company by scoring a '0' for a not applicable item is avoided (Wallace, 1988; Cooke, 1991; Cooke, 1993).

The study conducts a cross-sectional study over the financial year 2007; representing the first year after implementing of the comprehensive set of the Egyptian Accounting Standards. The purpose of the study is to assess the disclosure level after the new standards' issuance. Companies listed on the CASE 30 index will be used since such companies are the most actively traded and liquid companies in the market. CASE 30 is a price index that is weighted by market capitalization and adjusted by the free float. Adjusted market capitalization of a listed company is the number of its listed shares multiplied by the closing price of that company multiplied by the percent of freely floated shares. A company must have at least 15% free float to be listed on that index to ensure that the CASE 30 constituents truly represent actively traded companies and that the index is a good and reputable indicator for the Egyptian market. Companies listed on CASE 30 index are reviewed and changed twice a year; at the beginning of February and August.

The target population is the traded companies in 2007. The sample size was calculated as follows (Yamane, 1967; Manly, 1992):

$$n = \frac{N}{Nd^2 + 1}$$

where:

- n = sample size
- N = population size
- d = precision level

Accordingly, the sample size that is subject to the investigation is 39 companies, where N = 337 (number of traded companies in 2007) and d = 15%. The highest actively traded 39 companies (as expressed in the above

equation) were selected for year 2007 as being representative of the Egyptian market. A precision level of 15% was selected as the population size is small, where precision level increases when the sample size decreases (Sapsford and Jupp, 1996; Viljoen and Merwe, 2000). Since the population size is considered low with respect to sample size tables, the highest precision is selected (Arkin, 1984).

The authors use CASE 30 companies' annual reports that are available at Egypt for Information Dissemination (EGID), a subsidiary unit of the Cairo and Alexandria Stock Exchange. Annual reports are used since they are perceived as the most important source of information for investors in many developing countries (Naser and Nuseibeh, 2003; Mirshekary and Saudagaran, 2005). Companies that are not available at EGID were excluded from the analyses as this means that the annual report is not available to the public (EGID, 2008).

In 2007, banks and some financial service companies were required to implement only the rules and regulations set by the Central Bank of Egypt instead of the Egyptian Accounting Standards. This is due to the fact that the Egyptian Accounting Standards issued in 2007 were comply with the IFRSs, while on the other hand the rules and regulations set by the Central Bank of Egypt did not comply with the IFRSs at that date. Efforts of the Central Bank of Egypt to comply with the IFRSs came to light on 16 December 2008 by issuing recent Central Bank's rules that are complying with the IFRSs.

## FINDINGS AND ANALYSES

Descriptive statistics of the sample are presented in Table 2. Panel A shows the descriptive data for the continuous variables: disclosure level, assets, sales, debt ratio, debt equity ratio, assets in place, company age, return on equity, profit margin, return on assets and liquidity. Panel B presents the descriptive data for the categorical variables: business type, foreign activity and auditor type.

Panel A shows that the maximum disclosure level is 84%, reflecting that no company fully complied with the mandatory requirements. On the other hand, the minimum disclosure level revealed is 66%. Average disclosure level is 77%, which is a moderate level. Panel B shows that the sample size consists of twenty manufacturing companies, representing 51% of the sample, while service companies accounted for 49% (nineteen companies). Companies involved in foreign activity are twenty one (54% of the sample), while companies involved only in local activity are eighteen companies (46%). Twenty two companies (56%) are audited by one of the Big-4 audit firms, while seventeen companies (44%) are audited by local audit firms only.

Table 2: Descriptive statistics of listed companies under empirical study

<b>Panel A</b>					
<b>Continuous Variables</b>	<b>Range</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
DISL	18	66	84	76.5641	4.78921
ASS	3.56	7.36	10.92	8.9846	0.71892
SALES	3.58	6.32	9.9	8.2754	0.81871
DR	91.66	0.55	92.21	35.319	24.22383
DEQ	326.25	0	326.25	25.0356	66.29516
AIP	87.45	1.22	88.67	47.1859	25.76583
COAGE	99	1	100	27.6923	24.71964
ROE	197.29	0	197.29	24.899	36.71033
PM	5968.99	0	5968.99	205.7285	949.77443
ROA	80.69	0	80.69	12.3164	14.28458
LIQ	9201.5	25.21	9226.71	506.5574	1455.94367

  

<b>Panel B</b>		
<b>Categorical variables</b>	<b>Dummy = 1</b>	<b>Dummy = 0</b>

	Manufacturing companies	Service companies
BUSS	n = 20 (51%)	n = 19 (49%)
FORN	International	Local
ADTR	n = 21 (54%) Big 4 affiliation	n = 18 (46%) Small
	n = 22 (56%)	n = 17 (44%)

Disclosure level of the thirty nine companies making up the sample size of the firm characteristics analysis for year 2007 is shown in Table 3. The high disclosure level category comprised thirteen companies representing 33.3% of the sample size. Twenty two companies (56.4%) represented the moderate disclosure category. Only 4 companies (10.3%) have a low disclosure category.

Table 3: Disclosure categories

Disclosure category	Number of companies	%
High (80-90%)	13	33.3
Moderate (70-80%)	22	56.4
Low (60-70%)	4	10.3
Total	39	100

Companies examined within each sector along with the average disclosure level are shown in Table 4. Basic resources sector has an average disclosure level of 83%, representing the highest disclosure level. Food and beverage sector has the lowest disclosure level of 76%. Most of the sectors have a disclosure level that ranges between 70 and 80%.

Table 4: Disclosure levels based on industry classification

Sector	Number of companies	Average disclosure
Oil & gas	1	79%
Personnel & household products	8	76%
Food & beverage	1	68%
Telecommunications	3	80%
Technology	1	76%
Media	1	80%
Financial services excluding banks	4	78%
Travel & leisure	2	81%
Basic resources	1	83%
Real estate	5	78%
Industrial goods, services & automobiles	3	71%
Construction & materials	4	78%
Chemicals	4	74%
Healthcare & pharmaceuticals	1	80%
<b>Total</b>	<b>39</b>	

Companies with highest disclosure category are in the following sectors: telecommunications, media, travel and leisure, basic resources, and healthcare and pharmaceuticals. Moderate disclosure level category includes the following sectors: oil and gas, personnel and household products, technology, financial services excluding banks,

real estate, industrial goods and services, construction and materials, and chemicals. Food and beverage is the only sector with low disclosure category.

Correlation analysis is conducted to test the relationships between the dependent variable; disclosure level, and the independent variables; (assets, sales, debt ratio, debt equity ratio, assets in place, company age, return on equity, profit margin, return on assets, liquidity, business type, foreign activity, and auditor type). Table 5 summarizes the results of Pearson Correlation with a two-tailed significance test. The most correlated variables with disclosure level are the sales and foreign activity variables (at 0.05 level) while the auditor type is significant at the 0.01 level. Accordingly, simple regression is conducted to test the extent to which each of those variables; sales, foreign activity, and auditor type can explain variation in the disclosure level as shown in Table 6.

Table 5: Correlation analysis of the independent variables and the dependent variable using the Pearson correlation

		DISL	ASS	SALES	DR	DEQ	AIP	COAGE	ROE	PM	ROA	LIQ	BUSS	FORN	ADTR
DISL	P Correlation	1.000													
	Sig. (2-tailed)														
ASS	P Correlation	0.253	1.000												
	Sig. (2-tailed)	0.120													
SALES	P Correlation	<b>0.320*</b>	.672**	1.000											
	Sig. (2-tailed)	0.047	0.000												
DR	P Correlation	-0.203	-.372*	-0.207	1.000										
	Sig. (2-tailed)	0.216	0.020	0.205											
DEQ	P Correlation	0.133	-0.088	0.033	.571**	1.000									
	Sig. (2-tailed)	0.420	0.593	0.844	0.000										
AIP	P Correlation	0.002	0.157	0.288	-0.164	0.201	1.000								
	Sig. (2-tailed)	0.989	0.340	0.075	0.317	0.220									
COAGE	P Correlation	-0.281	-0.198	-0.920	0.275	-0.191	-0.138	1.000							
	Sig. (2-tailed)	0.084	0.227	0.577	0.091	0.245	0.401								
ROE	P Correlation	0.225	0.208	0.281	.375*	.816**	0.066	-0.137	1.000						
	Sig. (2-tailed)	0.168	0.203	0.084	0.019	0.000	0.688	0.405							
PM	P Correlation	0.182	.450**	0.141	-0.151	-0.066	-0.300	-0.122	.318*	1.000					
	Sig. (2-tailed)	0.268	0.004	0.392	0.359	0.689	0.064	0.458	0.049						
ROA	P Correlation	0.264	.441**	.385*	-0.196	0.074	-0.182	-0.186	.562**	.795**	1.000				
	Sig. (2-tailed)	0.104	0.005	0.016	0.233	0.654	0.267	0.256	0.000	0.000					
LIQ	P Correlation	-0.125	0.114	0.103	-.329*	-0.100	-0.057	-0.224	0.003	0.026	0.222	1.000			
	Sig. (2-tailed)	0.449	0.491	0.533	0.041	0.545	0.730	0.171	0.983	0.873	0.174				
BUSS	P Correlation	-0.144	0.234	0.257	-0.206	-0.216	.377*	0.196	-0.176	0.150	0.079	-0.194	1.000		
	Sig. (2-tailed)	0.381	0.152	0.114	0.208	0.187	0.018	0.232	0.284	0.363	0.633	0.236			
FORN	P Correlation	<b>0.339*</b>	.321*	0.256	-0.228	0.186	.354*	-.332*	0.208	0.138	0.162	0.157	0.127	1.000	
	Sig. (2-tailed)	0.035	0.046	0.115	0.163	0.258	0.027	0.039	0.204	0.403	0.324	0.340	0.442		
ADTR	P Correlation	<b>.444**</b>	0.178	0.099	-0.072	0.197	0.097	-.342*	0.199	0.143	0.135	0.171	-0.236	.327*	1.000
	Sig. (2-tailed)	0.005	0.279	0.550	0.663	0.231	0.556	0.033	0.226	0.387	0.414	0.298	0.148	0.042	

\* Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

According to the simple regression presented in Table 6, sales explained 10.2% of the variation in disclosure level, while foreign activity explained 11.5%. Auditor type accounts for the highest explanation power which is 19.7% of disclosure level variation.

Table 6: Simple regression of the relationship between disclosure level and firm characteristics

Independent variable	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
1. SALES	0.320	0.102	0.078	4.59882
2. FORN	0.339	0.115	0.091	4.56619
3. ADTR	0.444	0.197	0.175	4.34893

A reduced multiple regression model is used to assess the predictive power of a regression model, where all three variables exist; assets, foreign activity and auditor type, that forming the independent variables. It is shown in Table 7 that the predictive power of the reduced regression model has increased where it explains 29.4% of the disclosure level variation. Moreover, the three variables have a positive relationship with disclosure level. However, auditor type is the only significant variable at ( $p < .05$ ).

Table 7: Reduced regression model of the relationship between disclosure level, sales, foreign activity and auditor type

Panel A: Model Summary				
Independent Variables	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
SALES				
FORN	.543	.294	.234	4.19168
ADTR				

  

Panel B: Coefficients					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients Beta	T B	Sig. Std. Error
	B	Std. Error			
(Constant)	62.004	7.003		8.854	.000
SALES	1.423	.859	.243	1.656	.107
FORN	1.478	1.467	.156	1.008	.321
ADTR	3.518	1.433	.369	2.455	<b>.019</b>

Based on the correlation analysis as shown previously in Table 5, where highly significant correlations are present with most of the variables at the 0.01 level, consequently, assets, debt ratio, return on equity, and return on assets are excluded from the full regression analyses to avoid distortion in results.

The results of full regression model as shown in Table 8 accounts for 43.4% in explaining disclosure level variations. Company size measured by sales and auditor type has a positive significant relationship with disclosure level. However, liquidity has a significant negative relationship with disclosure level.

Table 8: Full regression model of the relationship between disclosure level and firm characteristics

Panel A: Model summary				
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
1	.659	.434	.259	4.12298

  

Panel B: Coefficients				
Independent	Unstandardized	Standardized	T	Sig.

Variables	Coefficients		Coefficients		
	B	Std. Error	Beta	B	Std. Error
(Constant)	60.746	7.143		8.504	.000
SALES	1.988	.901	.340	2.207	<b>.035</b>
DEQ	-.003	.011	-.047	-.301	<b>.765</b>
AIP	-.031	.036	-.169	-.863	.395
COAGE	-.025	.031	-.127	-.788	.437
PM	9.72E-005	.001	.019	.114	.910
LIQ	-.001	.000	-.330	-2.186	.037
BUSS	-1.645	1.775	-.174	-.926	.362
FORN	2.301	1.597	.243	1.441	.160
ADTR	3.108	1.543	.326	2.015	<b>.053</b>

Company size measured by sales has a positive significant relationship with disclosure level. Large Egyptian companies in terms of sales/revenue value disclose more information than small companies. Accordingly, the second hypothesis is accepted. This result is consistent with most of the previous studies (Wallace et al., 1994; Hossain et al., 1994; Ahmed and Nicholls, 1994; Meek et al., 1995; Hossain et al., 1995; Inchausti, 1997; Owusu-Ansah, 1998; Ahmed and Courtis, 1999; Naser and Al-Khatib, 2000; Naser et al., 2002; Camfferman and Cooke, 2002; Ali et al., 2004; Hossain and Mitra, 2004; Samaha, 2004; Barako et al., 2006; Alsaeed, 2006; Oliveira et al., 2006; Hassan et al., 2006; Tsamenyi, 2007).

Leverage proxied by debt to equity ratio has a negative insignificant relationship with disclosure level. Consequently, the third hypothesis is rejected. Findings of the following studies are consistent with the current research: Wallace et al. (1994), Wallace and Naser (1995), Ali et al. (2004), Hossain et al. (1994), Meek et al. (1995), Camfferman and Cooke (2002) (in UK), Haniffa and Cooke (2002), Archambault and Archambault (2003), Oliveira et al. (2006), Agca and Onder (2007), and Tsamenyi (2007).

The results reveal that assets-in-place has a negative insignificant relationship with disclosure level, which is consistent with the studies of Hossain et al. (1994) and Hossain et al. (1995). Therefore, the fourth hypothesis is rejected. Company age reveals a negative insignificant relationship with disclosure level, as in Akhtaruddin (2005) and Alsaeed (2006). Accordingly, the fifth hypothesis is rejected. Profit margin, as a measure of profitability, has a positive insignificant relationship with disclosure level. Several studies find an insignificant relationship with disclosure level as Wallace et al. (1994), Wallace and Naser (1995), Meek et al. (1995), Inchausti (1997), Naser (1998), Ahmed and Courtis (1999), Naser and Al-Khatib (2000), Street and Gray (2002), Camfferman and Cooke (2002) (Netherlands), Akhtaruddin (2005), Alsaeed (2006), Barako et al. (2006), and Oliveira et al. (2006). Therefore, the sixth hypothesis is not accepted.

Liquidity has a negative significant relationship with disclosure as in Wallace et al. (1994) and Naser et al. (2002). Accordingly, as liquidity level increases, companies disclose less information. As a result, the seventh hypothesis is accepted. Business type reveals a negative insignificant relationship with disclosure level. Therefore, the eighth hypothesis is rejected. This is consistent with the findings of Wallace et al. (1994), Meek et al. (1995), Inchausti (1997) Naser (1998), Owusu-Ansah (1998) Street and Gray (2002), Naser et al. (2002), Akhtaruddin (2005), and Alsaeed (2006). Foreign activity has a positive insignificant relationship with disclosure level as in Ahmed and Nicholls (1994), Meek et al. (1995), Street and Gray (2002), Oliveira et al. (2006), and Agca and Onder (2007). Then, the ninth hypothesis is rejected.

Auditor type is the only categorical variable with a significant positive relationship with disclosure level. Companies that are audited by one of the Big-4 audit firms disclose more information than those companies audited by local firms. Consequently, the tenth hypothesis is accepted. This finding is similar to those of Street and Gray (2002), Camfferman and Cooke (2002)(UK), Naser et al. (2002), Archambault and Archambault (2003), Samaha (2004), Oliveira et al. (2006), and Agca and Onder (2007). This means that the propensity for secrecy may still have an impact on managers' decisions on disclosure. There is an urgent need for the regulatory agencies to increase the liability on non complying companies.

## SUMMARY AND CONCLUSIONS



This paper had two main objectives; first, identifying companies' disclosure level after the compliance with the newly issued Egyptian Accounting Standards in 2006, second, assessing the relationship between firm characteristics and mandatory disclosure level in the Egyptian environment. Firm characteristics have been divided into three groups namely: market-related, structure-related and performance related characteristics. The empirical results indicate that the average disclosure level among Egyptian companies investigated was 74%, while the maximum level was 83%, which is considered low as for mandatory disclosure. This indicates the need for regulatory agencies to start enforcing laws that assure the compliance with mandatory requirements. Empirical tests between disclosure and firm characteristics indicated that three variables had significant relationship with disclosure: company size and auditor type had a significant positive relationship with disclosure level, while liquidity had a significant negative relationship.

In an environment where a secretive culture is still prevailing; as in Egypt, presence of foreign audit partners forces companies to provide more information to external users, and also acts as a pressure on companies to increase the disclosure level instead of losing the company's reputation, as auditing firms with foreign affiliation do not fear losing a client like small auditing firms incorporated in Egypt. Moreover, secrecy may also let companies that can meet their short term obligations hide information from creditors and lenders. Large companies are subject to more scrutiny by the public and are subject to more political costs than small companies which lead to disclosing more information.

It is also worth noting that disclosure level has slightly improved when compared to Dahawy and Conover (2007) who used the same checklist in their analysis for 2004 annual reports; the average disclosure level was 61%, while the highest disclosure level was 76%. This indicates that the power of the secretive culture still hinders the compliance. On the other hand, it indicates that there is a positive impact for implementing the Egyptian Accounting Standards. Full compliance with all the Egyptian Accounting Standards requires transitory time to enable companies to have fair awareness and get well trained on the standards' implementation. Most probably, if compliance is reanalyzed after three years for example, it is expected that the disclosure level would increase. Moreover, in an environment where there is lack of enforcements, compliance with mandatory disclosure requirements remains a matter of choice (Hassan et al., 2009). Finally, implementation of high quality accounting standards is not a turnkey project but it is a "part of a long-term process and commitment, which ... is coupled with economic growth and capital market increased sophistication resulting from continuous dialogue between regulators and the private sector." (HassabElnaby et al., 2003).

Governors and regulators should enforce laws and regulations that guarantee full compliance with the mandatory requirements leading to the 100% mandatory disclosure level. Moreover, continuous training and education should give due care to enhance the awareness of the Egyptian Accounting Standards' practice. Furthermore, board of directors' awareness of the importance and benefits of disclosure to their companies, including foreign investments' attraction, should be enhanced.

## REFERENCES

- Abdelsalam, O.H., and Weetman, P. 2003. Introducing International Accounting Standards to an emerging capital market: relative familiarity and language effect in Egypt. *Journal of International Accounting, Auditing and Taxation*, 12: 63-84.
- Abdelsalam, O.H., and Weetman, P. 2007. Measuring accounting disclosure in a period of complex changes: the case of Egypt. *Advances in International Accounting*, 20: 775-104.
- Agca, A., and Onder, S. 2007. Voluntary disclosure in Turkey: a study on firms listed in Istanbul stock exchange (ISE). *Problems and Perspectives in Management*, 5(3): 241-286.
- Ahmed, K., and Courtis, J.K. 1999. Associations between corporate characteristics and disclosure levels in annual reports: a meta-analysis. *British Accounting Review*, 31: 35-61.
- Ahmed, K., and Nicholls, D. 1994. The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: the case of Bangladesh. *The International Journal of Accounting*, 29: 62-77.
- Akhtaruddin, M. 2005. Corporate mandatory disclosure practices in Bangladesh. *The International Journal of Accounting*, 40: 399-422.
- Ali, M.J., Ahmed, K., and Henry, D. 2004. Disclosure compliance with national accounting standards by listed companies in South Africa. *Accounting and Business Research*, 34(3): 183-199.
- Aljifri, K. 2008. Annual report disclosure in a developing country: the case of the UAE. *Advances in Accounting, incorporating Advances in International Accounting*, 24: 93-100.

- Alsaeed, K. 2006. The association between firm-specific characteristics and disclosure: the case of Saudi Arabia. *Managerial Auditing Journal*, 21(5): 476-496.
- Archambault, J.J., and Archambault, M.E. 2003. A multinational test of determinants of corporate disclosure. *The International Journal of Accounting*, 28: 173-194.
- Arkin, H. 1984. *Handbook of Sampling for Auditing and Accounting*. 3<sup>rd</sup> ed. New York: McGraw Hill.
- Barako, D.G., Hancock, P., and Izan, H.Y. 2006. Factors influencing voluntary corporate disclosures by Kenyan companies. *Corporate Governance*, 14(2): 107-125.
- Bartlett, S.A., and Chandler, R.A. 1997. The corporate report and private shareholder: Lee and Tweedie twenty years on. *British Accounting Review*, 29 (3): 245-261.
- Camfferman, K., and Cooke, T.E. 2002. An analysis of disclosure in the annual reports of UK and Dutch companies. *Journal of International Accounting Research*, 1: 3-30.
- Capital Market Authority (CMA). 2000. *Disclosure and Transparency Checklist*. [Online]. Available: [http://www.cma.gov.eg/cma/content/arabic/cma\\_forms/list.htm](http://www.cma.gov.eg/cma/content/arabic/cma_forms/list.htm) [20 January 2007]
- Chamisa, E.E. 2000. The relevance and observance of the IASC standards in developing countries and the particular case of Zimbabwe. *The International Journal of Accounting*, 35(2): 267-286.
- Cooke, T.E. 1991. An assessment of voluntary disclosure in the annual reports of Japanese corporations. *The International Journal of Accounting*, 26: 174-189.
- Cooke, T.E. 1993. Disclosure in Japanese corporate annual reports. *Journal of Business Finance and Accounting*, 20(4): 521-535.
- Dahawy, K., and Conover, T. 2007. Accounting disclosure in companies listed on the Egyptian stock exchange. *Middle Eastern Finance and Economics*, 1: 5-20.
- Dahawy, K., Merino, B.D., and Conover, T.L. 2002. The conflict between IAS disclosure requirements and the secretive culture in Egypt. *Advances in International Accounting*, 15: 203-228.
- Egypt for Information Dissemination (EGID). 2008. *About EGID*. [Online]. Available: <http://www.egidegypt.com/about/main.asp> [23 July 2008]
- Egypt. 2006. *Egyptian Accounting Standards*, No 243 of 2006. Ministry of Investments.
- Epstein, M.J., and Pava, M.L. 1993. *The shareholder's use of corporate annual report*. Connecticut: JAI Press.
- Haniffa, R.M., and Cooke, T.E. 2002. Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3): 317-349.
- HassabElnaby, H.R., Epps, R.W., and Said, A.A. 2003. The impact of environmental factors on accounting development: an Egyptian longitudinal study. *Critical Perspectives on Accounting*, 14: 273-292.
- Hassan, O.A.G., Giorgioni, G., and Romilly, P. 2006. The extent of financial disclosure and its determinants in an emerging capital market: the case of Egypt. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1): 41-67.
- Hassan, O.A.G., Romilly, P., Giorgioni, G., and Power, D. 2009. The value relevance of disclosure: evidence from the emerging capital market of Egypt. *The International Journal of Accounting*, 44: 79-102.
- Healy, P.M., and Palepu, K.G. 2001. Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1): 405-440.
- Hossain, M., and Mitra, S. 2004. Firm characteristics and voluntary disclosure of geographic segment data by US multinational companies. *International Journal of Accounting, Auditing and Performance Evaluation*, 1(3): 288-302.
- Hossain, M., Perera, M.H.B., and Rahman, A.R. 1995. Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial Management and Accounting*, 6(1): 69-87.
- Hossain, M., Tan, L.M., and Adams, M. 1994. Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur stock exchange. *The International Journal of Accounting*, 29: 334-351.
- Inchausti, B.G. 1997. The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *The European Accounting Review*, 6(1): 45-68.
- Jones, J. 2005. Exploring the global marketplace: succeeding locally involves thinking globally. *Journal of Accountancy*, 200(3): 100-104.
- Joshi, P.L., Bremser, W.G., and Al-Ajmi, J. 2008. Perceptions of accounting professionals in the adoption and implementation of a single set of global accounting standards: Evidence from Bahrain. *Advances in Accounting, incorporating Advances in International Accounting*, 24: 41-48.
- Lang, M., and Lundholm, R. 1993. Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31(2): 246-271.

- Leventis, S., and Weetman, P. 2004. Voluntary disclosures in an emerging capital market: some evidence from the Athens stock exchange. *Advances in International Accounting*, 17: 227-250.
- Manly, B.F.J. 1992. *The Design and Analysis of Research Studies*. Cambridge University Press.
- Meek, G.K., Roberts, C.B., and Gray, S.J. 1995. Factors influencing voluntary annual report disclosures by U.S., U.K. and Continental European multinational corporations. *Journal of International Business Studies*, 26(3): 555-572.
- Mirshakary, S., and Saudagaran, S.M. 2005. Perceptions and characteristics of financial statement users in developing countries: evidence from Iran. *Journal of International Accounting, Auditing and Taxation*, 14: 33-54.
- Naser, K. 1998. Comprehensiveness of disclosure of non-financial companies listed on the Amman financial market. *International Journal of Commerce and Management*, 8(1): 88-119.
- Naser, K., Al-Khatib, K., and Karbhari, Y. 2002. Empirical evidence on the depth of corporate information disclosure in developing countries: the case of Jordan. *International Journal of Commerce and Management*, 12(3/4): 122-155.
- Naser, K., and Al-Khatib, K. 2000. The extent of voluntary disclosure in the board of directors' statement: the case of Jordan. *Advances in International Accounting*, 13: 99-118.
- Naser, K., and Nuseibeh, R. 2003. Users' perceptions of corporate reporting: evidence from Saudi Arabia. *The British Accounting Review*, 35: 129-153.
- Naser, K., Nuseibeh, R., and Al-Hussaini, A. 2003. Users' perceptions of various aspects of Kuwaiti corporate reporting. *Managerial Auditing Journal*, 18(6/7): 599-617.
- Oliveira, L., Rodrigues, L.L., and Craig, R. 2006. Firm-specific determinants of intangibles reporting: evidence from the Portuguese stock market. *Journal of Human Resource Costing and Accounting*, 10(1): 11-33.
- Owusu-Ansah, S. 1998. The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting*, 33(5): 605-631.
- Patton, J., and Zelenka, I. 1997. An empirical analysis of the determinants of the extent of disclosure in the annual reports of joint stock companies in the Czech Republic. *European Accounting Review*, 6(4): 606-626.
- Samaha, K. 2004. International Accounting Standards in an emerging capital market: a study of compliance and factors explaining compliance in listed Egyptian companies. Unpublished Ph.D. Thesis. University of Manchester.
- Sapsford, R., and Jupp, V. 1996. *Data Collection and Analysis*. London: Sage.
- Saudagaran, S.M., and Diga, J.G. 2003. Economic integration and accounting harmonization options in emerging markets: adopting the IASC/IASB model in ASEAN. (In: Wallace, R.S.O. et al. (eds). *Research in Accounting in Emerging Economies*, 5: 239-266. Connecticut, Conn JAI Press.)
- Street, D.L., and Gray, S.J. 2002. Factors influencing the extent of compliance with International Accounting Standards: summary of a research monograph. *Journal of International Accounting, Auditing and Taxation*, 11: 51-76.
- Taplin, R., Tower, G., and Hancock, P. 2002. Disclosure (Discernibility) and Compliance of Accounting Policies: Asia-Pacific Evidence. *Accounting Forum*, 26(2): 172-190.
- Tsamenyi, M., Enninful-Adu, E., and Onumah, J. 2007. Disclosure and corporate governance in developing countries: evidence from Ghana. *Managerial Auditing Journal*, 22(3): 319-334.
- Wallace, R.S.O. 1988. Corporate financial reporting in Nigeria. *Accounting and Business Research*, 18(72): 352-362.
- Wallace, R.S.O., and Naser, K. 1995. Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual report of firms listed on the stock exchange of Hong Kong. *Journal of Accounting and Public Policy*, 14: 311-368.
- Wallace, R.S.O., Naser, K., and Mora, A. 1994. The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and Business Research*, 25(97): 41-53.
- Yamane, T. 1967. *Elementary Sampling Theory*. London: Prentice-Hall.
- Viljoen, C., and Merwe, L.V. 2000. *Elementary Statistics*. 2<sup>nd</sup> ed. South Africa: Pearson.

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#### CORRESPONDING AUTHOR

\* Dr Nermeen F. Shehata can be reached at [nfshahata@gmail.com](mailto:nfshahata@gmail.com)