

**Economic consequences  
of corporate voluntary disclosure:  
Evidences from Egyptian listed companies**

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**Abstract:**

This paper aims to examine the economic consequences of corporate voluntary disclosure in Egyptian listed companies. We hypothesised that corporate voluntary disclosure has economic impact, which it can influence investors' perceptions toward companies and consequently it can influence corporate market value. To examine economic consequences, we used both qualitative study to gather investors' perceptions toward the importance of corporate voluntary disclosure, and quantitative study to examine the impact of voluntary disclosure on corporate market value measured by Tobin's Q. We measured the voluntary disclosure in both annual reports and corporate web sites using disclosure index, in addition to various financial data as an indicator for economic performance. Both correlation and regression tests were performed to examine the hypotheses. The results showed that the investors seem to pay attention of CVD and there is weak significant association between CVD and corporate market value. This result could reflect that the content of voluntary disclosure provided by companies in both annual reports and web sites has economic value, to some extent, and it is important for investors. Also, the results seem to be consistent with the context of economic approach more than political economy approach context.

**Key words:**

Voluntary Disclosure, Market Value, Tobin's Q, Legitimacy Theory, and Economic Approach

## **1. Introduction:**

The growing interest in corporate voluntary disclosure (CVD) has led to an important question about the benefits of this disclosure for companies. Those companies that voluntarily disclose information are convinced that this disclosure has value, and it is important to clarify the benefits that would have been achieved by the companies as a consequence for this disclosure. Understanding why companies voluntarily disclose information is useful to both preparers and users of accounting information, as well as to accounting policy makers (Meek, Roberts and Gray, 1995). Brownlee (1990) argues that the regulatory agencies should be more concerned with the full and fair disclosure of information than with the specific accounting methods used to measure or report economic transactions. Theoretically, two approaches can be used to explain the benefits of CVD, economic approach which imply that CVD can achieve some financial benefits for the company, and/or in the context of (political economy approach (legitimacy theory and stakeholders theory), which imply that companies use CVD to legitimate their activities and/or to satisfy their stakeholders. In the context of economic approach, the finance-theory suggest that more public information enhances firm value by reducing the firm's cost of capital, or increasing the cash flows that accrue to shareholders, or both. Enhanced corporate disclosure is believed to mitigate from the information asymmetry problem and agency conflicts between management and outside investors. It should reduce the uncertainty surrounding future corporate performance and facilitate trading in shares. There are major market incentives to voluntarily disclose information and managers' attitudes to voluntary disclosure change according to the perceived relationship of the costs and benefits involved (e.g., see Gray et al 1990 and Healy & Palepu 1995). On the other hand, in the context of political economy approach, it can be

argued that, according to legitimacy theory, companies use CVD as a tool for legitimising their activities, in the face of social pressure. In this context, it appears that a company discloses information in line with legislative frameworks (Karim, 1998). Flack & Douglas (2007) reported that annual reports were known as the annual reporting behaviours of a corporation and it has ability to improve the perceptions of accountability among stakeholders and the wider community. This paper focuses on analysing the financial benefits/consequences of CVD. The focal point of this paper is to clarify whether CVD is just a communication tool, in the context of (political economy approach), or it has direct economic benefits in the context of economic approach.

Prior studies extensively researched voluntary disclosure in annual reports which consider as a main medium of corporate disclosure. But annual reports have been criticized; Yusoff & Henefaf (1995) and Yuen et al. (2009) have shown that, the annual reports have provided inadequate information to the users, Haw et al. (2000) and Hooks et al. (2002) found that in actuality many annual reports introduce limited amount of information. On the other hand, use of Internet as a channel for dissemination of the corporate information is a phenomenon that has experienced considerable growth during the recent years (Moradi et al., 2011). It has now becoming increasingly common for large corporations to communicate information to their stakeholders by using a voluntary disclosure medium like the Internet. Many companies provide websites which include large amounts of information on a rich range of financial matters. Compared to the traditional printed reports, the Internet offers many more opportunities to communicate financial information, and its importance in this regard is rapidly increasing (Pirchegger & Wagenhofer, 1999). The Internet affects information flows. The effects are twofold: First, the Internet changes the costs of the information collection, processing, and dissemination. Second, it increases the demand for standardization of information (wagenhofer, 2003). The

content of IFR may include annual and/or quarterly reports, stock price data, press releases, analyst reports, and management discussions of operations. The presentation formats used in IFR include hyperlinks, video and audio files, processable file formats, and dynamic graphics (Kelton and Yang 2005). Thus, investors have several options regarding which Internet financial disclosures to view and the format in which to view them. So, this paper extends the examination to voluntary disclosure in web sites, which it addresses, voluntary disclosure in both annual reports and web sites.

The examination of economic consequences of CVD will be conducted through two dimensions. First dimension of the paper is to investigate the perceptions of Egyptian investors toward the importance of CVD for their decisions. The participation and impact of the individual investor on the capital markets continues to grow, so, this investigation could reflect a value content of CVD. Accounting research suggests that the presentation format of financial disclosures can influence decision-making (Clements & Wolfe 2000; Rose 2001; Rose et al. 2004). Also, since the use of the Internet to disseminate financial information is a growing practice with limited regulation, the impact on investors is an interesting and important area of research. hyperlinks affect the manner in which investors analyze and integrate information and make financial decisions (Dull et al. 2003) and cause investors to blend information from different sources, which has adverse effects on decision-making (Hodge 2001). Also, Presentation format affects both the information acquisition (Clements and Wolfe 2000; Hodge et al. 2004) and the information evaluation processes (Maines and McDaniel 2000; Hodge et al. 2004). However, research on the impact of IFR on investor judgments is limited (Hodge 2001; Dull et al. 2003). Another dimension is to examine the potential impact of CVD on corporate market value. Prior studies about the economic consequences of voluntary disclosure are mostly conducted in developed markets such as the United States, where strong enforcement

mechanisms exist (Hassan et al, 2009). Prior studies, however, focus either on investigating the link between voluntary disclosure levels and stock liquidity (see for example: Healy, et al. 1999; Leuz & Verrecchia, 2000), or on testing the link between voluntary-disclosure levels and a proxy for the cost of equity capital (see for example: Botosan & Plumlee, 2002; Hail, 2002). There is little direct empirical evidence with regard to the relationship between voluntary disclosure and firm value in general and for emerging markets in particular.

The benefits and costs associated with voluntary disclosure in Egyptian context need to be examined carefully due to (Hassan, et al, 2009): 1) benefits of increased disclosure may be too small to be observed and empirically tested. 2) Revealing more information voluntarily to the capital market may place the company at a competitive disadvantage, assuming that this information is relevant to rivals. 3) There is a deep-rooted tendency towards secrecy in the corporate culture of the country. Thus investors might suspect or misinterpret the intentions of the company when it provides more information to the capital market without any obligation to do so. In addition, Egyptian companies face severe economic crisis after January revolution, and at this time shareholders hold uncertainties regarding their investments. Companies are facing a threat of their share price plunging and investors bailing them. In order to minimize the prevailing uncertainty, companies need to find ways to ensure their shareholders that the company is still worth investing in. One way to influence the investors' uncertainty is information; consequently study the value content of voluntary disclosure is increasingly important in such time. The increased uncertainty may justify an increasing disclosure level even for companies with a closed disclosure culture.

**Therefore, the current paper addresses the current research questions:**

1. Does voluntary disclosure achieve economic benefits for the Egyptian companies?

2. Does the Egyptian investors pay attention to CVD when they making investment decisions?
3. Which theoretical approach provides appropriate explanation for CVD in the context of Egyptian business environment?

The empirical results showed that, on one hand, Egyptian investors pay attention for CVD in both annual reports and web sites and, on the other hand, CVD has weak significant association with market value, which reflect that there is an impact, to some extent, for CVD on corporate market value. These results could reflect that voluntary disclosure which provided by Egyptian companies meet, to some extent, the expectations and needs of Egyptian investors. Also, the results reflect that CVD in Egyptian business environment can be explained in the context of economic theory, which there are economic consequences for voluntary disclosure provided by Egyptian companies.

The paper extends the previous studies in two ways; firstly, by extend measure voluntary disclosure to contain both annual reports and web sites, and secondly, by using Tobin's Q as an indicator of corporate financial performance.

The remainder of this paper is organized as follows. Section 2 discusses the prior studies. Section 3 develops testable hypotheses. Section 4 explains the data, research methodology and the variables used in our empirical study. Sections 5 present our empirical findings.

## **2. Prior Studies:**

There were considerable researches that concerned voluntary disclosure information in annual reports of companies and most of them centred in developed countries. Some of these studies have analysed the economic consequences for CVD.

Yang, (2012) examined the capital market consequences of managers' individual forecasting style in terms of the stock price reaction to forecast news. He find that the stock price reaction to management forecast news is stronger when

information uncertainty is high and when the manager has a history of issuing more accurate forecasts.

Kristandl & Bontis (2007) examined the association between the level of voluntary disclosure and cost of equity capital. The results showed negative relationship between the level of forward-oriented information and cost of equity capital, and an unexpected positive relationship between the level of historical information and cost of equity capital.

Bertomeu, et al (2008) study whether firms' voluntary disclosures can reduce asymmetric information in financial markets and lead to cheaper financing. They find that more disclosure occurs in environments with fewer informational frictions, matching the observed association between disclosure and cost of capital. Arya & Mittendorf (2007) show that more voluntary disclosure by firms can lead to less disclosure by outside information providers; leading to lower overall proprietary information publicly revealed and higher value for shareholders. However, Botosan & Plumlee (2002) find that the benefits of increased disclosure are sensitive to the type of disclosure being made; they find positive, negative, and no associations between different types of disclosure and the cost of capital.

In the context of the investors' perceptions, Hodge & Pronk (2006) examined whether professional and non-professional investors use varying online financial information. Hodge (2001) investigated whether companies can influence investors' perceptions of their financial reports by hyperlinking audited financial statements to unaudited information. The results showed that hyperlinking audited financial statements to unaudited information influence investors' judgement and misclassification of audited and un-audited financial information may mislead investors. Dull et al. (2003) provide additional evidence of the effects of hyperlinks on financial decisions. Experiment participants view electronic financial statements for either a large or a small company in one of two formats: with hyperlinks connecting the financial statement line items to the



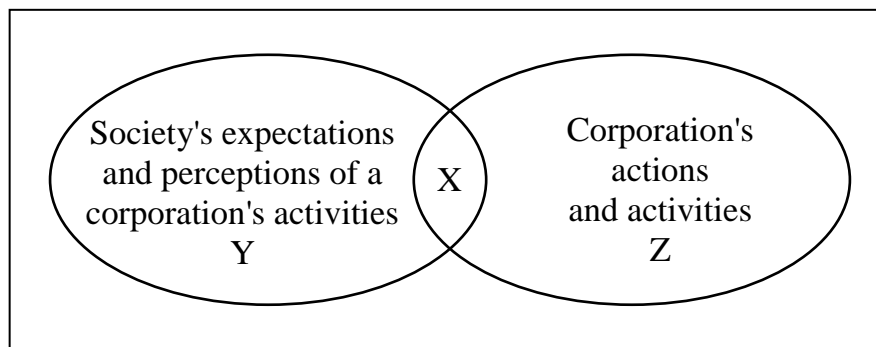
related footnotes or without hyperlinks. Results for the large company indicate that the use of hyperlinks does not affect investment decisions. For the small company, the use of hyperlinks increases total decision time, increases the amount of information used to make decisions, and affects assessments of the company's future performance.

In Egypt, Hassan, et al (2009) examined the value of voluntary and mandatory disclosure in Egyptian market and they found that mandatory disclosure has a highly significant but negative relationship with firm value, while voluntary disclosure has a positive but insignificant association with firm value.

Abdul Karim, (2003) has analyzed the concept of Voluntary Disclosure, its objectives and its importance in providing important information to the various decision-makers in the Egyptian business environment, as well as analysis of the economic consequences of it. Using a field study on a sample of investment decisions makers, and the credit decisions makers, the study found evidences support the importance of the Voluntary Disclosure. Abdel Sayed, (2003) has analysed the accounting implications of the Voluntary disclosure. The study pointed out that Voluntary disclosure contributes to reducing the information asymmetry, and reduce uncertainty among investors regarding the company's performance, reducing the cost of capital and improve the efficiency of prices of the company in the financial market. The study found that the Voluntary disclosure has real effects when it affects, whether positively or negatively, the cash flows of the competitors, and it has financial consequences on competitors when it leads to a change in stock prices for them. Also the study of AlKhial(2009) aimed to recognize the importance of the Voluntary Disclosure and identify the most important information that should be included in the financial reports. The study pointed out that Voluntary disclosure affect company investment decisions, reduce the degree of information asymmetry and reduce the cost of capital.

### 3. Hypotheses development:

Two theoretical approaches can be used to explain corporate voluntary disclosure, political economy approach and economic approach. Two theories which are similar and derived from the broader political economy perspective (Gray et al, 1996; Deegan, 2002), Stakeholder theory offers an explanation of accountability to stakeholders, and Legitimacy theory suggests voluntary disclosures are part of a process of legitimation. Legitimacy theory can be illustrated in figure 1 which reveal that the incongruence between corporate activity and community' expectations of the corporation and its activities (the areas Y and Z in figure 1) represent legitimacy gaps. So, the company aims to, to be legitimate, the area X as large as possible, thereby reducing the legitimacy gap. In this context, voluntary disclosure considers one of tactics to reduce legitimacy gap (O'Donovan, 2002: 347).



**Figure 1: legitimacy gaps (adapted from O'Donovan, 2002: 347)**

On the other hand, economic approach (Friedman's, 1962) assertion that the only proper reason for the existence of a corporation is to make a profit for its shareholders, may have provided the impetus for an examination of the relationships between corporate disclosure and economic performance.

Theoretically, the economic consequences of voluntary disclosure can be resulted from the following perspectives;

- The reduction of information asymmetry increases stock market liquidity (Diamond & Verrecchia, 1991; Baiman & Verrecchia, 1995).
- Higher disclosure of corporate information lowers estimation risk of unknown corporate parameters (Barry & Brown, 1985; Coles & Loewenstein, 1988; Coles et al., 1995).
- The uneven distribution of information increases information asymmetry, which leads to higher disclosure levels of the uneven distribution (Merton, 1987).

This paper argues that economic approach perspectives may provide greater insights into managerial motivation for voluntary disclosure. We argued that economic consequences of CVD can be reflected in two dimensions. First, CVD can provide valuable information, as voluntary disclosure overcomes the limitations of mandatory disclosure. For example, current accounting rules do not allow managers to demonstrate the benefits of investments in quality improvements, human resource development programs, research and development, and customer service on their balance sheets in an appropriate manner. Therefore, voluntary disclosure could influence the investment decision making and consequently influence the financial position of the company. Second, the effects of voluntary disclosure in reducing the information asymmetry and lower estimation risk can be positively reflected on corporate market value.

### **3.1 Investors' Reaction:**

The participation and impact of the individual investor on the capital markets continues to grow and how information is shared among the participants deeply affects the function of capital markets (Ho & Wong, 2003). Singhvi and Desai (1971) stated that the quality of corporate disclosure in annual report considerably influences the extent and quality of investment

decisions made by investors. How investors perceive the increasing corporate disclosure appears to be controversial issue. Investors may interpret the high levels of voluntary disclosures as an adverse signal about the future value of the company based on insider information known by management.

Also, the spread of internet disclosure and its associated technologies consider an important factor that drive investors' attention in corporate disclosure. Since XBRL business data is more easily searchable and retrievable, use of an XBRL-enabled tool should lead to greater effectiveness. Hodge et al. (2004) show that investors benefit from the ability to easily review, compare, and integrate data from multiple firms. Nonprofessional investors using XBRL-formatted information should enjoy efficiency gains since XBRL-formatted tools allow them to gather, integrate, and compare firm data more rapidly, and therefore, at a lower cost, compared to using paper-based data (Hodge et al. 2004). The following hypothesis can be expected,

**Hypothesis 1:** corporate voluntary disclosure is important for investors when they making investment decisions.

### **3.2 Market Value:**

Corporate disclosure in annual reports is a strategic tool, which can enhance the company's ability in raising capital at the lowest possible cost (Lev, 1992; Healy and Palepu, 2001). Plumlee, et al. (2008) posited that, theoretically, voluntary disclosure quality influences firm value through direct effects on a company's cost of equity capital, and/or indirect effects on a company's cash flow (Plumlee, et al, 2008: 3). Teoh & Hwang (1991) indicate that investors may assess firm value based on whether or not news was disclosed on a particular date, and whether it was good or bad (Teoh & Hwang, 1991: 286). Rahman (2002) argued that corporate voluntary disclosure is considered one of the determinants of market value, with internal and external corporate governance factors. Also, the

growing percentage of socially responsible investors (SRI) is a strong factor in the expected positive impact of social disclosure as a category of voluntary disclosure on economic performance. Murray et al. (2006) argued that the growth in ethical investment funds, reverses the traditional hypothesis that all investors are exclusively interested in a financial appraisal of their investments, so social and environmental information may well offer an important source of direct input to ethical investors' decisions (Murray et al., 2006: 232).

Voluntary disclosure can increase or decrease firm value depending on the complex interplay of a number of possibly conflicting factors. The fundamental consideration is whether the net benefit from increased disclosure is positive or negative. The impact of disclosure on firm value is still a controversial issue (Hassan, et al, 2009). On the one hand, it is assumed that there is an association between economic theory and contemporary accounting thought which implies greater disclosure should lower information asymmetry's costs (Leuz&Verrecchia 2000). Economic theory suggests that a company's obligation to increase levels of disclosure should lower the information asymmetry element of a company's cost of capital. Increasing the level of the disclosure reduces the likelihood of information asymmetry arising either between a company and its shareholders or among potential buyers and sellers of companies' stocks. Also, corporate disclosure is critical for the functioning of an efficient capital market. In addition, it seems that regulatory disclosures do not reflect management performance perfectly and completely. Therefore, management tries to use voluntary disclosures as a powerful tool to communicate with stakeholders and decrease the cost of capital. On the other hand, information might have a negative value, even if its production is costless to the company, because investors may perceive themselves to be worse off if they consider that the company is disclosing information which might be exploited to their detriment. Investors might suspect or

misinterpret the intentions of the company in providing more information to the market without an obligation to do so (Hassan, et al, 2009, 81). Wagenhofer (2004) argues that the effects of disclosure depend on three factors; uncertainty, multiperson settings with conflicts of interest, and information asymmetry. Depending on the assumptions made about these factors, it is possible to predict a negative relationship between increased disclosure and firm value. For example, more public disclosure might reduce private information acquisition by market participants and hence reduce the total amount of information available in the capital market. More public information might also have negative net benefits if the information places a firm at a competitive disadvantage relative to its rivals.

Given that different theoretical perspectives and mixed empirical results which provided by prior studies, the following hypothesis need to be examined,

**Hypothesis 2:** corporate voluntary disclosure positively influences corporate market value.

#### **4. Research design and Method:**

To achieve the purpose of the paper, two-dimension' investigation will be conducted; first, field study to identify the perceptions of investors concerning the impact of CVD on their decisions, Second, empirical model to examine the impact of CVD on firm value using regression technique.

##### **4.1 Investors' perceptions toward value content of voluntary disclosure:**

The primary objective of this study is to assess the extent that investors perceive information disclosed. The target respondent of this study is various categories which making the investment decisions. Each respondent received a marked questionnaire (for tracking purposes) together with a letter outlining the objective of the research, respondent confidentiality, and availability of survey result upon request.

#### **4.1.1 Sample:**

The sample consists of four categories; financial analysts, credit managers, investors and intermediaries. The sample size satisfies the rule of thumb proposed by Roscoe (1975) as noted by Sekaran (2003). Sekaran noted Roscoe as suggesting that, among others, a sample size larger than 30 and less than 500 is appropriate for most research, with a minimum number of sub-sample sizes of 30 for each category is necessary.

#### **4.1.2 Research instrument (questionnaire):**

A questionnaire survey was designed where respondents were asked to determine the degree of importance of each information item using five scales Likert-type, where (1) referred to not important at all, and (5) to strongly important.

#### **4.2 Corporate value model:**

This model examines the influence of CVD on corporate market value which represents a proxy for corporate financial performance, in 2012.

##### **4.2.1 Sample:**

The sample for this model comprises EGX 100 companies in 2012. We excluded financial companies from our sample due to their specific financial characteristics affect their information disclosure. The final number of a sample is 83 companies.

##### **4.2.2 Construction of the disclosure index:**

This paper addresses CVD in both annual reports and web sites, so two disclosure indexes have been used. Voluntary disclosure (in annual reports) index used in this paper adapted from Samaha & Dahawy, (2011). The index consists of 80 items categorized into 11 groups. Internet disclosure index used in this study was based on that employed by both Aly, et al (2010) and Samaha, et al (2012) consisting of 82 items. The index consists of 58 items of disclosure content and 24 items of presentation format and accessibility factors. Content analysis technique was used to check both annual reports and web sites in order to measure disclosure index for each company.

We used the unweighted dichotomous disclosure index, which does not focus on a single user group (Bonson-Ponte & Escobar-Rodriguez, 2002). Using unweighted disclosure index because the assigning different weights for different items in the disclosure index may be misleading as the relative importance of each item varies from company to company, industry to industry and time to time (Abd El Salam, 1999). Therefore, if a company discloses (or failed to disclose) an item of information, which is included in the index, it receives a score of 1 (0). The disclosure index for each company was calculated by dividing the actual scores awarded by the maximum possible scores appropriate for the company. Therefore, the disclosure index ( $I_j$ ) for each firm was calculated as follows:

$$I_j = \frac{\sum_{i=1}^{n_j} X_{ij}}{n_j}$$

where  $n_j$  is number of relative items applicable to company  $j$ ; and  $X_{ij} = 1$  if the item is disclosed; 0, otherwise.

#### **4.2.3 Dependent variable (firm value):**

The dependent variable is corporate market value, which will be measured using Tobin's  $q$ . Tobin's  $q$  represents the ratio of the market value to the replacement cost of assets. If the value of the ratio is less than one, this means less profitable investment opportunities are expected, and if the value is more than one, this means more profitable investment opportunities are expected (Wahba, 2008: 92). It was developed by James Tobin, and it is widely used as an indicator of intangible value in economics research, and in the international business literature (Dowell, et al, 2000:1063).

The benefit of Tobin's  $q$  is that it makes comparisons between companies relatively easier than comparison based on stock returns or accounting measures where a risk adjustment or normalization is required (Allayannis & Weston, 2001: 251). Heal, (2005) mentioned that "one robust result seems to be that



superior environmental performance is correlated with high values for Tobin's q" (Heal, 2005:402).

Some studies used Q as a proxy of firm value; Allayannis & Weston, (2001) examined the impact of using foreign currency derivatives on firm value (Tobin's q), Dowell, et al, (2000) find that companies adopting a stringent global environmental standard have higher market values as measured by Tobin's q, Lo & Sheu, (2007) find a significantly positive relationship between corporate sustainability and its market value measured by Tobin's q.

In this study Tobin's q will be measured (as in Moon, 2007) as follows:

$$\text{Tobin's } q = \frac{\text{Market value of assets}}{\text{Book value of assets}}$$

$$\frac{\text{Book value of assets} + \text{market value of common stocks} - \text{book value of common stocks} - \text{deferred taxes}}{\text{Book value of assets}}$$

#### **4.2.4 Control variables :**

In addition, previous literature (Allayannis & Weston, 2001; Lo & Sheu, 2007) indicated some variables that could affect the firm value, these variables are:

- Size – there is ambiguous evidence about the influence of corporate size on firm value. This variable will be measured by using total assets.
- Access to financial market – if the companies are not able to obtain the necessary financing, their Q may remain high because they only undertake positive NPV (net present value) projects. This variable will be measured by using a dividend dummy with value 1, if a company paid a dividend in the current year, and value 0, otherwise.
- Profitability – if the company is more profitable, it is more likely to trade with a premium, than a less profitable one, and thus increase its Q. This variable will be measured by return

on assets, which is defined as the ratio of net income (loss) to total assets.

- Investment growth – the corporate value depends on future investment opportunities. This variable will be measured by the ratio of capital expenditure to sales.
- Industrial diversification – there is ambiguous evidence about the influence of industry diversification on firm value. While some theoretical arguments suggest that industry diversification leads to increase in the firm value, there is some empirical evidence showing that industry diversification is negatively related to firm value. This variable will be measured as a dummy variable with value 1, if a company operates in more than one sector, and value 0, otherwise.
- Multinationality – there are some theoretical arguments suggesting that geographical diversification increases value. This variable will be measured by the percentage of sales to foreign countries to total sales (for the manufacturing companies), or the percentage of foreign branches to total branches (for non-manufacturing companies).

The following regression model will be used to examine the relationship between CVD and lagged corporate market value:

$$TQ = \beta_0 + \beta_1 CVD + \beta_2 CS + \beta_3 AFM + \beta_4 CP + \beta_5 IG + \beta_6 ID + \beta_7 DMA + \varepsilon$$

The following table summarize the concept and measurement of previous variables.

**Table 1: variables measurement**

Variables	Meaning	Measurement
TQ	Corporate market value	$\frac{\text{Book value of assets} + \text{market value of common stocks} - \text{book value of common stocks} - \text{deferred taxes}}{\text{Book value of assets}}$
CVD	corporate voluntary disclosure in both annual reports and web sites	Total of both Annual report disclosure index and Web site disclosure index.
CS	Corporate size	Log. Of total assets
AFM	access to financial market	a dividend dummy with value 1, if a company paid a dividend in the current year, and value 0, otherwise
CP	corporate profitability	the ratio of net income (loss) to total assets
IG	investment growth	ratio of capital expenditure to sales
ID	industry diversification	a dummy variable with value 1, if a company operates in more than one sector, and value 0, otherwise
DMA	degree of multinational activities	The percentage of sales to foreign countries to total sales (for the manufacturing companies), or the percentage of foreign branches to total branches (for non-manufacturing companies).

## 5. Results:

### 5.1 Investors' perceptions:

#### 5.1.1 Sample description:

The sample size is (259) respondents, and Table( 2) displays the sample characteristics. Out of (259) respondents; (65) were financial analysts (25.1%), 79 were credit managers (30.5%), 50 were investors (19.3%) and 65 were intermediaries (23.1%). ten respondents are PhD holders (3.9%), while 16 respondents are master holders (6.2%), and (90%),233 of first degree. In terms of experience, (1.9%) had less than five years experience, (21.6%) had (5-10) years of experience, (33.6%) had (10-15) years of experience, (35.9%) had (15-20) years of experience and 6.9% of the respondents indicated that they had more than (20) years of experience. The experience level of a sample considers high enough to strengthen the results of research.

To investigate for possible non-response bias, Kolmogorov-Smirnoff tests of differences in the responses provided by early and late respondents (the first and last 25% of questionnaires returned) were conducted. No significant differences ( $p < 0.05$ ) in the data provided by these sub-groups were noted for any questions posed, which suggests little concern for non-response bias.

**Table 2: sample characteristics**

	<b>Items</b>	<b>Frequency</b>	<b>Percentage</b>
<b>position</b>	Financial analyser	65	25.1
	Credit manager	79	30.5
	Investor	50	19.3
	Intermediaries	65	25.1
<b>qualification</b>	Bachelor	233	90.0
	Master	16	6.2
	PHD	10	3.9
	Professional	0	0

	Items	Frequency	Percentage
<b>Experience</b>	Other	0	0
	Less than 5years	5	1.9
	5-10 years	56	21.6
	10-15	87	33.6
	15-20	93	35.9
	More than 20 years	18	6.9
<b>Total</b>		259	

### 5.1.2 Analysis of Responses:

The analysis of respondents' perceptions showed that investors consider corporate voluntary disclosure as an important issue when making their decisions, and they are more interested in CVD in annual reports (which 83.4% stated that they interested or very interested in annual reports voluntary disclosure) than CVD in web sites (which 79.2% stated that they interested or very interested in internet voluntary disclosure), and all sample categories have expressed the same result. The result reflects that investors consider annual reports as main source of disclosure. This result is consistent with a number of arguments that consider annual reports as a principle focus of the firm's disclosures (e.g. Thompson & Zakaria, 2004; Abu-Baker & Naser, 2000; Alnajjar, 2000). Also, respondents indicated that they interested in both historical information (83.4%) and forward-looking information (78%). All sample categories have expressed the same result with exception of intermediaries which appear to prefer, to a very weak extent, forward looking information (with a mean of 3.6308), than historical information (with a mean of 3.6154). Overall, these results provide a primary indicator that CVD has value content and it has economic consequences. Regarding the first hypothesis which indicated the importance of CVD for investors, the results provide evidence that support this hypothesis.

To test whether there is a significant statistical difference between different groups, the appropriate non-parametric statistical test could be used is the Kruskal-Wallis. The results of Kruskal-Wallis test (not reported) indicated that there is no significant statistical difference between different groups in responses to all questions with except the question concerning evaluation the importance of corporate strategy information (Sig, 0.012).

This attention from investors toward CVD is consistent with is consistent with the point of view that mandatory disclosure has some limitations based on the critics that face the current financial reporting model. Also, this result is consistent with what have been found in previous studies, the study of Abdul Karim, 2003, found that voluntary disclosure is important for investment decisions makers in Egyptian environment, and the study of AlKhial,( 2009), indicated that voluntary disclosure affect companies' investment and financing decisions, which voluntary disclosure reduce information asymmetry and cost of capital. In addition,the studies conducted to examine the extent of investor interest in social disclosure, as a part of voluntary disclosure, provided mixed results, with Anderson &Frankle (1980) and Epstein & Freedman (1994) indicating that investors are interested in social disclosure, while Chan & Milne (1999) indicated that there is no significant reaction to good environmental performance, and Chan & Milne (1999) show that the decision impact of social disclsoure is small. According to the Oracle and Economist Intelligence Unit, based on the results from the Corporate Responsibility Survey, 85% of executives and investors surveyed, ranked corporate responsibility a central consideration in investment decisions (Economist Intelligence Unit, 2005). Solomon & Solomon (2006) noted a moderate request from institutional investors on public, social and environmental information.

With regard to items of CVD, the respondents indicated that they are interested in all of these items, and that there is a convergence in the degree of attention to those items.

Concerning annual reports voluntary disclosure, table 3 provide the mean and standard deviation of these items. Table 3 show general company information and product and services information were ranked as the most important items, while employment information was ranked as the least important item. From standpoint of different sample categories, the financial analysts think that corporate strategy is the most important item (with a mean of 3.8769) and employment information is the least important item (with a mean of 3.2462), credit managers support that general information is the most important item (with a mean of 3.7848) and employment information is the least important item (with a mean of 3.4051), investors think that social and environmental information is the most important item (with a mean of 3.8600) and employment information as the least important item (with a mean of 3.5600), intermediaries have expressed that operations review is the most important item (with a mean of 3.7846) and corporate strategy as the least important item (with a mean of 3.2615).

**Table 3: the importance of voluntary disclosure in annual reports items**

Items	Mean	Standard deviation	Rank
General corporate information	3.7529	.90688	1
Product/service information	3.7529	.94045	2
Future prospects	3.7297	.91304	3
Social and environmental reporting	3.7066	.95580	4
Review of operations	3.6680	1.02572	5
Corporate strategy	3.6602	1.01939	6
Research and development	3.6062	1.04145	7
Financial review	3.6023	1.06392	8
Segmental information	3.5907	1.02037	9
Information about directors	3.5714	1.02947	10
Employee information	3.4054	1.16877	11

Concerning internet disclosure, table 4, show that financial information was ranked as the most important of internet disclosure content and information accessibility is most important in internet disclosure presentation. From standpoint of different sample' categories, both financial analysts and credit managers think that financial information is the most important item (with a mean of 3.7077 and 3.7848), while investors think that governance information is the most important item (with a mean of 3.8000), and intermediaries think that social and environmental information is the most important item.

**Table 4: the importance of voluntary disclosure in web sites items**

Items	Mean	Standard deviation	Rank
<b>First: Disclosure content items</b>			
Financial attributes	3.7259	.94733	1
Corporate governance attributes	3.6834	.91507	2
Corporate social and environmental attributes	3.6486	1.04738	3
Investor relations attributes	3.6062	1.03022	4
<b>Second: presentation</b>			
Accessibility (convenience and usability) attributes	3.6486	.96253	1
Technological features attributes	3.5521	1.06029	2

## **5.2 corporate value model:**

### **5.2.1 Descriptive statistics :**

The descriptive statistics (table 5) for EGX 100 companies (excluded financial companies) show that, with regard to CVD, the percent of voluntary disclosure in annual reports CSDAR is between( 52 and 88) with average (69). On the other hand, the percent of voluntary disclosure in companies' web site CSDWS is between( 50 and 87) with average (68). Minimum percent reflects that all EGX 100 companies provide CVD in both their annual reports and web sites, and the average



percent indicate that EGX 100 companies are strongly interested in CVD.

The average of Tobin's q is (2.07) which consider a high rate of Tobin's q. The average of industrial growth is( 0.1176), and the degree of multinationality is (0.1334).Concerning Access to financial market AFM, the results (not reported) show that (51) companies (61.4%) paid a dividend during 2012, and 32 companies (36.6%) are not.

**Table 5: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
DMA	83	.00	2.00	.1334	.23913
ID	83	.00	1.00	.6988	.46157
IG	83	.01	.32	.1176	.07037
CP	83	-.25	.81	.2518	.26066
CS	83	1.32	10.88	6.5706	2.79010
CVDWS	83	50.84	87.50	68.5253	11.34212
CVDAR	83	52.00	88.75	69.0302	11.47920
TQ	83	.12	4.98	2.0721	1.38693
Valid N (list wise)	83				

### 5.2.2 Correlation results:

To examine the relationship between each disclosure variable and corporate market value, correlation analysis is performed, and Table 6 presents the correlation results. The results show that there is strongly positive significant correlation between total voluntary disclosure CVD and corporate market value TQ (coef. 0. 816 & Sig. 0.000). also, there is a significant association voluntary disclosure in web sites CSDWS and TQ (coef. 0.789 & Sig. 0.000) and between voluntary disclosure in annual reports CSDAR and TQ (coef. 0.789 & Sig. 0.000). This result reflects that the more voluntary disclosure

companies provide either in annual reports or web sites, the higher firm value.

**Table 6: Correlations results**

		CVD	CVDWS	CVDAR	TQ
CVD	Pearson Correlation	1	.976**	.977**	.816**
	Sig. (2-tailed)		.000	.000	.000
	N	82	83	83	83
CVDWS	Pearson Correlation	.976**	1	.909**	.789**
	Sig. (2-tailed)	.000		.000	.000
	N	82	83	83	83
CVDAR	Pearson Correlation	.977**	.909**	1	.812**
	Sig. (2-tailed)	.000	.000		.000
	N	82	83	83	83
TQ	Pearson Correlation	.816**	.789**	.812**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	82	83	83	83

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

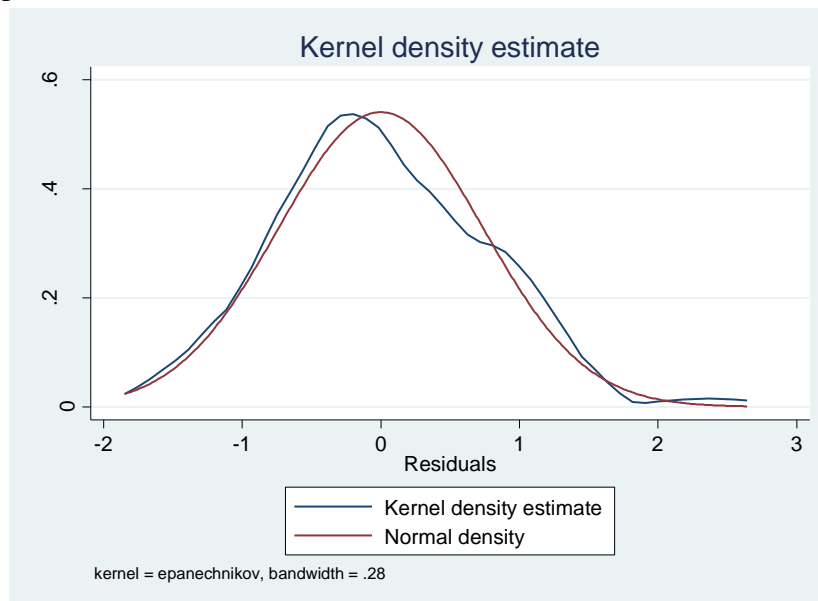
### 5.2.3 Regression Analysis:

To examine the overall impact of CVD on corporate market value, regression analysis is conducted. The regression analysis depends on the formula  $Y = f(X)$ , and OLS linear regression will be used. The linear regression model is considered to be the most common method in disclosure

literature. Without verifying that the data have met the assumptions underlying OLS regression, the results may be misleading. A number of assumptions underlie OLS regression; normality, homogeneity of variance (homoscedasticity) and collinearity.

### **Normality of residuals:**

This assumption refers to the fact that the residuals (errors) should be normally distributed. There is no assumption that independent variables will be normally distributed. Normality of residuals is required for assurance that the P-values for t-tests and F-test are valid. The normality assumption is not required in order to obtain unbiased estimates of the regression coefficients. This assumption can be examined using the Stata programme, and the following figure provides a kernel density plot.



***Figure 2: Normality of residuals***

The previous figure indicates that the data appear to have a normality problem. Using robust standard errors addresses the problem of errors that are not normally distributed. Robust standard errors do not change the coefficient estimates, but change the standard errors and significance tests. So, the regression test re-conducted using robust standards errors, and it is noted that there is no significant differences in the results between two models. Therefore, it can be said that the effect of normality problem is limited.

### **Heteroskedasticity:**

Heteroskedasticity means that the error variance should be constant, as one of the main assumptions for OLS regression is the homogeneity of the variance of residuals. If the variance of the residuals is non-constant, then the residual variance is said to be heteroskedastic. To examine the heteroskedasticity problem using the Stata programme using the Breusch-Pagan test. The results for the Breusch-Pagan test show that the chi-square values ( $\chi^2(1) = 0.11$ ) are small and the test is insignificant ( $\text{Prob} > \chi^2 = 0.7356$ ), indicating that heteroskedasticity is not a problem.

### **Multicollinearity:**

Multicollinearity means that the independent variables are correlated, which can cause problems in estimating the regression coefficients. To examine the multicollinearity problem using the Stata programme, the values of VIF will be calculated. These values of VIF (table 7) indicate a limited problem of multicollinearity, which the biggest value of (VIF) is (6.16) which less than (10).

### **Regression results:**

Table( 7) provide the results of regression model. The high value of  $R^2$  and significant F test reflect the high predictive power of the model. The regression results (table 7) show that,

consistent with previous correlation results, there is a weak significant association between CVD and corporate market value (Coef. .024399, P 0.013). These results reflect that corporate voluntary disclosure weakly influence the corporate value, which provide evidence that there are weak economic consequences for CVD. With regard to the second hypothesis which indicated the impact of CVD on market value, the overall results provide evidence to support this hypothesis. This result is not consistent with the result of Hassan, et al (2009) which found no significant association between voluntary disclosure and firm value. This conflict in results could be explained through the differentiation in measuring CVD which measured in current study in both annual reports and web sites. On the other hand, the result is consistent with the results of Kristandl & Bontis (2007) which revealed significant association between voluntary disclosure and cost of capital. Also, these results are considered consistent with some studies which indicated an association between social disclosure, as a category of voluntary disclosure, and some financial aspects. Gozali et al. (2002) found a relationship between environmental disclosure and share price, but they differentiated between good and bad environmental news. Blacconiere & Northcut (1997) found a relationship between stock prices and the extensive use of environmental disclosure in chemical companies. Murray et al. (2006) indicated that over a period of time, total social and environmental disclosure is significantly related to market returns, even after adjusting for the size effect, and Richardson & Welker (2001), indicated, in a contrasting hypothesis, that there is a statistically significant positive relationship between the level of social disclosure and the cost of equity capital.

**Table 7: regression results**

TQ	Coef	Std.Err	t	P>t	[95% Conf. Interval		VIF
CVD	.024399	.0096351	2.53	0.013	.0052006	.0435973	6.16
CS	.1622715	.0710801	2.28	0.025	.0206413	.3039017	5.26
CP	.5220515	.6995843	0.75	0.458	-.8719006	1.916004	4.46

TQ	Coef	Std.Err	t	P>t	[95% Conf. Interval		VIF
AFM	.202209	.2662374	0.76	0.450	-.3282807	.7326987	2.29
IG	.7288096	1.669936	0.44	0.664	-2.598611	4.05623	1.85
ID	-.2144375	.2379399	-0.90	0.370	-.688543	.259668	1.61
DMA	.5937648	.3812517	1.56	0.124	-.1658957	1.353425	1.14
cons	-2.624089	1.009627	-2.60	0.011	-4.635815	-.6123634	
Prob>f		0.0000					
R-squared		0.7159					
Adj R-squared		0.6891					

The weak association between CVD and corporate market value provides an indicator that investors are interested in voluntary disclosure information when they make their investment decisions, which consistent with previous result of field study which indicated the investors are interested in CVD. However, the results of field study showed great attention from investors toward voluntary disclosure while the regression model showed weak association between CVD and market value. This differentiation in results can be consistent with the argument of Murray et al. (2006) which argued that despite investors exhibiting an increasing demand for social responsibility information, there is no proven link between the price-sensitivity of social disclosure and the substantial changes in economic circumstances that this information could be signalling (Murray et al., 2006: 231). These results could imply, to large extent, that while investors are interested in CVD, they not find their information needs in corporate sources. An important concern has emerged concerning the adequacy of disclosed voluntary information for investors. Solomon & Solomon (2006) indicated that investors did not consider public social disclosure adequate for their investment decisions, and private social disclosure channels were developed. Solomon & Darby (2005) indicated that private social disclosure is important for both companies and investors, as it is used to inform companies about information required by investors.

Murray, et al. (2006) indicated that annual reports disclosure is inadequate because it fails to offer a complete picture of a company's activities. This result cast a light on the need for studies which addresses the information needs and requirements of investors and how companies provide it.

In addition, the weak consequence for CVD refers to the limited importance for socially responsible investment SRI in the Egyptian business environment. According to Eurosif (2006), SRIs represent between 10% and 15% of assets under management in the US and in Europe. The small proportion of SRI could explain its limited effect on financial markets. However, Valore et al. (2009: 2) argued that the influence of SRI is limited because that despite SRI being on the rise, particularly in terms of the number of funds offered, retail SRI accounts form a small proportion of total retail funds. Therefore, the idea that SRI represents an important function in capital markets and can influence corporate financial positions is still disputed. This point reflects the need for more analysis of SRI in and its accounting reflections in Egyptian business environment. The overall results concerning the importance of CVD for investors and the weak association between CVD and corporate market value refer that economic theory could provide better explanation for voluntary disclosure in Egyptian business environment.

**Therefore, the results of the current paper can be summarized as the following;**

1. The Egyptian companies are interested in provide voluntary disclosure in both annual reports and web sites.
2. The Egyptian investors pay attention to voluntary disclosure when making their investment decisions.
3. There is a weak association between corporate voluntary disclosure and corporate market value, which indicate to a weak economic consequence for CVD.
4. It seems that CVD can be explained through the context of economic theory.

**Also, the paper presents some ideas for future studies;**

1. Analysis the information needs of the investors more than mandatory information.
2. Analysis the concept of socially responsible investment.
3. Analysis the theoretical perspectives in explaining corporate disclosure such as political economy approach and economic approach.
4. More analysis for financial benefits of CVD.



## References

1. Abu-Baker, N. & Nasser, K. (2000). 'Empirical evidence on corporate social disclosure (CSD) practices in Jordan'. *International Journal of Commerce and Management*, 10 (3/4), 20-35.
2. Alnajjar, F.K. (2000). 'Determinants of social responsibility disclosures of U.S. Fortune 500 firms: an application of content analysis'. *Advances in Environmental Accounting and Management* 1, 163-200.
3. Aly, D.; Simon, J.; Hussainey, K. (2010). 'Determinants of corporate internet reporting: evidence from Egypt'. *Managerial Auditing Journal* 25 ,( 2),182-202.
4. Arya, A., & Mittendorf, B. (2007). 'The Interaction among Disclosure, Competition between Firms, and Analyst Following'. *Journal of Accounting and Economics*, 43, 321-339.
5. Baiman, S. and Verrecchia, R. (1995). 'Earnings and price-based compensation contracts in the presence of discretionary trading and incomplete contracting'. *Journal of Accounting and Economics*, 20, 93-121.
6. Barry, C. & Brown, S. (1985). 'Differential information and security market equilibrium'. *Journal of Financial and Quantitative Analysis*, December, 407-22.
7. Bertomeu, J., A. Beyer, and R. Dye .(2008). 'Capital Structure, Cost of Capital, and Voluntary Disclosures'. **Working Paper**.
8. Bonson-Ponte, E. & Escobar-Rodriguez, T. (2002). 'A survey on voluntary disclosure on the internet: empirical evidence from 300 European Union companies'. *The International Journal of Digital Accounting Research*, 2 ,( 3), 27-52.
9. Botosan, C. A., & Plumlee, M. A. (2002). 'A re-examination of disclosure level and the expected cost of equity capital,. *Journal of Accounting Research*' 40(1), 21-40.

10. Brownlee, E.R et al. (1990). 'Corporate Financial Reporting: Text and Cases'. **Boston**, 217-219.
11. Choi. (1973). 'Financial disclosure and entry to the European capital market'. **Journal of Accounting Research**, 159-175.
12. Coles, J. &Loewenstein, U. (1988). 'Equilibrium pricing and portfolio composition in the presence of uncertain parameters'. **Journal of Financial Economics**, 279-303.
13. Coles, J., Loewenstein, U. and Suay, J. (1995). 'On equilibrium pricing under parameter uncertainty'. **Journal of Financial and Quantitative Analysis**, September, 347-64.
14. Deegan, C. (2002). 'Introduction– the legitimising effect of social and environmental disclosures—a theoretical foundation'. **Accounting, Auditing and Accountability Journal**, 15, (3), 282-311.
15. Diamond, D. and Verrecchia, R. (1991). 'Disclosure, liquidity and the COEC'. **The Journal of Finance**, September., 1325-60.
16. Friedman, M. (1962) . 'Capitalism and Freedom'. University of Chicago Press, Chicago.
17. Gray, R.; Owen D.; Adams, C. (1996). '**Accounting and Accountability, Prentice Hall Europe**'. Great Britain.
18. Hassan, O.A.G.; Romilly, P.; Giorgioni, G.; Power, D., (2009). 'The value relevance of disclosure: Evidence from the emerging capital market of Egypt'. **The International Journal of Accounting**, 44: 79–102.
19. Healy, P. M.&Palepu, K. G. (2001). 'Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature'. **Journal of Accounting & Economics** 31 (1-3): 405-440.
20. Hodge, F. D., J. J. Kennedy, and L. A. Maines. (2004). 'Does search-facilitating technology improve the transparency of financial reporting? '. **The Accounting Review**, 79 (3): 687-703.

21. Karim, A.K.M.W.(1996). 'The association between corporate attributes and the extent of corporate disclosure'. *Journal of Business Studies*, University of Dhaka, 17(2), 89-124.
22. Meek, G., Roberts, C.B., & 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* (Third Quarter), 555-572.
23. Merton, R. (1987). 'A simple model of capital market equilibrium with incomplete information'. *The Journal of Finance*, Vol. 42 No. 3, pp. 483-510.
24. Samaha, K. & Dahawy, K., (2011). 'an empirical analysis of corporate governance structures and voluntary corporate disclosure in volatile capital markets: the Egyptian experience' *Int. J. Accounting, Auditing and Performance Evaluation*, 7, Nos. 1/2.
25. Samaha, K.; Dahawy, K.; Abdel-Meguid, A.; Abdallah, S., (2012). 'Propensity and comprehensiveness of corporate internet reporting in Egypt Do board composition and ownership structure matter? '. *International Journal of Accounting and Information Management*, 20 ( 2), 2012, 142-170.
26. Thompson, P. & Zakaria, Z. (2004). 'Corporate social responsibility reporting in Malaysia progress and prospects'. *Journal of Corporate Citizenship* ,13 (Spring), 125-136.
27. Wagenhofer, A. (2004). 'Accounting and economics: What we learn from analytical models in financial accounting and reporting. In C. Leuz, D. Pfaff, & A. Hopwood (Eds.) '. *The Economics and Politics of Accounting Oxford: OUP*.
28. Yang, H.I. (2012). 'Capital market consequences of managers voluntary disclosure styles'. *Journal of Accounting and Economics* ,53 , 167-184.

29. Flack, T., Douglas, E. (2007). '*The role of annual reports in a system of accountability for public fundraising charities*'. **PhD Dissertation**, Queensland University of Technology.
30. Yusoff, N.H., Hanefaf, M.M. (1995). 'Malaysian institutional investors' annual reports information needs'. **Malaysian Management Journal** 1:2, 41-49.
31. Yuen, C.Y., Liu, M., Zhang, X., Lu, C. (2009). 'A case study of voluntary disclosure by Chinese enterprises'. **Asian Journal of Finance and Accounting** 1:2, 118-145.
32. Haw, I.M., Qi, D., Wu, W. (2000). 'Timeliness of annual report releases and market reaction to earnings announcements in an emerging capital market: the case of China'. **Journal of International Financial Management and Accounting** 11:2, 108-131.
33. Kelton, A. and Y. Yang (2005). 'The Impact of Corporate Governance on Internet Financial Reporting'. **Working Paper**.
34. Pirchegger, B. and Wagenhofer, A. (1999). 'Financial information on the internet: a survey of the homepages of Australian companies'. **European Accounting Review**, 8 (2), 383-95.
35. Hail, L. (2002). 'The impact of voluntary corporate disclosures on the ex ante cost of capital for Swiss firms'. **European Accounting Review**, 11 (11), 741-73.
36. Leuz, C., and R. Verrecchia, (2000). 'The Economic Consequences of Increased Disclosure'. **Journal of Accounting Research** 38, 91-124
37. Rose, J. M., F. D. Roberts and A. M. Rose. (2004). 'Affective Responses to Financial Data and Multimedia: The Effects of Information Load and Cognitive Load'. **International Journal of Accounting Information Systems** 5: 5-24.
38. Rose, J. M. (2001). 'The Effects of Multimedia-Induced Affective States on Recall and Decision-Making by Individual Investors'. **International Journal of Accounting Information Systems** 2: 22-40.

39. Ho, S.S.M., Wong, K.S. (2003). 'Preparers' perceptions of corporate reporting and disclosure'. *International Journal of Disclosure and Governance* 1:1, 71-81.
40. Dull, R. B., A. W. Graham and A. A. Baldwin .(2003). 'Web-Based Financial Statements: Hypertext Links to Footnotes and Their Effects on Decisions'. *International Journal of Accounting Information Systems*, 4: 185-203.
41. Singhvi, S., Desai, H. (1971). ' An empirical analysis of the quality of corporate financial disclosure'. *The Accounting Review*, 46:1, 129-138.
42. Lev, B. (1992). 'Information disclosure strategy'. *California Management Review*, 34, ( 4), 9-32.
43. Hodge, F. (2001). 'Hyper linking Unaudited Information to Audited Financial Statements: Effects on Investor Judgments'. *The Accounting Review*, 76(4): 675-691.
44. Maines, L. and L. McDaniel .(2000). 'Effects of Comprehensive-Income Characteristics on Nonprofessional Investors' Judgments: The Role of Financial-Statement Presentation Format'. *The Accounting Review*, 75(2): 179-207.
45. Clements, C. E. and C. J. Wolfe. (2000). 'Reporting Financial Results with the Video Medium: An Experimental Analysis'. *Journal of Information Systems*, 14(2): 79-94.
46. Anderson, John C.; Frankle, Alan W. (1980). 'Voluntary Social Reporting: An Iso-Beta Portfolio Analysis' .*The Accounting Review*, vol.55 (3): 467-479.
47. Epstein, Marc J.; Freedman, Martin .(1994). 'Social Disclosure and Individual Investor' *Accounting Auditing & Accountability Journal*, 7 (4): 94-109.
48. Solomon, Jill Frances; Solomon, Aris. (2006). 'Private Social, Ethical and Environmental Disclosure'. *Accounting, Auditing & Accountability Journal* ,19 (4): 564-591.
49. Healy, P., and J. Whalen. (1999). ' A Review of the Earnings Management Literature and Its Implications for Standards Setting'. *Accounting Horizons*, 13, 365-383.

50. Leuz, C., and R. Verrecchia, (2000). 'The Economic Consequences of Increased Disclosure'. *Journal of Accounting Research*, 38, 91-124.
51. Abd El Salam, O.H. (1999). 'The introduction and application of international accounting standards to accounting disclosure regulations of a capital market in developing country :the case of Egypt'. *PhD thesis, Heriot-Watt University*, Edinburgh.
52. Kristandl Gerhard ,Bntis.(2007). 'The Impact of Voluntary Disclosure on Cost of Equity Capital Estimates in a Temporal Setting'. *Journal of Intellectual Capital* .8(4),577-594.*available at [www.emeraldinsight.com/1469-1930.htm](http://www.emeraldinsight.com/1469-1930.htm)*.
53. Moradi, M., Salehi, M. & Arianpoor, A. (2011). 'A study of the reasons for shortcomings in establishment of internet financial reporting in Iran'. *African Journal of Business Management*, 5(8), 3312-3321.
54. Wagenhofer, A., .(2003). ' Economic Consequences of Internet Financial Reporting'. *Schmalenbach Business Review*, 55: 262-279.
55. Hodge, F., & Pronk, M., .(2006). 'The impact of expertise and investment familiarity on investors use of online financial reporting information'. *Journal of Accounting, Auditing and Finance*, Summer, 267-292.
56. Abdul Karim, Aref Abdulllah, .(2003). 'accounting voluntary disclosure with empirical study to the demand factor in the Egyptian environment'. *scientific journal of commerce and finance*, faculty of commerce, university of Tanta, (1):250-307. (in Arabic).
57. AlKhial, T. A., .(2009). 'voluntary disclosure and its role in rationalize the investment decisions in Saudi capital market (field study) '. *scientific journal of economic and commerce*, faculty of commerce, Ain Shams university, (3):105-152. (in Arabic).
58. Plumlee, M.; Brown, D.; Marshall, S., .( 2008). 'The Impact of Voluntary Environmental Disclosure Quality on Firm

- Value'. *Working Paper*, University of Utah. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=992269](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=992269).
59. Teoh, S. H. & Hwang, C. Y., .(1991). 'Nondisclosure and Adverse Disclosure as Signals of Firm Value'. *The Review Of Financial Studies*, 4(2): 283-313.
  60. Rahman, A. R., .(2002). 'Incomplete Financial Contracting, Disclosure, Corporate Governance and Firm Value - with Evidence from a Moderate Market for Corporate Control Environment' [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=348304](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=348304).
  61. Murray, A. & Sinclair, D., Power, D., Gray, R., . (2006). 'Do Financial Markets Care About Social and Environmental Disclosure? Further Evidence and Exploration From the UK'. *Accounting, Auditing & Accountability Journal*, 19(2): 228-255.
  62. Sekaran, U., .(2003). '*Research methods for business*' .(4th ed.). Hoboken, NJ: John Wiley & Sons.
  63. Wahba, H, .(2008). 'Does The Market Value Corporate Environmental Responsibility? An Empirical Examination'. *Corporate Social Responsibility and Environmental Management*, 15: 89-99.
  64. Heal, G., .(2005). '*Corporate Social Responsibility: An Economic and Financial Framework*'. The Geneva Papers, 30(3): 387-409.
  65. Allayannis, G. & Weston, J. P., .(2001). 'The Use of Foreign Currency Derivatives and Firm Market Value'. *The Review Of Financial Studies*, 14(1): 243-276.
  66. Lo, S.-F. & Sheu, H.-J.,. (2007). 'Is Corporate Sustainability a Value-increasing Strategy for Business? '. *Corporate Governance*, 15(2): 345-356.
  67. Moon, J. J., (2007). 'In Good Companies? A Critical Evaluation of the Corporate Social Performance-Corporate Financial Performance Link'. *Working Paper, University of Pennsylvania*.
  68. Chan, C. C. C. & Milne, M. J., (1999). 'Investor Reaction to Corporate Environmental Saints and Sinners: An

- Experimental Analysis'. *Accounting and Business Research*, 29(4): 265-279.
69. Economist Intelligence Unit. ( 2005). 'The Importance of Corporate Responsibility'. A White Paper from the Economist Intelligence Unit Sponsored by Oracle, [http://graphics.eiu.com/files/ad\\_pdfs/eiuOracle\\_CorporateResponsibility\\_WP.pdf](http://graphics.eiu.com/files/ad_pdfs/eiuOracle_CorporateResponsibility_WP.pdf).
  70. Gozali, N. O., How, J. C. Y., Verhoeven, P., (2002). 'The Economic Consequences of Voluntary Environmental Information Disclosure'. [www.iemss.org/iemss2002/proceedings/pdf/volume%20due/340.pdf](http://www.iemss.org/iemss2002/proceedings/pdf/volume%20due/340.pdf)
  71. .Blacconiere, W. G. & Northcut, W. D., (1997). 'Environmental Information and Market Reactions to Environmental Legislation'. *Journal of Accounting, Auditing & Finance*, 12(2): 149-178.
  72. Richardson, A. J. & Welker, M., (2001). 'Social Disclosure, Financial Disclosure and The Cost of Equity Capital'. *Accounting Organizations and Society*, 26: 597-616.
  73. Solomon, J. F. & Darby L., (2005). 'Is private social, ethical and environmental reporting mythicizing or demythologizing reality? '. *Accounting Forum*, 29: 27-47.
  74. European Social Investment Forum (Eurosif), (2006). '*European SRI Study 2006*'. Eurosif: Paris.
  75. Valor, C., Cuesta, M. D. L., Ferandez, B, (2009), 'Understanding Demand for Retail Socially Responsible Investments: A Survey of Individual Investors and Financial Consultants' *Corporate Social Responsibility and Environmental Management*, 16: 1-14.
  76. O'Donovan, G., (2002). 'Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory' *Accounting, Auditing & Accountability Journal*, Vol. 15 Iss: 3, pp.344 - 371



## **Appendix 1 :**

### **Voluntary disclosure (in annual reports) index**

1. Brief history of company/company profile s
2. Corporate vision and mission s
3. Corporate structure s

#### ***General corporate information sub-index***

4. Statement of strategy/objectives: general s
5. Statement of strategy/objectives: financial s
6. Statement of strategy/objectives: marketing s
7. Statement of strategy/objectives: social s
8. Significant events calendar s
9. Impact of strategy on current results s
10. Impact of strategy on future results s

#### ***Corporate strategy sub-index***

11. Statement of future prospects: qualitative s
12. Qualitative forecasts of sales f
13. Quantitative forecasts of sales f
14. Qualitative forecasts of profits f
15. Quantitative forecasts of profits f
16. Qualitative forecasts of cash flows f
17. Quantitative forecasts of cash flows f
18. Assumption underlying the forecast f

#### ***Future prospects sub-index***

19. Age of directors s
20. Educational qualifications s
21. Commercial experience of the non-executive directors s
22. Commercial experience of the executive directors s
23. Other directorships held by the non-executive directors s
24. Other directorships held by the executive directors s
25. Position or office held by executive directors s

#### ***Information about directors sub-index***

26. Review of operations by divisions – turnover f
27. Review of operations by divisions – operating profit f

28. Review of operations – productivity f

*Review of operations sub-index*

29. Discussion of major types of products/services/projects s

30. Improvement in product quality s

31. Improvement in customer service s

32. Distribution of marketing network for finished products s

33. Customer awards/ratings received s

***Product/service information sub-index***

34. Geographical production – quantitative f

35. Line of business production – quantitative f

36. Competitor analysis – qualitative s

37. Competitor analysis – quantitative f

38. Market share analysis – qualitative s

39. Market share analysis – quantitative f

***Segmental information sub-index***

40. Discussion of company's R&D activities s

41. Corporate policy on R&D s

42. Location of R&D activities s

43. Number employed in R&D s

***Research and development sub-index***

44. Breakdown of employees by line of business CSR

45. Breakdown of employees by level of qualification/exec vs. non-execs CSR

46. Breakdown of employees by ethnic origin CSR

47. Employees appreciation CSR

48. Employees training CSR

49. Amount spent on training CSR

50. Nature of training CSR

51. Policy on training CSR

52. Number of employees trained CSR

53. Discussion of employee welfare CSR

54. Safety policy CSR

55. Information on accidents CSR

56. Cost of safety measures CSR

57. Policy on communication CSR

- 58. Equal opportunity policy statement CSR
- 59. Recruitment problems and policy statements CSR

#### ***Employee information sub-index***

- 60. Statement of internal control CSR
- 61. Value added statement CSR
- 62. Product safety CSR
- 63. Environmental protection programmes: qualitative CSR
- 64. Environmental protection programmes: quantitative CSR
- 65. Charitable donations/sponsorships CSR
- 66. Participation in government social campaigns CSR
- 67. Community programmes (health education) CSR

#### ***Social and environmental reporting sub-index***

- 68. Profitability ratios f
- 69. Gearing ratios f
- 70. Liquidity ratios f
- 71. Cash flow ratios f
- 72. Financial history or summary (3 or more years) f

#### ***Financial review sub-index***

- 73. Stock exchanges where shares are traded f
- 74. Volume of shares traded (trend) f
- 75. Volume of shares traded (year-end) f
- 76. Share price information (trend) f
- 77. Share price information (year-end) f
- 78. Market capitalisation (year-end) f
- 79. Domestic and foreign shareholdings f
- 80. Distribution of share holdings (types) f

## **Appendix2 : Internet Disclosure index**

### **Disclosure content items**

- (1) English web sites.
- (2) Arabic web sites.
- (3) Quarterly report of current year.
- (4) Quarterly reports of past years.
- (5) Semi-annual report of current year.
- (6) Semi-annual report of past years.
- (7) Audit review report.
- (8) Current year financial statements.
- (9) Historical financial statements.
- (10) Current year annual reports.
- (11) Annual reports of past years.
- (12) Excerpts of financial reports or statements.
- (13) Letter from the chairman or CEO.
- (14) Chairman or CEO's signature or printed name.
- (15) Auditor's report of current year.
- (16) Auditor's report of past years.
- (17) Auditor's signature.
- (18) Auditor's name printed.
- (19) Note on language translation and audit.
- (20) Current year balance sheet.
- (21) Balance sheet of past years.
- (22) Summarized balance sheet.
- (23) Current year income statement.
- (24) Income statement of past years.
- (25) Summarized income statements.
- (26) Current year statement of cash flow.
- (27) Past years' statements of cash flow.
- (28) Summarized statement of cash flow.
- (29) Appropriation statement (statement of proposed dividend).
- (30) Statement of changes in stockholders' equity.
- (31) Notes to financial statements of current year.
- (32) Notes to financial statements of past years.

- (33) Usage of comparative figures.
- (34) Summary of financial data over a period of at least three years.
- (35) Segmental reporting by line of business (revenue).
- (36) Segmental reporting by sector (revenue).
- (37) GAAP basis in the year reported.
- (38) Disclosure of risk or risk management.
- (39) Earnings per share.
- (40) Other ratios.
- (41) Background or history of the organisation.
- (42) Forward looking information.
- (43) Supplement or amendment to current year annual report.
- (44) Past year material events.
- (45) Current year material events.
- (46) Corporate governance.
- (47) Press releases.
- (48) Financial calendar.
- (49) Top ten stockholders in current year.
- (50) List of BOD names.
- (51) List of key executives names and phone number.
- (52) Historical share prices.
- (53) Current share prices.
- (54) Share price performance in relation to stock market index.
- (55) Services or products provided.
- (56) Sales of key products.
- (57) Market share of key products.
- (58) Monthly or weekly sale or operating data.
- (59) Mailing list.

#### **Presentation format items**

- (1) Contact us.
- (2) E-mail.
- (3) Postal address.
- (4) Telephone number.
- (5) One click to get to investor relations or financial information.
- (6) E-mail to investor relations or financial control manager.

- (7) Investor relations phone number.
- (8) Investor relations postal address.
- (9) Frequently asked questions.
- (10) Internal search engines.
- (11) Link to the stock exchange web sites.
- (12) Link to securities companies' web sites.
- (13) Link to parent or subsidiary.
- (14) Table of content/sitemap.
- (15) Hyperlinks inside the annual report.
- (16) PowerPoint or presentation of financial data.
- (17) Financial data in excel.
- (18) Financial data in PDF format.
- (19) Financial data in HTML.
- (20) Financial data in Word.
- (21) Graphics or diagrams.
- (22) Pull-down menu.
- (23) Click-over menu.
- (24) Financial information found in more than one place.
- (25) Conference calls.
- (26) Ratings.
- (27) Disclaimer.
- (28) Contact to the webmaster.
- (29) Use of frames.
- (30) One click to get to press releases or news.
- (31) Clear boundaries for annual reports.

### Appendix:3 Questionnaire

#### **First part: PERSONNEL INFORMATION**

Name:

Age:

Occupation:

Intermediaries	Investors	Credit manager	Financial analysts

#### **Educational qualifications:**

Bachelor	Master	PH.D.	Professional	Other

#### **Experience:**

Less than 5 years	Between 5 and 10 years	Between 10 and 15 years	Between 15 and 20 years	More than 20 years

**Second part:**

First question: determine to which extent you are interested in corporate voluntary disclosure (in annual reports and in web sites) when making your investment decisions;

The medium of voluntary disclosure	Degree of importance				
	Strongly important	Important	Neutral	Not important	Strongly not important
	(5)	(4)	(3)	(2)	(1)
Annual reports					
Web sites					

**Second question:** the following are the items of corporate voluntary disclosure in both annual reports and web sites; please determine the importance of each item in your investment decisions

Items of voluntary disclosure	Degree of importance				
	Strongly important	Important	Neutral	Not important	Strongly not important
	(5)	(4)	(3)	(2)	(1)
<b>First: Annual reports</b>					
General corporate information					
Product/service information					
Future prospects					
Social and environmental reporting					
Review of operations					
Corporate strategy					
Research and					



Items of voluntary disclosure	Degree of importance				
	Strongly important (5)	Important (4)	Neutral (3)	Not important (2)	Strongly not important (1)
development					
Financial review					
Segmental information					
Information about directors					
Employee information					
<b>Second: web sites</b>					
First: Disclosure content items					
Financial attributes					
Corporate governance attributes					
Corporate social and environmental attributes					
Investor relations attributes					
Second: presentation					
Accessibility (convenience and usability) attributes					
Technological features attributes					

**Third question:** corporate voluntary disclosure can be divided into historical information and future information, please determine the importance of each type for your investment decisions

The medium of voluntary disclosure	Degree of importance				
	Strongly important (5)	Important (4)	Neutral (3)	Not important (2)	Strongly not important (1)
Historical information					
Future information					

#### Appendix 4 : Companies of Sample

NO	Company Name	Sector
1	El Kahera Housing	Real Estate Sector
2	National Real Estate Bank and Development	
3	Madinet Nasr Housing	
4	ALICO	
5	Real Estate Egyptian Consortium	
6	Cairo Investment&Development	
7	Egyptians Housing &Development	
8	North Africa for real estate investment	
9	Palm Hills	
10	TMG Holding	
11	El Shams Housing	
12	United Housing & Development	
13	EZZ Steel	Basic Resources Sector
14	HadiSolib	
15	ASPCA For Mining ASCOM	
16	Public For The Paper Industry -Rakna	

NO	Company Name	Sector
17	SIDPEC	Chemical Sector
18	Egyptian Financial and Industrial	
19	KIMA	
20	EGYFERT	
21	Abu Qir Fertilizers	
22	Sinai Cement	Construction and Materials
23	Upper Egypt Contracting	
24	Delta For Construction &Rebuilding	
25	Giza General Contracting	
26	Lecica	
27	MisrBeniSuef Cement	
28	Bitumode	
29	Gemma	
30	Orascom Construction Industries	
31	Giza General Contracting	
32	Lift Slab MISR	
33	Arab Valves	
34	Nasr For Civil Works	
35	Paints and Chemical Industries -Paquin	
36	South Valley Cement	
37	Tourah Cement	
38	Acrow Miser	
39	National Cemment	
40	Pyramisa	Travel&Lisurer
41	Orascom Development Holding	
42	Misr Hotels	Telecommunication
43	Orascom Telecom Media&Technology Holding	
44	Global Telecom Holding	
45	Mobinil	
46	Telecom Egypt	Personal &Household Products
47	Arab Cotton Ginning	
48	Oriental Weavers	
49	Unirab	

NO	Company Name	Sector
50	Spinalex	
51	Eastern co	
52	Kabo	
53	Golden Textiles	
54	Cairo Poultry	Food & Beverage Sector
55	Alexandria Flour Mills	
56	International Agriculture Products	
57	North Cairo Flour Mills	
58	Midle&West Delta Mills	
59	Middle Egypt Flour Mills	
60	BiscoMisr	
61	Delta Sugar	
62	Cairo Oils & Soap	
63	Ismailia Misr Poultry	
64	Foodico	
65	Agriculture EL Nasr For Manufacturing	
66	Egypco	
67	Juhaynah Food Industries	
68	NUDAP	
69	GMC For Industrial Investment	Oil & Gas Sector
70	AMOC	Health Care and Pharmaceuticals
71	EIPICO	
72	Kahira Pharmaceuticals	
73	Minapharm Pharmaceuticals	
74	GlaxoSmithkline	
75	Nile Pharmaceuticals	Media Sector
76	Egyptian Modern Education Systems	
77	Nile sat	Technology Sector
78	JP Auto	Service Sector and Industrial Products and Cars
79	Swede Electric	
80	Maridive	
81	United Arab Shipping and Unloading	
82	MACO	
83	Middle East Glass Manufacturing	

**Appendix:5**  
**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Q221	259	1.00	5.00	3.7529	.90688
Q222	259	1.00	5.00	3.6602	1.01939
Q223	259	1.00	5.00	3.7297	.91304
Q224	259	1.00	5.00	3.5714	1.02947
Q225	259	1.00	5.00	3.6680	1.02572
Q226	259	1.00	5.00	3.7529	.94045
Q227	259	1.00	5.00	3.5907	1.02037
Q228	259	1.00	5.00	3.6062	1.04145
Q229	259	1.00	5.00	3.4054	1.16877
Q2210	259	1.00	5.00	3.7066	.95580
Q2211	259	1.00	5.00	3.6023	1.06392
Q2212	259	1.00	5.00	3.7259	.94733
Q2213	259	1.00	5.00	3.6834	.91507
Q2214	259	1.00	5.00	3.6486	1.04738
Q2215	259	1.00	5.00	3.6062	1.03022
Q2216	259	1.00	5.00	3.5521	1.06029
Q2217	259	1.00	5.00	3.6486	.96253
Valid N (listwise)	259				

**ANOVA Table**

		Sum of Squares	df	Mean Square	F	Sig.
Q21 * Q11	Between Groups (Combined)	1.469	3	.490	.663	.575
	Within Groups	188.260	255	.738		
	Total	189.730	258			
Q22 * Q11	Between Groups (Combined)	2.015	3	.672	.700	.553
	Within Groups	244.711	255	.960		
	Total	246.726	258			
Q231 * Q11	Between Groups (Combined)	2.029	3	.676	.856	.465
	Within Groups	201.508	255	.790		
	Total	203.537	258			
Q232 * Q11	Between Groups (Combined)	.190	3	.063	.062	.980
	Within Groups	259.694	255	1.018		
	Total	259.884	258			

## Appendix:6

النتائج الاقتصادية للإفصاح الاختياري -أدلة عملية من الشركات المصرية المسجلة.

### ملخص البحث :

**يستهدف البحث** استكشاف النتائج الاقتصادية التي قد تترتب على الإفصاح الاختياري. واعتمد البحث على فرض أن الإفصاح الاختياري له تأثير اقتصادي حيث يمكن أن يؤثر على وجهات نظر المستخدمين تجاه الشركات وبالتالي قد يؤثر على القيمة السوقية للشركة . **ولتحقيق أهداف البحث** تم الاعتماد كل من الدراسة الميدانية للتعرف على وجهات نظر المستثمرين حول أهمية الإفصاح الاختياري والدراسة الكمية لاختبار أثر الإفصاح الاختياري على القيمة السوقية للشركة . وقد تم قياس الإفصاح الاختياري في كل من التقارير السنوية للشركة والموقع الخاص بالشركة على شبكة الانترنت. **وقد أوضحت النتائج** أن المستثمرين أبدوا اهتمامًا بالإفصاح الاختياري للشركة والذي يؤثر بشكل خفيف على قيمتها السوقية كما تعكس النتائج أن ما توفره الشركة من معلومات بشكل اختياري قد لا يلبي احتياجات المستثمرين، ومن ناحية أخرى فإن النتائج تشير إلى أن الإفصاح الاختياري في بيئة الأعمال المصرية .يمكن تفسيره في سياق النظرية الاقتصادية أكثر من سياق النظرية الشرعية.