Influence of Firms' Operational Characteristics and Corporate Governance Attributes on Forward-Looking Information Disclosure: An Empirical Study on Companies Listed on Egyptian Stock Exchange

Mawaheb Abdel-Aziz Ismail
Accounting Lecturer
Department of Accounting, Alexandria University
mawaheb.ismail@gmail.com

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Abstract:

The paper examines the impact of firms' operational and corporate governance characteristics on forward-looking information disclosure for a sample of firms listed on the Egyptian Stock Exchange during the period from 2014 through 2019. I predict that firm's operational characteristics, specifically, firm size, audit size, leverage, and profitability, positively affect forward-looking information disclosure level. It's further hypothesized that corporate governance attributes, specifically, board size, board independence, audit committee performance, and ownership structure, also affect forward-looking information disclosure level. Results reveal that firm size, audit size, profitability, and board size positively and significantly affect forward-looking information disclosure level, whereas the effect of board independence, audit committee, and ownership concentration appears negative, yet significant. Moreover, results uncover the insignificant impact of leverage on forward-looking information disclosure level. Further, sensitivity analyses support these results and indicate the dominance of quantitative forward-looking disclosure.

Keywords:

Forward-looking information, firm size, audit size, leverage, profitability, board size, board independence, audit committee, ownership concentration.

1- INTRODUCTION

Information plays an essential role in financial markets through guiding participants in making sound allocation decisions. Companies' annual financial statements represent the basic source of information concerning firms' financial position and results of operations. On voluntarily basis, companies may publish corporate governance report presenting their governance level. Information published in financial statements, along with its narrative notes, reflects past financial results and their related disclosure, the so-called "backward-looking information (Aljifri and Hussainey 2007). Forward-looking information (FLI) refers to firms' expectations about the future of the company, which eventually provide current and potential shareholders with useful information about firm's future prospects (Alkhatib 2014). Forward-looking information can be found mainly in chairman's report and board of directors' annual disclosure report. Not only current shareholders, but also potential investors are willing to invest in companies with promising future performance. Therefore, both are interested in FLI disclosure. O'Sullivan et al. (2008) argue that firms with high quality disclosure include FLI in their reports.

The concept of forward-looking information disclosure (FLID) has attracted the attention of researchers for more than a decade. Various terminologies were used by different studies to refer to FLI. For example, Eng and Mak (2003), and Lim et al. (2007) denotes FLI as future prospects, where the latter considers FLID as a subset of strategic information directed to investors. Patelli and Prencipe (2007), and Elsayed and Hoque (2010) refer to FLI as projected information, whereas Broberg et al. (2009) denote it as future-oriented information. These studies perceive that FLID, despite its importance, has the least disclosure rate among other disclosure areas.

In fact the issue of FLID can be traced back to the Private Securities Litigation Reform Act of 1995, which defines FLI as:

- A statement containing projection of revenues, income, earnings per share, capital expenditure, dividends, capital structure or other financial items.

- A statement of plans and objectives set by management for future operations.

- A statement of future economic performance incorporated in any discussion and analysis of financial condition by the management.

Therefore, it follows that FLID may be either quantitative or qualitative information shaping the future of the company. Further, FLID may be provided orally in boards' general meetings, or written in board of directors' annual disclosure report.

FLID is perceived to have several motivations; Oliveira et al. (2010) suggest that firms are encouraged to increase such voluntarily disclosure in order to meet shareholders' expectations and optimize the use of corporate resources. Also, FLID promotes greater transparency regarding the company through providing information needed by investors to assess long term prospects in a clear and concise form (Garcia-Sanchez et al. 2013). Moreover, Ioana and Adriana (2014) argue that disclosure of FLI creates strategic tools which enable firms to correlate financial and non-financial performance indicators, enhance their corporate reputation, and legitimize themselves. Further, FLID is found to help firms in identifying opportunities and lowering cost of capital (Frias-Aceituno et al. 2014).

Despite its importance, FLID faces certain challenges cited in management perception that such disclosure may expose the company to competitors. Many companies fear that increasing demand for FLID will force them to disclose competitively-sensitive information, make profit forecasts or expose themselves to the threat of litigation (PricewaterhouseCoopers 2007). This view point is supported by Kent and Ung (2003), and Uyar and Kilic (2012), who agree that releasing FLI may increase indirect costs incurred in sharing proprietary information that could be used by competitors. Therefore, companies may be hesitant in disclosing FLI because of the possible negative impact of such disclosure on their competitive position. Also, it might be difficult to accurately predict corporate future performance because of uncertainties related to certain industries and market conditions (Aljifri and Hussainey 2007).

Focusing on Egypt, this paper is concerned with the disclosure of FLI and its determinants; firms' operational characteristics and corporate governance attributes. The specific features of Egyptian economy distinguish it from other settings, and make it a rich area for study. The motivation for this topic emerges from several sources. First, listed companies in Egypt are found to completely comply with mandatory disclosure levels required by law; however, this is not sufficient to satisfy users' growing demand for incremental corporate information; especially in the current information revolution era. Voluntary disclosure levels of Egyptian firms are found to be relatively lower than expected (Rizk et al. 2008). As an emerging capital market, Egyptian financial market is characterized by relatively weak regulatory environment, weak corporate governance, and low information disclosure (Alsaeed 2006). Therefore, shedding the light on FLID and its determinants would enhance market credibility. Second, the Corruption Perception Index, developed by Transparency International, ranks countries based on how corrupt their business sector is perceived to be. A country's score indicates the perceived level of corruption on a scale on 0 (highly corrupt) to 100 (very clean). Egypt scored 35 points out of 100 on the 2019 Corruption Perceptions Index reported by

Transparency International; a score which makes the research in this area necessary, where increasing transparency through disclosing more information would help alleviating corruption. Third, the rapid growth of the Egyptian economy (Samaha and Dahawy 2010); cited in enhancing investment climate and attracting local, regional, and foreign direct investment, promotes listed companies in Egypt to employ FLID in order to add to market credibility and attract more foreign investors.

Disclosure of FLI is a form of voluntary disclosure which is not yet strictly regulated in Egypt. A sizable body of research has examined the voluntary disclosure level in Egypt, along with its determinants and consequences. The relationship between company characteristics and disclosure level was examined by Dahawy (2009) using a disclosure checklist issued by the Egyptian Capital Market Authority. Findings support that the degree of disclosure by Egyptian companies is affected by the highly secretive Egyptian culture. Results indicate that the degree of affiliation of the auditor with an international firm is the most significant variable affecting the level of voluntary disclosure. Focusing on disclosure of corporate social responsibility, Hussainey et al. (2011) examined the main determinants of such voluntary disclosure. Evidence suggests that profitability is the key driver for Egyptian listed companies to disclose information regarding corporate social responsibility. Nevertheless, other variables such as ownership structure, firm size, leverage, and liquidity, do not seem to drive such disclosure. This result was previously reached by other studies, such as Aly et al. (2010), Hassan et al. (2006), and Samaha et al. (2010).

Corporate governance attributes are also found to impact the level of voluntary disclosure in Egypt. Samaha et al. (2012) provide evidence supporting that voluntary disclosure on corporate governance is lower for companies with a dual role for its CEO, also for companies with higher ownership concentration. The extent of corporate governance disclosure increases with more board independence. Also, corporate social and environmental reporting level was found to be significantly affected by ownership structure (Rizk et al. 2008).

Building on the above established theoretical and empirical foundations, I predict that firms' operational characteristics and corporate governance attributes do affect level of FLID. Specifically, the study hypothesizes that firm size, auditor type, leverage, and profitability, are positively related to FLID in Egyptian listed firms. Additionally, it's hypothesized that board size, board independence, and audit committee performance are positively associated with FLID, whereas ownership concentration negatively impacts such disclosure.

Research hypotheses are examined using a sample of firms listed on the Egyptian Stock Exchange during the period from 2014 to 2019. This period

witnessed a relative steadiness in political conditions, stimulating investment and growth. This motivates the aim of my research, elaborated in examining the determinants of FLID.

Results reveal that for firms' operational characteristics, firm size, audit size, and profitability positively and significantly affect FLID, whereas the impact of leverage turns out to be insignificant. Regarding corporate governance attributes, only board size appears to have a positive significant effect, while board independence, audit committee performance, and ownership concentration are found to have a negative significant effect on FLID. Results are shown to be robust to the use of alternative proxies for independent variables.

The contribution of the study lies in examining the relationship among disclosure quality, firm characteristics, and corporate governance mechanisms, thus extending recent governance and disclosure literature. Further, by employing Egyptian setting, this paper adds to the literature addressing the determination of drivers for FLID in emerging capital markets.

The paper is structured as follows. Section (2) reviews literature and develops hypotheses. Section (3) presents sample and research methodology. Empirical results are presented and discussed in section (4). The study concludes with a brief summary in section (5).

2- LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Literature Review:

Literature categorizes information included in firms' reports into two groups: backward-looking information and forward-looking information (Hussaieny 2004, and Aljifri and Hussaieny 2007). While backward-looking information refers to firms' historical financial results, forward-looking information entails providing information which enables shareholders to evaluate future performance of a company. Many researchers, such as Beretta and Bozzolan (2008), Jensen and Berg (2012), and Menicucci (2013), argue that traditional annual reports fail to offer future prospects or fundamental risks related to future. Given the high variability of economic environment, backward-looking information is not expected to meet shareholders' needs for information. Here comes the role of FLI to integrate quantitative and qualitative drivers of performance (Higgins et al. 2014). Jensen and Berg (2012) emphasize that FLI proceeds to rebalance performance indicators away from the common short-term outlook of traditional annual reports toward a long-term view.

Since its elaboration in 1995 by the Private Securities Litigation Reform Act, the issue of FLID has created a space for debate among researchers. On the

one hand, some studies (e.g., Celik et al. 2006, and Uyar and Kilic 2012) provided arguments promoting FLID. Firstly, FLID mitigates information asymmetry arising when some parties possess private information about the firm that is not available to other stakeholders. Secondly, FLI about firm's operations, plans, strategies, and financial targets are useful in predicting expected cash flows and future firm value. Thirdly, FLID is able to clear out ambiguity about firm's future, thereby satisfying current investors and attracting potential investors who would be willing to invest in companies with promising future prospects.

On the other hand, companies may feel reluctant to disclose FLI. It's highly argued that firms may hesitate to disclose company-specific risks and future prospects, since this could be used by competitors, thereby increasing firm's indirect costs (Kent and Ung 2003). Further, FLID may expose firms to litigation costs if estimations and predictions turn out to be inaccurate. Stated differently, the potential inaccuracy of future projections decrease managers' incentives to disclose FLI because of litigation costs (Healy and Paleepu 2001, and Oliveira et al. 2011).

The theoretical foundations backing FLID emphasize three theories; agency theory, signaling theory, and legitimacy theory.

Agency theory, well-established by Jensen and Meckling (1976), and Fama and Jensen (1983), has the potential to explain voluntary FLID. The well-held agency problem emerges from the separation between ownership and management; whereas managers seek to achieve their own goals even on the expense of shareholders' interests. Information asymmetry plays a role, where managers, as insiders, enjoy superior information that can be used to exploit outsiders (An et al. 2011). According to agency theory, as argued by Agyei-Mensah (2017), a company with high agency costs will try to reduce these costs by increasing the extent of voluntary disclosure, one of which is FLI. Thus, agency theory entails that disclosure of FLI mitigates information asymmetry and decreases agency costs (Hassanien and Hussainey 2015).

Signaling is another theory explaining FLID. Originally, Spence (1973) establishes that because of uncertainty inherent in capital markets, managers use information disclosure to give signals to outsiders concerning their performance. Gallego-Alvarez et al. (2011) demonstrated that information disclosure are considered signals to capital markets to mitigate information asymmetry, reduce financial costs, and enhance firm value. Therefore, signaling theory promotes extensively voluntary disclosure, where well-performing managers distinguish themselves from poor-performing managers by providing additional information about their outstanding performance.

Legitimacy theory, developed by Shocker and Sethi (1974), postulates that firms maintain their legitimacy by disclosing certain information in its annual reports. According to legitimacy theory, and as argued by Naser et al. (2006), firms try to justify their existence in society by legitimizing their activities through FLID.

Using different contexts, a number of studies examined determinants of FLID. Employing a sample of Australian firms, Kent and Ung (2003) investigated the impact of competition, external financing, earnings volatility, firm size, and audit quality on FLID level. Evidence supports that earnings volatility and firm size affect FLID, whereas other variables do not. In the United Arab of Emirates, Aljifri and Hussainey (2007) reached that profitability and leverage influence FLID level, while audit size, firm size, and business sector do not. The Turkish setting was examined by Uyar and Kilic (2012) to investigate determinants of FLID. Results of content analysis show that FLID level among Turkish firms is relatively low; mainly qualitative focusing on spreading good news. It's indicated that firm size and auditor size are the main drivers for FLID, whereas profitability, leverage, ownership structure, directors independence, and listing age, are insignificant. Using a large sample of firms listed on London Stock Exchange, Al-Najjar and Abed (2014) reached that board size and independence of audit committee have the major impact on FLID level. Alkhatib (2014) and Aribi et al. (2018) provide evidence form Jordan suggesting that firms' operational characteristics (firm size, leverage, profitability, auditor type), and board composition (gender diversity) have a positive impact on FLID. In US, Kilic and Kuzey (2018) constructed forward-looking disclosure index comprising of quantitative and qualitative items. Results reveal that firms rely more on qualitative FLID rather than quantitative. For determinants, gender diversity and firm size were found to be positively correlated with FLID, whereas leverage is negatively related to FLID. Moreover, other variables, namely board size, board composition, profitability, and industry, fail to show any impact on FLID.

Hypotheses Development:

Firms' Operational Characteristics

It's highly argued that financial reporting practices and disclosure quality are strongly related to firms' operational characteristics, therefore, it's predicted that characteristics such as size, auditor type, leverage, and profitability would significantly affect FLID level.

Firm Size

One of the most important variables shaping firm's operational features is size, whether measured by its total assets, sales, or market capitalization. A bulk of studies (Camfferman and Cooke 2002, Patel and Dallas 2002, Eng and

Mak 2003, Celik et al. 2006, Alsaeed 2006, Uyar and Kilic 2012, Alkhatib 2014, Aribi et al. 2018, and others) lends credence to the argument that firm size positively affects voluntary disclosure levels. Literature provides several theoretical justifications and empirical support for such argument. Basically, Jensen and Meckling (1976) establish that large companies face greater agency costs as they require large volumes of external capital to finance their projects. Therefore, large firms tend to disclose more information in order to decrease agency costs and limit conflict of interests between managers and capital providers (Marston and Polei 2004). Moreover, large firms, diversified across geographical and product markets, are likely to have a wide base of stakeholders who exert greater pressure on managers to disclose more information (Brammer and Pavelin 2008). Further, large companies use higher levels of voluntary disclosure to reduce political costs and reinforce public confidence (Watts and Zimmerman 1990, and Marston and Polei 2004). Being a part of voluntary disclosure, FLID is found to be positively related to firm size by a number of studies, such as Kent and Ung (2003), Vanstrealen et al. (2003), Flostrand and Strom (2006), and Uyar and Kilic (2012). It's worth mentioning that some empirical studies fail to confirm such relation; for example, Aly et al. (2010) and Samaha and Dahawy (2011) did not find a significant association between firm size and disclosure of voluntary information.

Building on the above established theoretical and empirical evidence, the first research hypothesis can be formulated as follows:

H1: There is a positive association between firm size and FLID levels for companies listed on Egyptian Stock Exchange.

Audit Size

In order to maintain their reputation, Big-4 audit firms have greater incentives to influence their clients to adhere to better reporting practices and to disclose more information (Wallace et al. 1994, and Hail 2002). Large audit firms perceive information disclosed by their clients as a means of signaling their own quality (Inchausti 1997). Therefore, companies audited by Big-4 audit firms are more likely to disclose higher levels of information on voluntarily basis since a Big-4 auditor attempts to guard its reputation and supports investors through extra disclosure. This assumption has been proven valid by a number of studies; for example, Xiao et al. (2004), Abdel Salam (1999), Wang et al. 2008, and Uyar and Kilic (2012). Other studies find no significant impact of audit size on firms' disclosure levels, such as Aljifri and Hussainey (2007), Aly et al. (2010), and Samaha and Dahawy (2011).

Thus, the second research hypothesis is formulated as follows:

H2: There is a positive association between audit size and FLID levels for companies listed on Egyptian Stock Exchange.

Leverage

Leverage is another feature of firm's operational characteristics that does affect different firm's aspects. For its effect on voluntary disclosure levels, agency theory proposes that highly leveraged firms tend to disclose more information to reduce agency costs presented in high monitoring, and in turn cost of capital (Jensen and Meckling 1976). Aljifri and Hussainey (2007) and Wang and Hussainey (2013) assert that firms with higher leverage ratios are more probable to disclose more forward-looking information to decrease risk premiums in required rates of return on equity and to meet creditors' needs of information. Such assumption is empirically supported by a considerable number of studies, such as Inchausti (1997), Alsaeed (2006), Uyar and Kilic (2012), and Alkhatib (2014). It's notable that some studies reject the positive linkage between disclosure levels and leverage (Hassan et al. 2006, and Ezat and El-Marsy 2008)

Therefore, the third research hypothesis is proposed as follows:

H3: There is a positive association between leverage and FLID levels for companies listed on Egyptian Stock Exchange.

Profitability

Literature well accepts a positive association between voluntary disclosure level and profitability. Elfeky (2017) confirms that management attaining high profits has more incentives to adhere to higher levels of voluntary disclosure; with the aim of justifying compensation, improving reputation, and strengthening its position. Theoretically speaking, agency theory argues that managers in highly profitable firms will disclose additional information to gain personal benefits and justify compensation package (Barako 2007). Also, signaling theory purports that companies generally tend to disclose more information when they perform well, where such disclosure is a strategic mean of sending positive signals to the capital market (Inchausti 1997). This assumption has been accepted by many studies, for example; Watson et al. (2002), Alsaeed (2006), Aljifri and Hussainey (2007), Alkhatib (2014), Elfeky (2017), and others. Building on the above discussion, the fourth research hypothesis is formulated as follows:

H4: There is a positive association between profitability and FLID levels for companies listed on Egyptian Stock Exchange.

Corporate Governance Attributes:

Since determinants of FLID are proposed through agency and signaling theories, and since strong corporate governance has the potential of alleviating information asymmetry between insiders and outsiders, then it's expected that FLID, as a part of firm's overall voluntary disclosure practices, is affected by corporate governance attributes; board size, board independence, audit committee, and ownership structure.

Board Size

Board of directors' main and most important function is to monitor and control management actions. It's suggested that large board is more capable of performing this function; where greater resources and more professional expertise can positively influence managerial performance (Klein 2006, Anderson et al. 2004, and Leng and Ding 2011). Moreover, shareholders are found to view financial information reported by large boards as more reliable, and are willing to lower their required rate of return (Anderson et al. 2004). On the contrary, small-sized board is justified by some researchers (e.g., Wu 2000, Lipton and Lorsch 1992, and Jensen 1993) as having more effective communication, higher degree of coordination, lower incidence of free-rider problems, and higher degree of participation in meetings.

Studies investigating the impact of board size on disclosure quality in general, and on FLI in particular, has shown mixed results. On the one hand, studies such as Kilic and Kuzey (2018), Uyar et al. (2014), Elzahar and Hussaieny (2012), Elfeky (2017), and Cheng and Courtenay (2006), all did not find a significant association between board size and voluntary disclosure. On the other hand, a positive correlation between board size and voluntary disclosure was indicated by Barako et al. (2006), Laksmana (2008), and Hussainey and Al-Najjar (2011). For the Egyptian context, Wang and Hussainey (2013), and Ezat and El-Masry (2008) reach a positive linkage between board size and FLID level.

Therefore, the fifth hypothesis is proposed as follows:

H5: There is a positive association between board size and FLID levels for companies listed on Egyptian Stock Exchange.

2-2-6 Board Independence

The positive impact of independent non-executive directors in limiting managerial opportunistic practices, decreasing the likelihood of firms' financial

distress and bankruptcy, and mitigating agency problems was well documented by a number of studies (Fama and Jensen 1983, Park and Shinn 2004, Patelli and Prencipe 2007, Anderson and Reeb 2004, Dunn 2004, and Daily et al. 2003). Additionally, board independence was found to have a positive impact on firms' disclosure quality. This result has been reached by Ajinkya et al. (2005), Hossain et al. (2005), and O'Sullivan et al. (2008). For Egyptian firms, Samaha and Dahawy (2010, 2011), and Elfeky (2017) verify such positive relationship between corporate voluntary disclosure and percentage of independent directors in the board.

Building on the above mentioned results, the sixth research hypothesis is formulated as follows:

H6: There is a positive association between board independence and FLID levels for companies listed on Egyptian Stock Exchange.

2-2-7 Audit Committee

Literature often perceives audit committee as an effective corporate governance mechanism that helps reducing agency cost and monitoring the reliability of the company's accounting processes and compliance with relevant corporate legal and ethical standards (Turley and Zaman 2004). It's well established that the mere formation of audit committee in organization results in substantial benefits, cited in enhancing third party perception of auditor independence, increasing audit quality, and limiting managerial opportunistic behavior (Mendez and Garcia 2007, and Brown et al. 2008). Audit committee performance, cited in its independence and activity, appears to impact various aspects of the company, including voluntary disclosure quality. Ho and Wong (2001), and Al-Najjar and Abed (2014) provide evidence suggesting a positive association between independence of audit committee and voluntary disclosure of FLI for UK firms. For Australian companies, O'Sullivan et al. (2008) confirm such positive link between FLID and audit committee performance. Consequently, the seventh hypothesis is derived as follows:

H7: There is a positive association between audit committee and FLID levels for companies listed on Egyptian Stock Exchange.

2-2-8 Ownership Concentration

It's highly supported that the nature of ownership and degree of concentration do affect firms' financial reporting practices and disclosure quality (Koh 2003, Bergstresser and Philippon 2006, Wang and Deng 2006, Florackis et al. 2009, Elsayed and Wahba 2014, and Shahwan 2015). However, results concerning such impact appear inconclusive. For example,

Secci (2005) reaches that firms controlled mainly by State disclose less voluntary information. Same finding was reached by Elsayed and Hoque (2010), where governmental ownership negatively affects levels of voluntary disclosure. On the contrary, block-holder and managerial ownership motivates voluntary disclosure quality (Lim et al. 2007, Samaha et al. 2011, Ezat and El-Masry 2008, Samaha and Dahawy 2010). It's indicated that firms with higher ownership concentration face less agency costs, and thus have less incentive to provide additional forward-looking information (Cahan and Hossain 1996). It's worth mentioning that some studies show opposing results, for example, Al-Najjar and Abed (2014) provide evidence supporting a positive association between block-holder ownership and FLI. Same result was reached by O'Sullivan et al. (2008). Given the specific nature of Egyptian Stock Exchange, where a large portion of listed companies is formerly stated-owned companies that have been privatized, that is, Egyptian capital market sites a high degree of government ownership concentration, the last research hypothesis can be elaborated as follows:

H8: There is a negative association between ownership concentration and FLID levels for companies listed on Egyptian Stock Exchange.

3- RESEARCH DESIGN

Data and Sample Selection

Initial study sample comprises the 100 most active firms continuously listed on the Egyptian Stock Exchange during the period 2014-2019. This period appears critical, where it evidenced political stabilization after three years of major events and irregularities following the Egyptian revolution of January 2011. Egypt has taken major steps in economic reform aiming to enhance investment climate and attract foreign funds to Egyptian capital market. According to official data, Egyptian gross domestic product has risen from 2.92% in 2014 to 5.56% in 2019. Therefore, it would be useful to find out what determines FLID which, absolutely, enhances market credibility during this critical period.

Firms' financial data were obtained through annual reports available on the website of "Mubasher Misr". Non-financial data concerning board characteristics were manually extracted from supplementary notes related to financial statements.

Data required to construct FLID index were obtained from companies' annual financial statements, and more important from boards' annual disclosure reports available on companies' web sites, or on specialized web sites including; "horizon-brokerage", "NAEEM Brokerage", "Mubasher", "alborsaanews", and "Economic Group".

To ensure homogeneity of data, companies belonging to financial sector were excluded since they operate in different regulatory environments than those of other companies. Also, companies whose annual disclosure reports could not have been reached were excluded. As a consequence, final sample was filtered to 74 firms belonging to five sectors.

Data Sample selection and distribution are presented in Table (1).

Table (1)
Sample Selection and Distribution

Panel A: Sample Selection			
Initial Sample			**100**
Excluding:			
Banks and Financial Service companies			**(14)**
Companies with missing annual disclosure reports			**(12)**
Final Sample			**74**
Panel B: Sample Distribution by Industry			
Industry	**Firms**	**6-Years Observations**	**%**
Construction & Materials	**25**	**150**	**34**
Chemicals & Pharmaceuticals	**10**	**60**	**14**
Industrial & Basic Resources	**19**	**114**	**26**
Leisure & Entertainment	**13**	**78**	**17**
Media & Communications	**7**	**42**	**9**
Total	**74**	**444**	**100**

Measurement of Research Variables:

Dependent variable:

Forward-Looking Information Disclosure Index (FLID index):

Following prior studies (Uyar and Kilic 2012, O'Sullivan 2008, Celik et al. 2006, Eng and Mak 2003, and others), I employ a content analysis to determine quantitative and qualitative FLI needed to construct FLID index. These data were extracted from two main sources. The first source is the supplementary notes of firms' annual reports, where items such as provisions, contingent liabilities, accounting estimates, risks of financial instruments, and

impairment of assets, all involve future expectations. The second source is boards' annual disclosure reports, where words such as anticipate, predict, expect, estimate, forecast, coming year/period, all denotes FLI (Hussainey et al. 2003, Alkhatib 2014, and Aribi et al. 2018).

Items of FLID are categorized under 2 groups: Quantitative and Qualitative information. Thus, disclosure index includes expectations about financial information (e.g., target earnings, expected cash flows, capital expenditure, and so on), and anticipations on non-financial information (e.g, strategic plans, expansions, growth opportunities, and so on). The final disclosure index includes a comprehensive list of 28 items; 14 denoting quantitative information, and 14 for qualitative information (Table 2).

A binary approach is used to construct an un-weighted index based on the existence or non-existence of an item, where a certain item of FLI is assigned 1 if exist, or 0 if not exist (Johnson et al. 2001, Alkhatib 2014, Uyar and Kilic 2012, O'Sullivan 2008, and Celik et al. 2006). FLID index is un-weighted since it assumes that all items are equally important, and therefore are assigned the same weight (Gray et al. 1995, Al-Najjar and Abed 2014, and Soliman 2013). For each firm-year observation, a total score is calculated by summing up the dummy values assigned for each of the 28 items representing FLI. FLID index is constructed as the ratio of total items disclosed to maximum items disclosed for each firm, that is, actual disclosure to total possible disclosure (Agyei-Mensah 2017, Alkhatib 2014, Uyar and Kilic 2012, O'Sullivan 2008, and Celik et al. 2006).

Functionally, FLID index is measured as follows:

$$\textbf{FLID index} = \Sigma^{m} d_i \; / \; \Sigma^{n} d_i$$

Where; d_i = 1 if the item d is disclosed (0 if not).

m = number of items actually disclosed

n = maximum number of disclosure items (best practice)

Table (2) illustrates items encompassing FLID index under the 2 categories; quantitative and qualitative.

Table (2)
Items of FLID Index

Categories	Items
QuaNtitative	1-Profit / Loss
	2-Cash flow
	3-Shares and Market Capitalization
	4- Profitability
	5- Sales
	6- Capital Expenditure
	7- Production
	8- Costs
	9- Expenses
	10- Capital Structure
	11- Human and intellectual Capital
	12- Change in Ownership
	13- Financial Resources and Obligations
	14- Dividends and Taxes
QuaLitative	1- Corporate strategy (vision and mission)
	2-Performance Goals
	3-Quality achievements (ISO Certificates)
	4-Objectives
	5-Industrial / Sector information
	6- Mergers and Acquisitions
	7-Innovative efforts and Technological Structure
	8-Legal and Regulatory Aspects
	9-New Investments and Expansions
	10-Impact of Changes in Political and Economic Conditions and Accounting Standards
	11-Social Responsibilities
	12-Competitive Position and Market Analysis
	13-Risks
	14-Relationships
	Source: Adopted from Kent and Ung (2003), Menicucci (2013), Aribi et al. (2018), and Agyei-Mensah (2017)

Independent Variables

Table (3) presents measurement of independent variables denoting firms' operational characteristics and corporate governance attributes.

Table (3)
The Operational Definition of Independent Variables

Variable	Proxy
1-Firm Size (CoSize)	Natural logarithm of firm's total assets (Uyar and Kilic 2012, Elfeky 2017, and Agyei-Mensah 2017)
2-Audit Size (AuSize)	Dummy variable = 1 if the firm is audited by Big 4 audit firm, and 0 otherwise (Uyar and Kilic 2012, and Agyei-Mensah 2017).
3- Leverage (Lev)	Firm's total liability deflated by book value of equity (Al-Najjar and Abed 2014, and Agyei-Mensah 2017).
4- Profitability (ROA)	Return on assets; net income deflated by total assets (Aribi et al. 2018, Uyar and Kilic 2012, and Kilic and Kuzey 2018).
5- Board Size (BoSize)	Total number of directors on the board (Agyei-Mensah 2017, and Elfeky 2017).
6- Board Independence (BoIndep)	Dummy variable = 1 if the board contains at least 50% independent non-executive members, and 0 otherwise (Al-Najjar and Abed 2014, and Agyei-Mensah 2017).
7- Audit Committee (AuComm)	Dummy variable = 1 if an audit committee: (1) is comprised of at least three independent members, and (2) meets at least four times annually, and 0 otherwise (Brown et al. 2008, and Mendez and Garcia 2007).
8-Ownership Concentration (OWCO)	Percentage of total shares held by majority (Elfeky 2017, (Lim et al. 2007, and Ezat and El-Masry 2008).

Regression Model

The aim of the study is to investigate the effect of firm's operational characteristics and corporate governance attributes of FLID index. Research hypotheses are tested using the following multivariate regression model:

$$FLID_{i,t} = \beta_0 + \beta_1 CoSize_{i,t} + \beta_2 AuSize_{i,t} + \beta_3 Lev_{i,t} + \beta_4 ROA_{i,t} + \beta_5 BoSize_{i,t} + \beta_6 BoIndep_{i,t} + \beta_7 AuComm_{i,t} + \beta_8 OWCO_{i,t} + \dot{\varepsilon}_{i,t}$$

4- Empirical Results

Descriptive Statistics and Correlation Matrix

Table (4) presents descriptive statistics for study variables.

Table (4)
Descriptive Statistics of Study Variables
(N= 444 observations)

Variable	Mean	Std. Dev.	Min	Q1	Median	Q3	Max	Kurtosis	Skewness
FLID	0.6418	0.0953	0.4286	0.5714	0.6428	0.6786	0.9285	0.085	0.668
CoSize	19.902	1.6095	16.2448	18.677	19.779	20.949	24.334	-0.308	0.470
AuSize	1.28	21.039	0	0	0	1	1	7.0654	2.3765
Lev	2.2491	3.3397	0.0005	0.2933	0.9278	2.3844	24.694	8.356	2.625
ROA	0.0631	0.1333	-1.3834	0.0016	0.0465	0.1127	0.4828	3.1446	-2.264
BoSize	7.67	3.011	3	5	7	9	16	0.176	0.715
BoIndep	0.47	0.499	0	0	0	1	1	-1.991	0.136
AuComm	0.86	0.345	0	1	1	1	1	2.479	-2.114
OWCO	0.4870	0.2785	0.0200	0.2300	0.4550	0.7500	0.9900	-1.202	0.192

Table (4) shows that dependent variable, FLID, is normally distributed (0.085, 0.668) with a mean and median of 0.6418 and 0.4286 respectively. Continuous independent variables (CoSize, Lev, ROA, BoSize, and OWCO) show normal distribution, and low dispersion cited in low standard deviations and ranges. For ownership concentration, the mean and median are 0.49 and 0.46, indicating that almost 50% of sample firms are highly concentrated firms. The maximum % of ownership concentration (99%), suggesting the existence of complete concentration for certain firms. Dichotomous independent variables (AuSize, BoIndep, AuComm) are normally distributed with low differences between mean and median. Only AuSize appears highly dispersed with standard deviation of 21.039. To check for normality, skewness and kurtosis tests were conducted, with a threshold of +3 for skewness as recommended by Hair et al. (2006), and threshold of +10 for kurtosis, as suggested by Kline (1998). Values appearing on Table (4) indicate that data are normally distributed.

Table (5)

Pearson Correlation Matrix of Study Variables

Variables	FLID	CoSize	AuSize	Lev	ROA	BoSize	BoIndep	AuComm	OWCO
FLID	1								
CoSize	0.422**	1							
AuSize	0.212**	0.352**	1						
Lev	0.055	0.332**	0.153**	1					
ROA	0.256**	0.154**	-0.008	-0.032	1				
BoSize	0.322**	0.493**	0.256**	0.030	0.301**	1			
BoIndep	-0.205**	-0.22**	0.193**	-0.088	-0.057	0.005	1		
AuComm	-0.25**	-0.02	0.103*	-0.056	-0.116*	-0.061	-0.034	1	
OWCO	-0.12**	0.168**	0.178**	0.397**	-0.155**	0.066	-0.097*	0.046	1

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

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

Table (5) illustrates Pearson correlation coefficients between study variables. Correlation coefficients confirm the absence of multi-collinearity, where no coefficient exceeds 0.8 (Hair et al. 2006). Dependent study variable, FLID, as hypothesized, appears to be positively and significantly associated with firm's operational characteristics; firm size, audit size, and profitability, except for leverage. Moreover, corporate governance attributes are significantly correlated to FLID, however and contrary to expectations, FLID is negatively correlated to board independence and audit committee performance. In line with critical reasoning, variables denoting firms' operational characteristics are all significantly and positively correlated, implying that large-sized firms are most probably audited by big-4 audit firms, have greater access to external funds, and have the potential to achieve higher profitability rates. Further,

values and significance of coefficients show that leverage is the least variable correlated to other research variables. Corporate governance attributes are not significantly correlated to one another, indicating low level of coordination among corporate governance mechanisms.

Fundamental Analysis:

Table (6) presents results of regressing FLID index on independent variables representing firms' operational characteristics and corporate governance attributes.

Table (6)

Outputs of Regression Analysis for the effect of Study Independent Variables on FLID

Variables	β	t	Sig.	VIF (collinearity)
Constant	**0.383***	**6.606**	**0.000**	
CoSize	**0.277***	**5.352**	**0.000**	**1.778**
AuSize	**0.191***	**4.291**	**0.000**	**1.312**
Lev	**-0.020**	**-0.434**	**0.664**	**1.349**
ROA	**0.114***	**2.730**	**0.007**	**1.159**
BoSize	**0.102***	**2.140**	**0.033**	**1.508**
BoIndep	**-0.205***	**-4.835**	**0.000**	**1.185**
AuComm	**-0.239***	**-6.022**	**0.000**	**1.041**
OWCO	**-0.195***	**-4.458**	**0.000**	**1.264**
R-Sq = 34.3%	**F= 28.4**	**N=444**	**P-value = 0.000**	

Results in Table (6) indicate the significance of the regression model (zero P-value). The value of R-Sq implies that independent variables included in the model are capable of explaining 34% of variations in FLID level. Low values of variance inflation factors (VIFs) for predictors ensure the exclusion of multi-collinearity problems.

For firms' operational characteristics, FLID is found to be positively and significantly affected by firm size, audit size, and profitability. This drives the acceptance of the first, second, and fourth hypotheses. However, the third hypothesis is rejected; where leverage has a negative and insignificant coefficient (-0.02, 0.664), thus discarding leverage as one of FLID determinants.

Regarding corporate governance attributes, hypotheses concerning board size and ownership concentration are accepted. That is, board size positively and significantly affects FLID, whereas ownership concentration negatively and significantly affects FLID. For board independence and audit committee, despite their significant impact on FLID, the direction of such impact was

opposite to expectations; where both show a negative impact on FLID. This leads to the rejection of their hypotheses.

In sum, FLID is found to be positively determined by firm size, audit size, profitability, and board size, whereas board independence, audit committee performance, and ownership concentration are found to have a negative impact on FLID. Leverage appears to have an insignificant impact of FLID.

The result of positive and significant impact of firm size, audit size, and profitability was previously confirmed by prior studies, such as Kilic and Kuzey (2018), Alkhatib (2014), Uyar and Kilic (2012), and Elfeky (2017). It's worth mentioning that the same studies reject leverage as a driver for FLID; where they reach a negative association verifying my results. The positive significant impact of board size was also reached by Al-Najjar and Abed (2014), and Elfeky (2017). Moreover, the negative significant impact of ownership concentration was supported by Elfeky (2017), and rejected by Uyar and Kilic (2012), which also confirm the insignificance of board independence.

Sensitivity Analysis: A Case of Segregating the Sample

As a robustness check to fundamental results, I perform a T-test for mean differences of study variables; by segregating the sample into two sub-samples:

1- Low FLID firms whose index is less than or equal FLID median (0.6428), and

2- High FLID firms; whose index is greater than FLID median.

The results are presented in the following table:

Table (7) Independent Samples Test

	Low FLID Firms	High FLID Firms	Differences (Sig)
FLID	**0.5646**	**0.7137**	**-0.1491 (0.000)***
CoSize	**19.4248**	**20.346**	**-0.9211 (0.000)***
AuSize	**0.21**	**0.35**	**-0.142 (0.001)***
Lev	**1.8664**	**2.6053**	**-0.7388 (0.070)**
ROA	**0.0488**	**0.0764**	**-0.0275 (0.030)***
BoSize	**6.75**	**8.53**	**-1.778 (0.000)***

	Low FLID Firms	High FLID Firms	Differences (Sig)
BoIndep	**0.54**	**0.40**	**0.146 (0.002)***
AuComm	**0.93**	**0.80**	**0.139 (0.000)***
OWCO	**0.5115**	**0.4643**	**0.0472 (0.024)***

*Significant at 5% significance level

Results of T-Test imply that the two sub-samples have significantly different means with respect to all variables, except leverage. This further supports study's evidence revealing that FLID is significantly affected by firm size, audit size, profitability, board size, board independence, audit committee performance, and ownership concentration (either in a positive or a negative way), while acting passively to leverage.

Sensitivity Analysis: A Case of Splitting FLID Index

A second robustness test is performed to add more credence to fundamental results. This involves splitting FLID index into its categories: QuaNtitative and QuaLitative.

The descriptive statistics for the two indices are presented in Table (8).

Table (8)

Descriptive Statistics of QuaNtitative and QuaLitative FLID Indices

(N= 444 observations)

Variable	Mean	Std. Dev.	Min	Q1	Median	Q3	Max	Kurtosis	Skewness
QuaN	0.8227	0.07625	0.6429	0.7857	0.8571	0.8571	1.00	-0.431	-0.053
QuaL	0.4610	0.1576	0.2142	0.3571	0.4285	0.5714	0.928	0.067	0.765

Table (8) shows that the two variables are normally distributed. QuaNFLID shows a higher mean, median, minimum value, and lower standard deviation, implying that firms focus more on quantitative disclosure. Moreover, QuaNFLID has a maximum value of 1, indicating that at least one firm-year observation discloses all quantitative items comprising such index. This contradicts Uyar and Kilic (2012), and Kilic and Kuzey (2018) suggesting that firms tend to provide qualitative FLID rather than quantitative.

Sensitivity analysis entails investigating the impact of study variables on the two categories encompassing FLID index; QuaNtitative and QuaLitative items using the following two regression models:

Model (1):

$$\mathbf{QuaNFLID_{i,t} = \beta_0 + \beta_1 CoSize_{i,t} + \beta_2 AuSize_{i,t} + \beta_3 Lev_{i,t} + \beta_4 ROA_{i,t} + \beta_5 BoSize_{i,t} + \beta_6 BoIndep_{i,t} + \beta_7 AuComm_{i,t} + \beta_8 OWCO_{i,t} + \dot{\varepsilon}_{i,t}}$$

Model (2):

$$\mathbf{QuaLFLID_{i,t} = \beta_0 + \beta_1 CoSize_{i,t} + \beta_2 AuSize_{i,t} + \beta_3 Lev_{i,t} + \beta_4 ROA_{i,t} + \beta_5 BoSize_{i,t} + \beta_6 BoIndep_{i,t} + \beta_7 AuComm_{i,t} + \beta_8 OWCO_{i,t} + \dot{\varepsilon}_{i,t}}$$

This approach has been adopted by previous studies, such as Kilic and Kuzey (2018), and others.

Table (9)

Results of Regression Analysis for the effect of Study Variables on QuaN and QuaL FLID indices

	Model (1) QuaNFLID			Model (2) QuaLFLID		
Variable	**β**	**t**	**Sig.**	**β**	**t**	**Sig.**
Constant	**0.644***	**13.150**	**0.000**	**0.122**	**1.195**	**0.233**
CoSize	**0.186***	**3.406**	**0.001**	**0.245***	**4.455**	**0.000**
AuSize	**0.042**	**0.893**	**0.373**	**0.211***	**4.456**	**0.000**
Lev	**0.036**	**0.762**	**0.447**	**-0.041**	**-0.861**	**0.390**
ROA	**0.005**	**0.120**	**0.905**	**0.136***	**3.051**	**0.002**
BoSize	**0.253***	**5.015**	**0.000**	**0.001**	**0.024**	**0.981**
BoIndep	**-0.289***	**-6.469**	**0.000**	**-0.108***	**-2.393**	**0.017**
AuComm	**-0.036**	**-0.866**	**0.387**	**-0.271***	**-6.440**	**0.000**
OWCO	**-0.168***	**-3.642**	**0.000**	**-0.154***	**-3.325**	**0.001**
N	**444**			**444**		
R-Sq	**26.7%**			**25.9%**		
F	**19.825**			**18.979**		
P-value	**0.000**			**0.000**		

Table (9) shows that both models are significant (zero P-values) in expressing the relationship between dependent and independent variables. Explanatory powers of the two models (26.7%, 25.9%) demonstrate the competence of the independent variables included in the model in justifying variations in FLID. Model (1) illustrates the effect of study variables on quantitative items of FLID. Out of the four variables denoting firms' operational

characteristics, only firm size appears to be positively and significantly related to quantitative FLID. Nevertheless, audit size, leverage, and profitability turn out to be insignificantly linked to quantitative FLID. This motivates the acceptance of the first hypothesis and rejection of second, third, and fourth hypotheses for the quantitative FLID.

Regarding corporate governance attributes, board size, board independence, and ownership concentration significantly affect quantitative FLID, while audit committee performance does not. It's worthy to consider that the impact of board size is positive (as expected), while the impact of board independence and ownership concentration is negative. This implies the acceptance of fifth and last hypotheses concerning board size and ownership concentration, and rejecting sixth and seventh hypotheses concerning board independence and audit committee for quantitative FLID.

Model (2) illustrates the effect of study variables on qualitative items of FLID. Results (in conformity with fundamental analysis) indicate the significant impact of firm size, audit size, profitability, and ownership concentration on qualitative FLID, implying the acceptance of their hypotheses. Opposing to expectations, board independence and audit committee performance appear to negatively affect qualitative disclosure, whereas the effect of leverage and board size appears insignificant. This drives the rejection of hypotheses related to board size, board independence, audit committee, and leverage for qualitative FLID.

Comparing regression results of fundamental and sensitivity analyses reveals that the main influential variables common in affecting the three indices; FLID, quantitative, and qualitative are Firm size and ownership structure, where the three indices are positively affected by firm size and ownership diffusion (less concentrated ownership). Moreover, both board independence and audit committee performance appear negative drivers for the three indices. Further, audit size and profitability positively and significantly affect both FLID and qualitative indices, but not quantitative index. Whereas, board size positively and significantly affects both FLID and quantitative indices, but not qualitative index.

Sensitivity Analysis: A Case of Alternative Measures of Independent Variables

In order to test whether fundamental results are robust to the use of alternative proxies, different assessments are employed for independent variables as follows:

1- Firm size is measured using natural logarithmic of market value of equity (Al-Najjar and Abed 2014).

2- Leverage is assessed through debt ratio (Kilic and Kuzey 2018).

3- Profitability is indicated by return on equity (Uyar and Kilic 2012).

4- For board size, a dummy variable is created, equals 1 if board size is greater than or equal the sample median (7) and 0 otherwise (Kilic and Kuzey 2018).

5- For ownership concentration, an indicator variable is created whose value equals 1 if concentration is greater than or equal 50%, and 0 otherwise (Elfeky 2017).

Audit size, board independence, and audit committee performance are measured as previously assessed in fundamental analysis.

Table (10)

Outputs of Regression Analysis for the effect of

Study Variables (under different proxies) on FLID

Variables	β	t	Sig.	VIF (collinearity)
Constant	0.561*	12.219	0.000	
CoSize Ln MVE	0.182*	4.217	0.000	1.191
AuSize	0.225*	5.231	0.000	1.184
Debt Ratio	-0.033	-0.805	0.421	1.085
ROE	0.083*	1.936	0.05	1.169
DummBoSize	0.195*	4.325	0.000	1.292
BoIndep	-0.210*	-5.025	0.000	1.066
AuComm	-0.212*	-5.194	0.000	1.041
DummOWCO	-0.168*	-3.999	0.000	1.120
R-Sq = 31.8% F= 25.4 N=444 P-value = 0.000				

Results of sensitivity analysis confirm that of fundamental, whereas FLID is significantly related to all study independent variables, except for leverage. Firm size, audit size, profitability, and board size positively determine FLID, while board independence, audit committee performance, and ownership concentration appear to have a negative significant impact. Therefore, hypotheses related to firm size, audit size, profitability, board size, and ownership concentration are accepted, whereas hypotheses related to leverage, board independence, and audit committee are rejected.

5- SUMMARY AND CONCLUSIO

This paper belongs to the wide stream of literature examining the determinants of disclosure quality. Focusing on forward-looking information disclosure, the study investigates the impact of firms' operational and corporate

governance characteristics for a sample of 444 firm-year observations from 2014 to 2019.

For the purposes of measuring FLID, and based on reviewing literature, the study establishes a comprehensive list of 28 items; 14 denoting quantitative information, and 14 for qualitative information. FILD index is formed based on the existence or non-existence of an item, where a certain item of FLI is assigned 1 if exist, or 0 if not exist. For each firm-year observation, a total score is calculated by summing up the dummy values assigned for each of the 28 items representing FLI. FLID index is constructed as the ratio of total items disclosed to maximum items disclosed for each firm, that is, actual disclosure to total possible disclosure

The study hypothesizes that firm size, auditor type, leverage, and profitability are positively related to FLID in Egyptian listed firms. Additionally, it's hypothesized that board size, board independence, and audit committee performance are positively associated with FLID, whereas ownership concentration negatively impacts such disclosure.

In fundamental analysis, I investigate the effect of the eight study variables on FLID index. Three cases of sensitivity analyses are performed; testing for mean differences, splitting FLID index into quantitative and qualitative categories, and employing different measures for assessing independent variables.

Conclusions

Results of fundamental analysis imply that FLID is positively and significantly determined by firm size, audit size, profitability, and board size, whereas board independence, audit committee performance, and ownership concentration are found to have a negative impact on FLID. Leverage appears to have an insignificant impact of FLID. These results are further supported through sensitivity analysis, where different proxies are used in assessing firm size, profitability, leverage, board size, and ownership concentration. It's worth mentioning that same findings were reached by a number of studies, such as Kilic and Kuzey (2018), Alkhatib (2014), Uyar and Kilic (2012), and Elfeky (2017).

In performing sensitivity analysis, FLID index is segregated into quantitative and qualitative indices. Results reveal that quantitative FLID index appears to be positively affected by firm size and board size, and negatively by ownership concentration. The other five variables (audit size, leverage, profitability, board independence, and audit committee) fail to show significant impact on quantitative index. Qualitative FLID index is found to be positively affected by firm size, audit size, and profitability, and negatively by ownership concentration.

Research results can be interpreted as follows; first, large-sized profitable firms that are audited by internationally affiliated audit firms are more likely to disclose more forward-looking information. Moreover, firms with large-sized boards and less concentrated ownership structure tend to disclose more information. This implies that more members on the board and wider shareholder base push management for higher forward-looking information disclosure levels.

Second, it seems that management perceive independent board and well performing audit committee as substitutes for disclosing more information. That is, board independence and well performing audit committee alternate the role of high disclosure in mitigating agency problems, so investors may feel satisfied even at lower levels of FLID. This may, in part, explains the significant negative impact of board independence and audit committee on FLID.

Third, high leveraged firms listed on Egyptian capital market appear to be reluctant in disclosing more information. This contradicts evidence provided from developed countries, where high leveraged firms tend to disclose more information to lower cost of equity capital, and meet creditors' needs of information. This may be justified as follows; companies with high leverage ratios may feel that much disclosure would harm their credit and competitive position.

This paper makes important contributions to the literature, first; it adds to the existing research addressing the impact of firms' operational characteristics and corporate governance attributes on forward-looking information disclosure. Second, it extends evidence provided from Egyptian Stock Market on voluntary disclosure levels and its determinants.

Recommendations

Evidence provided has significant implications. First, for Listed Companies, careful attention and considerable efforts must be devoted for enhancing the level of FLID in order to attain its advantages; cited in mitigating information asymmetry, maintaining credibility, lowering cost of capital, satisfying investors' information needs, and attracting potential investors. Companies should design a disclosure plan incorporating quantitative and qualitative items; aiming at enhancing the quality of disclosed information.

Second, for Policymakers, more efforts should be exerted to enhance disclosure levels. Voluntary disclosure, including corporate governance reports, disclosure on social responsibilities, and forward-looking information, in Egyptian Stock Exchange is much unregulated; where managers enjoys much flexibility in choosing what, how, and when to disclose FLI. Therefore, the

type, extent, and form of FLID should be regulated, so that investors and analysts can rely on in making their decisions.

Third, for Egyptian Stock Exchange supervisors, monitoring compliance with reporting obligations is not sufficient; more efforts are needed to ensure higher levels of FLID, employing both financial and non-financial information.

Future Research

Future research could be directed towards investigating the impact of other variables on FLID, such as industrial sector, results of operations, diversification, complexity of operations, and international cross listings. Moreover, researchers could attempt to assign different weights to various items encompassing FLID index. Further, and apart of determinants, future papers could adopt a consequence approach, that is, considering FLID index as the independent variable, and proceed to trace its effect on aspects such as value relevance of accounting information, stock returns, cost of capital, or credit rating.

References

1. AbdElsalam, O.1999. The introduction and application on International Accounting Standards to accounting disclosure regulations of a capital market in a developing country: The case of Egypt. Ph.D Thesis. Heriot Watt University.
2. Agyei-Mensah, B. K. 2017. The relationship between corporate governance, corruption and forward-looking information disclosure: A comparative study. Corporate Governance 17 (2): 284-304.
3. Ajinkya, B., Bhojariaj, S. and Sengupta, P. (2005), "The association between outside directors, institutional investors and the properties of management earnings forecasts", Journal of Accounting Research, Vol. 43 No. 3, pp. 343-376.
4. Aljifri, K. and Hussainey, K. (2007). 'The determinants of forward-looking information in annual reports of UAE companies'. Managerial Auditing Journal, 22 (9), 881–894.
5. Alkhatib, K. (2014), "The determinants of forward-looking information disclosure", Procedia – Social and Behavioral Sciences, Vol. 109, pp. 858-864.
6. Al-Najjar, B. and Abed, S. (2014), "The association between disclosure of forward-looking information and corporate governance mechanisms: evidence from the UK before the financial crisis period", Managerial Auditing Journal, Vol. 29 No. 7, pp. 578-595.
7. Alsaeed, K. (2006), "The association between firm-specific characteristics and disclosure: the case of Saudi Arabia", Managerial Auditing Journal 21(5), 476-496.
8. Aly, D., Simon, J. and Hussainey, K. (2010). 'Determinants of corporate internet reporting: evidence from Egypt'. Managerial Auditing Journal, 25 (2), 182–202.
9. An, Y., Davey, H. and Eggleton, I.R.C. (2011), "Towards a comprehensive theoretical framework for voluntary IC disclosure", Journal of Intellectual Capital, Vol. 12 No. 4, pp. 571-585.
10. Anderson, R. C., and Reeb, D. M. 2004. Board composition: Balancing family influence in S&P 500 firms. Administrative Science Quarterly 49(2): 209–237.
11. Anderson, R.C., S. A. Mansi and D. M. Reeb. 2004. Board Characteristics, Accounting Report Integrity, and Cost of Debt. Journal of Accounting and Economics 37: 315–342.

12. Aribi, Z., R. Alqatamin, and T. Arun. 2018. Gender diversity on boards and forward-looking information disclosure: Evidence from Jordan. Journal of Accounting in Emerging Economies 8 (2): 205-222.
13. Barako, D. G. (2007). Determinants of voluntary disclosures in Kenyan companies annual reports. African Journal of Business Management, 1(5).
14. Barako, D., Hancock, P., & Izan, H. (2006), "Factors Influencing Voluntary Corporate Disclosure by Kenyan Companies", Corporate Governance 14(2), 107- 125.
15. Beretta, S. and Bozzolan, S. (2008), "Quality versus quantity: the case of forward-looking disclosure", Journal of Accounting, Auditing & Finance, Vol. 23 No. 3, pp. 333-376.
16. Bergstresser, D., and Philippon, T. (2006). CEO Incentives and Earnings Management. Journal of Financial Economics 80: 511–529
17. Brammer, S., Pavelin, S., (2008). 'Factors influencing the quality of corporate environmental disclosure', Business Strategy and the Environment, 17 (2), 120–136.
18. Broberg, P., Tagesson, T., & Collin, S-O. (2009). What explains variation in voluntary disclosures? A study of annual reports from corporations listed at the Stockholm Stock Exchange. Journal of Management and Governance, 14(4), 351-377.
19. Brown, J.R., Falaschetti, D. and Orlando, M.J., 2008. Auditor independence and earnings quality: Evidence for market discipline vs. Sarbanes-Oxley proscriptions. FSU College of Law. Law and Economics Paper: 7-33.
20. Cahan, S.F. and Hossain, M. (1996), "The investment opportunity set and disclosure policy choice: some Malaysian evidence", Asia Pacific Journal of Management, Vol. 13 No. 1, pp. 65-85
21. Camfferman, K., & Cooke, T. (2002), "An analysis of Disclosure in the Annual Reports of UK and Dutch Companies", Journal of International Accounting Research 1, 3-30.
22. Celik, O., Ecer, A. and Karabacak, H. (2006), "Disclosure of forward looking information: evidence from listed companies on Istanbul Stock Exchange (ISE)", Investment Management and Financial Innovations, Vol. 3 No. 2, pp. 197-216.
23. Cheng, E.C.M. and Courtenay, S.M. (2006), "Board composition, regulatory regime and voluntary disclosure", The International Journal of Accounting, Vol. 41 No. 3, pp. 262-289.

24. Dahawy, K. (2009), "Company characteristics and disclosure level: The case of Egypt", International Research Journal of Finance and Economics 34, 194-208.
25. Daily, C.M., Dalton, D.R. and Cannella, A.A. (2003), "Corporate governance: decades of dialogue and data", Academy of Management Review, Vol. 28 No. 3, pp. 371-382.
26. Dunn, K.A. and Mayhew, B.W., 2004. Audit Industry Specialization and Client Disclosure Quality. Review of Accounting Studies 9 (2): 35-58.
27.
28. Elfeky, M. 2017. The extent of voluntary disclosure and its determinants in emerging markets: Evidence from Egypt. The Journal of Finance and Data Science 3: 45-59.
29. Elsayed, M. and Hoque, Z. (2010). 'Perceived international environmental factors and corporate voluntary disclosure practices: an empirical study', The British Accounting Review, 42, 17–35.
30. Elzahar, H. and Hussainey, K. (2012), "Determinants of narrative risk disclosures in UK interim reports", The Journal of Risk Finance, Vol. 13 No. 2, pp. 133-147.
31. Eng, L., & Mak, Y. (2003), "Corporate Governance and voluntary disclosure", Journal of Accounting and Public Policy 22, 325-345.
32. Ezat, A. and El-Masry, A. (2008). 'The impact of corporate governance on the timeliness of corporate internet reporting by Egyptian listed companies', Managerial Finance, 34 (12), 848 – 867.
33. Fama, E.F. and Jensen, M.C. (1983), "Separation of ownership and control", The Journal of Law and Economics, Vol. 26, pp. 301-325.
34. Florackis, C., Kostakis, A. and Ozkan, A. 2009, "Managerial ownership and performance", Journal of Business Research 62 (12):1350-1357.
35. Flöstrand, P., & Ström, N. (2006). The valuation relevance of non-financial information. Management Research News.
36. Frias-Aceituno, J.V., Rodríguez-Ariza, L. and Garcia-Sánchez, I.M. (2014), "Explanatory factors of integrated sustainability and financial reporting", Business Strategy and the Environment, Vol. 23 No. 1, pp. 56-72.
37. Gallego-Álvarez, I., Rodríguez-Domínguez, L. and García-Sánchez, I.M. (2011), "Information disclosed online by Spanish universities: content and explanatory factors", Online Information Review, Vol. 35 No. 3, pp. 360-385.
38. Garcia-Sánchez, I.M., Rodríguez-Ariza, L. and Frías-Aceituno, J.V. (2013), "The cultural system and integrated reporting", International Business Review, Vol. 22 No. 5, pp. 828-838.

39. Gray, R., Kouhy, R. and Lavers, S. (1995). 'Constructing a research database of social and environmental reporting by UK companies', Accounting, Auditing & Accountability Journal, 8 (2), 78–101.
40. 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.
41. Hair, J.F., Tatham, R.L., Anderson, R.E. and Black, W. 2006. Multivariate Data Analysis, Pearson Prentice Hall, Upper Saddle River, NJ 6.
42. Hassan, O., Giorgioni, G. and Romilly, P. (2006). 'The extent of accounting 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
43. Hassanein, A. and Hussainey, K. (2015), "Is forward-looking financial disclosure really informative? Evidence from UK narrative statements", International Review of Financial Analysis, Vol. 41, pp. 5, pp. 52-61.
44. Healy, P.,& Palepu, K. (2001), "Information asymmetry, corporate disclosure and capital markets: A review of the empirical disclosure literature", Journal of Accounting and Economics 31, 405-44
45. Higgins, C., Stubbs, W. and Love, T. (2014), "Walking the talk(s): organizational narratives of integrated reporting", Accounting, Auditing & Accountability Journal, Vol. 27 No. 7, pp. 1090-1119.
46. Ho, S.S.M. and Wong, K.S. (2001), "A study of corporate disclosure practice and effectiveness in Hong Kong", Journal of International Financial Management and Accounting, Vol. 12, pp. 75-102.
47. Hossain, M., Ahmed, K. and Godfrey, J.M. (2005), "Investment opportunity set and voluntary disclosure of prospective information: a simultaneous equations approach", Journal of Business Finance and Accounting, Vol. 32 Nos 5/6, pp. 871-907.
48. Hussainey, K. (2004). A Study of the Ability of (Partially) Automated Disclosure Scores to Explain the Information Content of Annual Report Narratives for Future Earnings. PhD thesis, Manchester University, UK.
49. Hussainey, K., Elsayed, M., and Razik, M. A. (2011). Factors affecting corporate social responsibility disclosure in Egypt. Corporate Ownership and Control, 8(4), 432-443.
50. Hussainey, K., Schleicher, T. and Walker, M. (2003), "Undertaking large-scale disclosure studies when AIMR-FAF ratings are not available: the case of prices leading earnings", Accounting and Business Research, Vol. 33 No. 4, pp. 275-294.

51. Ioana, D. and Adriana, T.T. (2014), "Research agenda on in integrated reporting: new emergent theory and practice", Procedia-Economics and Finance, Vol. 15, pp. 221-227.
52. 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.
53. Jensen M. (1993), "The modern industrial revolution, exit and the failure of internal control systems", The Journal of Finance, Vol. 48 No. 3, pp. 831-880.
54. Jensen, J. C., and Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting. An institutionalist approach. Business Strategy and the Environment, 21(5), 299-316.
55. Jensen, M.C., and Meckling, W.H. (1976). 'Theory of the firm: managerial behavior, agency costs and ownership structure', Journal of Financial Economics, 3 (3), 305–360.
56. Johnson, M.F., Kasznik, R., & Nelson, K.K. (2001). The impact of securities litigation reform on the disclosure of forward-looking information by high technology firms. Journal of Accounting Research, 39(2), 297-327.
57. Kent, P. and Ung, K. (2003), "Voluntary disclosure of forward-looking earnings information in Australia", Australian Journal of Management, Vol. 28 No. 3, pp. 273-285.
58. Kilic, M., and C., Kuzey. 2018. Determinants of forward-looking disclosures in integrated reporting. Managerial Auditing Journal 33 (1):115-144.
59. Klein, A. 2006. Audit committee, board of directors characteristics, and earnings management. Law and Economics Research paper series No. 06-42.
60. Kline, R.B. 1998. Principles And Practice of Structural Equation Modeling, Guilford, New York, NY.
61. Koh, P.S. 2003. On the Association Between Institutional Ownership and Aggressive Corporate Earnings Management in Australia. The British Accounting Review 35: 105–128.
62. Laksmana, I. (2008). Corporate board governance and voluntary disclosure of executive compensation practices. Contemporary accounting research, 25(4), 1147-1182.
63. Leng, J. and Ding, Y. (2011), "Internal control disclosure and corporate governance: empirical research from Chinese listed companies", Technology and Investment, Vol. 2 No. 4, pp. 286-294.

64. Lim, S., Matolcsy, Z., & Chow, D. (2007). The association between board composition and different types of voluntary disclosure. European Accounting Review, 16(3), 555-583.
65. Lipton, M. and J. W. Lorsch 1992. A Modest Proposal for Improved Corporate Governance. Business Lawyer 1: 59–77.
66. Marston, C., & Polei, A. (2004), "Corporate reporting on the Internet by German companies", International Journal of Accounting Information Systems 5 (3), 285 – 311.
67. Mendez, C. F., & Garcia, R. A. 2007. The effects of ownership structure and board composition on the audit committee meeting frequency: Spanish evidence. Corporate Governance, 15(5): 909–922.
68. Menicucci, E. (2013), "Firms characteristics and forward-looking information in management commentaries of Italian listed companies", African Journal of Business Management, Vol. 7 No. 17, pp. 1667-1674.
69. Naser, K., Al-Hussaini, A., Al-Kwari, D., & Nuseibeh, R. (2006). Determinants of corporate social disclosure in developing countries: the case of Qatar. Advances in International Accounting, 19, 1-23.
70. Oliveira, L., Rodrigues, L.L. and Craig, R. (2010), "Intellectual Capital reporting in sustainability reports", Journal of Intellectual Capital, Vol. 11 No. 4, pp. 575-594.
71. Oliveira, J., Rodrigues, L.L. and Craig, R. (2011), "Risk-related disclosures by non-finance companies: Portuguese practices and disclosure characteristics", Managerial Auditing Journal, Vol. 26 No. 9, pp. 817-839.
72. O'Sullivan, M., Percy, M. and Stewart, J. (2008), "Australian evidence on corporate governance attributes and their association with forward-looking information in the annual report", Journal of Management & Governance, Vol. 12 No. 1, pp. 5-35.
73. Park, Y. W., & Shin, H. H. 2004. Board composition and earnings management in Canada. Journal of Corporate Finance 10(3): 431–457.
74. Patel, S. A., & Dallas, G. S. (2002). Transparency and disclosure: Overview of methodology and study results-United States. Available at SSRN 422800.
75. Patelli, L., & Prencipe, A. (2007). The relationship between voluntary disclosure and independent directors in the presence of a dominant shareholder. European Accounting Review, 16(1), 5-33.
76. PricewaterhouseCoopers Corporate (2007), Reporting, Guide to Forward-looking Information, available at: www.pwc.com/gx/en/audit. . ./860-global-forward-looking-guide.pdf (accessed 5 June 2015).

77. Private Securities Litigation Reform Act (1995), available at: www.cga.ct.gov/2002.rpt.2002-R-0695.
78. Rizk, R., Dixon, R. and Woodhead, A. (2008). 'Corporate social and environmental reporting: a survey of disclosure practices in Egypt', Social Responsibility Journal, 4 (3), 306–323.
79. Samaha, K. and Dahawy, K. (2010). 'Factors influencing voluntary corporate disclosure by the actively traded Egyptian firms', Research in Accounting in Emerging Economies, 10, 87–119.
80. Samaha, K., and Dahawy, K. (2011). 'An empirical analysis of corporate governance structures and voluntary corporate disclosure in volatile capital markets: the Egyptian experience', International Journal of Accounting, Auditing and Performance Evaluation, 7 (1/2), 61–93.
81. Samaha, K., Dahawy, K., Hussainey, K., & Stapleton, P. (2012). The extent of corporate governance disclosure and its determinants in a developing market: The case of Egypt. Advances in Accounting, 28(1), 168-178.
82. Secci, D. (2005). 'The Italian experience in social reporting: an empirical analysis', Corporate Social Responsibility and Environmental Management, 13 (3, 135-149.
83. Shahwan, T.M., 2015. The effects of corporate governance on financial performance and financial distress: evidence from Egypt. Corporate Governance.
84. Shocker, A.D. and Sethi, S.P. (1974), An Approach to Incorporating Action Preferences in Developing Corporate Action Strategies, The Unstable Ground: Corporate in a Dynamic Society (Der.: S.P. Sethi), Melville, CA.
85. Soliman, M. 2013. Firm characteristics and the extent of voluntary disclosure: The case of Egypt. Research Journal of Finance and Accounting 4 (17): 71-80.
86. Spence, M. (1973), "Job market signaling", The Quarterly Journal of Economics, Vol. 87 No. 3, pp. 355-374.
87.
88. Turley, S., & Zaman, M. 2004. The corporate governance effects of audit committees. Journal of Management and Governance, 8(3), 337–343.
89. Uyar, A. and Kilic, M. (2012), "Influence of corporate attributes on forward-looking information disclosure in publicly traded Turkish corporations", Procedia – Social and Behavioral Sciences, Vol. 62, pp. 244-252.
90. Vanstraelen, A., Zarzeski, M.T., & Robb, S.W.G., (2003). Corporate nonfinancial disclosure practices and financial analyst forecast ability

across three European countries. Journal of International Financial Management and Accounting, 14(3), 249-278.
91. Wahba, H., & Elsayed, K. (2014). The effect of life cycle stage of a firm on the relationship between board size and financial performance. International Journal of Managerial and Financial Accounting, 6(4), 273-295.
92. Wallace, R.S.O., Nasser, K. and Mora, A. (1994). 'The relationship between the comprehensive of corporate annual reports and firm characteristics in Spain", Accounting & Business Research, 25 (97), 41–53.
93. Wang, M. and Hussainey, K. (2013), "Voluntary forward-looking statements driven by corporate governance and their value relevance", Journal of Accounting and Public Policy, Vol. 32, pp. 26-49.
94. Wang, Z.J. and Deng, X.L. 2006. "Corporate governance and financial distress: evidence from Chinese listed companies", The Chinese Economy 39 (5): 5-27.
95. Wang, K., Sewon, O., & Claiborne, C. (2008), "Determinants and consequences of voluntary disclosure in an emerging market: Evidence from China", Journal of International Accounting, Auditing and Taxation 17, 14-30.
96. Watson, A., Shrives, P. and Marston, C. (2002), "Voluntary disclosure of accounting ratios in the UK", The British Accounting Review, Vol. 34 No. 4, pp. 289-313.
97. Watts, R., & Zimmerman, J. (1990), "Positive accounting theory: a ten year perspective", The Accounting Review 65, 131-157.
98. Wu, Y. 2000. Honey, I Shrunk the Board. Resource document. University of Chicago.
99. Xiao, J.Z., Yang, H. and Chow, C.W. (2004). 'The determinants and characteristics of voluntary internet-based disclosures by listed Chinese companies', Journal of Accounting & Public Policy, 23 (3), 191–225.