The Value Relevance of Forward Looking Disclosure: A Content Analysis of the Annual Reports of Egyptian Listed Companies

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Abstract:

Forward-looking financial disclosure (FLD) is intended to be value relevant to capture information about company’s future performance. However, a concern often arises over the boilerplate, storytelling, bias, and the auditing nature of FLD. This study aims to examine the measure of FLD in Egyptian corporate annual reports using automated content analysis technique. Second, is to identify the main FLD determinants. Finally, it examines the impact of FLD on firm value. The study uses a sample of Egyptian narrative statements in the annual reports over the period from 2008 to 2016. The final sample comprised 360 observations of listed non-financial companies in Egypt and two empirical regression models are used. FLD was measured by the number of sentences coded as containing both Egyptian forward looking and financial keywords. Firm value for listed companies was measured by Tobin’s Q. The study finds company’s size, leverage market risk, industry type, dividend policy, and competitive environment are the main firm-level determinants of FLD, while, auditor type is the main governance-level determinant of FLD in Egypt. Further, findings also reveal an association between the level of FLD and firm value. The results suggest that forward-looking financial information is value relevant about company performance and complements financial statements in Egypt. The managers, investors, external auditors, regulators and researchers should pay more attention to economic consequences of FLD, and how to deliver signals and information more understandably and readably for stakeholders. This research adds to the literature related to automated content analysis of narratives, and firm value for listed companies. The results enrich agency, signalling, stakeholders, communication and dividend theories.

Keywords: Narrative Reporting; Forward-Looking Disclosure; Firm value; Annual Report; Egypt
Introduction

It is widely recognized that the quality and content of information available to users has a crucial impact on guiding their financial and investment decisions, and thereby affects company’s valuation. Prior studies on corporate disclosure have identified a variety of determinants of the extent of both mandatory and voluntary disclosure practices. Therefore, this study aims to extend the knowledge of voluntary narrative disclosures of Egyptian listed companies.

It is argued that current earnings alone could be insufficient to communicate a company’s value to the market. Therefore, the market uses additional disclosures to anticipate future earnings (Schleicher, 1996). Accordingly, company narrative sections in the annual report are regarded as an important channel for investors to understand more about the company performance from the eyes of the board of directors and through which managers can communicate what cannot be delivered by financial statements fundamentals. Nonetheless, narrative reporting could bridge the gap between the financial statements amounts and the economic reality of companies’ performance (Merkley 2011, Moumen, 2014).

An important question arises whether forward looking narratives have information content or simply is a boilerplate disclosure (i.e., general standard speech with little content). Li (2010a) argued that many narratives include substantial boilerplate disclosures, generic language, and immaterial details. Nonetheless, prior research found that narratives could be value relevant if it reflects discussions about current and expected changes in company performance and that company share prices changes accordingly. If narrative reporting does not reflect changes in company performance, it is mainly boilerplate reporting. The International Accounting Standard Board (IASB) has worried about how informative narrative reporting is and has advised companies to avoid providing immaterial disclosures that make the more important information difficult to find (IFRS, 2010).

Additionally, managers have flexibility in the content and the channels to disclose voluntary information, therefore, they may use their impression management tactics, and bias to mislead investors especially under narrative reporting Li (2010b). Athanasakou and Hussainey (2014) argued that managers could use future-oriented information when they have incentives to provide obfuscate results and mislead investors. If so, even if managers update their discussion in narratives, investors will not have a transparent view of the business and, therefore, their response to FLD in narrative statements may be noised.

While FLI in the UK narratives is qualitative in nature, but it is regulated in the Operating Financial Review (OFR) statement in the UK annual reports. Likewise, FLI is regulated in the management and discussion section (MD&A) in the USA annual reports. The FLI in the US
substantially takes the form of quantitative forecasts which are easily to be verifiable as it is mainly quantitative earnings forecasts (Wang and Hussainey, 2013). Meanwhile, Egypt narratives are qualitative in nature and still not formally organized in certain annual report sections but can be mainly found in board of directors’ narratives and discussions and notes to statements. The annual report is considered the main formal source of information in many developing countries (Al-Razeen and Karbhari, 2004). Annual reports also is better than other channels of disclosure like interim reports in that annual reports avoid seasonality of reported interim data, and narrative disclosure are more extensive in annual reports (Hassanein, 2015).

FLD incorporates managements’ plans and objectives for future operations, expected performance and results, financial forecasts such as the next year’s earnings, the expected revenues, risks and uncertainties that could significantly affect actual results, and the anticipated cash flows and future investments. (Aljifri and Hussainey, 2007; Bozanic et al., 2018). In other words, FLD is more widely defined than management earnings forecasts. In particular, it includes all forward looking qualitative and non-earnings-related statements in financial statements and voluntary disclosures (e.g. Bozanic et. al, 2018). Therefore, stakeholders reading and understanding FLD are expected to be able to accurately assess companies’ future prospectus profiles and their expected values accordingly.

Nevertheless, increased firm value is an expected consequence of adequate narrative disclosure practice. This hypothesis is supported by finance theory which suggests that disclosure can affect firm value either by affecting its cost of capital or/and its expected cash flow (Hassanein and Hussainey, 2015). The empirical evidence regarding the influence of disclosure on value relevance (measured by firm value) is limited and still inconclusive. Some studies maintain that narrative disclosure adds to firm value (e.g., Plumlee et al., 2015; Tan et al., 2015; Nekhili et al., 2017), while, others (e.g., Hassan et al., 2009; Aryani, 2015) do not find evidence to support this assumption. Moreover, it is argued that, narrative reporting can be used as a strategic tool that enables companies to optimally choose their disclosure levels which could help in raising capital at the lowest cost of equity (Athanasakou et al., 2020). As far as the researcher knows, the association between the extent of FLD and firm value has not been thoroughly investigated in prior research, particularly, in an emerging country context. Other empirical evidence documented indirectly that

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1Article No (40) of EGX listing rules issued in 14 Feb. 2014 indicated that Egyptian listed companies are obligated to incorporate in its board of director’s report all the data in the appendix (1) that is accompanied to the implementing regulations to the Law No. 159 for the year 1981. This appendix in its first article required the firm to reveal “the general state” of the company and “its results” of operations and the “future of business” (e.g, business outlook). It is noticed also that some Egyptian companies reveal FLI under title of “other data”.
Ahmed Mohamed Abd El-Aziz El-Deeb  
The Value Relevance of Forward Looking

voluntary disclosure can affect firm value through for example reducing the cost of equity capital (e.g., Boston, 1997) and can increase the company’s market capitalization (Piotroski, 1999). However, the direct impact between disclosure and firm value were under studied and might be perceived by researchers as a natural conclusion rather than a hypothesis to be tested.

Furthermore, prior empirical research indirectly assesses the investors’ response to the disclosure of forward looking information (FLI) by their impact on future performance (e.g., Li, 2010a), accuracy of analyst forecasts (e.g., Bozzolan et al., 2009), and future earnings (e.g., Hussainey and Mouselli, 2010; Muslu et al., 2015). In addition, these studies were carried out in different environments than Egypt in terms of legal, cultural, and economic factors. Therefore, this study as far the researcher knows is the first in Egypt to investigate both determinants and firm value consequences of FLD. In addition, it is the first study employing automated content analysis (using Nvivo10 software) to count and extract sentences that are tagging both future and financial accounting keywords in Arabic written annual reports. While prior studies employed disclosure indices. In turn, this study adds to the knowledge and literature related to narrative disclosure and automated content analysis in emerging countries.

The reminder of this paper is organized as follows. Section 2 discusses theories explaining narrative disclosure. Section 3 and literature to formulate the research hypotheses. Section 3 literature review on FLD determinants and hypotheses development. Section 4 value relevance of FLD. Section 5 research design. Section 6 multivariate results. Section 7 conclusions.

2. Theories Explaining Narrative Disclosure

Managers may provide narratives when they already have new information and after considering the associated costs of including it in a narrative document. For instance, Hossain and Taylor (2007) stated that empirically there are three reasons for managers to disclose additional voluntary information: reduce agency and contracting costs, reduce the cost of capital, and increase firm value. Several motivations and costs theories could be applied to explain what motivates managers for disclosing or not disclosing through narratives (Healy and Palepu, 2001 and Graham et al., 2005).

Disclosure Theories

Relevant disclosure theories to explain FLD includes agency, signaling, capital need, legitimacy and Stakeholders theories.

The information Asymmetry: Due to managers having private information about future prospects and expected returns of investment opportunities than investors. As a result, investors would consider any unrevealed news as potential bad news and will be willing to pay only an
average price for companies’ shares. Accordingly, bad companies’ managers would be more attracted by share price than managers of good companies. Consequently, investors will potentially overprice low profitable shares, and underprice high profitable ones resulting eventually in adverse selection problem (Beyer et al, 2010). In turn, fully signaling FLI and good news information helps managers to avoid the problems of undervaluation or adverse selection.

**Agency theory:** Managers (agents) are required to transparently provide new detailed disclosure in order to not only mitigate agency conflicts but also to reduce agency monitoring and bonding costs (e.g., auditing costs). Disclosing FLD also helps managers to mitigate the investor’s uncertainty related to future cash flows.

**Signaling Theory:** Information asymmetry will be decreased if the person owning more information or owning good news sends signals to other interested parties. Therefore, it predicts, to avoid being underpriced, that managers of high quality companies would signal good news through FLD or earnings forecasts to distinguish themselves from lower quality companies and to deliver their future points of advantages to the market. Likewise, companies with bad news may disclose FLD to signal their capabilities and strengths to eliminate future losses (Hassanein and Hussainey, 2015).

**Capital Need Theory:** Companies tend to increase disclosure (e.g., FLD) around the period of company listing or capital increases in order to enhance stock market liquidity, attain higher stock prices and reduce the cost of capital as a result of reduced transaction costs and reduced uncertainty obtained from enhanced disclosure. Moreover, companies may have to increase the level of FLI in order to gain access to foreign capital.

**Legitimacy Theory:** Business operates via a social contract or agreement between a company and the society in which it operates. Therefore, the survival of the company depends not only on disclosed earnings, but also on other sustainability, accountability and other information like FLD.

**Stakeholders Theory:** Companies need to maintain positive image and held accountable to its stakeholders, in order to increase competitive advantages for the company’s future sustainability. FLD in the form of expected risk or return may be a common type of information relevant to fulfil stakeholders’ needs and explain their capabilities in handling the opportunities of the future and the value creation process.

**Costs of Disclosure Theories**

FLD is a solution to reduce information asymmetry and agency conflicts between managers and investors. However, it has direct
preparation costs and indirect costs that might arise if future outcomes might be inconsistent with management forecasts.

**Direct Costs of Disclosure**: All costs associated with the collection, preparation, production, publishing, and updating FLI. Higher direct costs of disclosure may hinder companies from providing FLD or they may be simply copy and paste it from previous years’ disclosures.

**Indirect Costs of Disclosure**: All costs arising from the adverse effect of disclosure on companies’ activities, for example, proprietary costs, litigation, and political costs. Higher indirect costs of disclosure may hinder companies from providing FLD or they may be simply boilerplate narratives, bias or mask bad future news.

**Proprietary Costs**: In more concentrated industries, disclosure of proprietary information could lead companies into a competitive disadvantage as this information can be used by their rivals (Moumen, 2014). By reporting FLD more transparently, competitors are not only able to capture a company’s strategies, but also may imitate its new products and plans and contributes to reduction in future cash flows by entering the industry, when a company reveal future good news or leave it when the company reveal future bad news.

**Political costs**: Larger or highly profitable companies are more exposed to political costs (e.g., higher taxes or government controls, or other adverse actions) to be encouraged for more voluntary disclosure or to apply certain accounting policies (Healy and Palepu, 2001). Consequently, managers of politically visible companies should have the desire to reveal transparent FLI to avoid political costs of being perceived as withholding information. However, some studies demonstrated that this relationship would be negative (Wallace et al, 1994; Graham et al. 2005). They argued that adopting reported lower earnings or bad news may reduce political actions based on high reported profits, and consequently reduce amount of income taxes paid (Shehata, 2014).

**Litigation Costs**: On one hand, managers tend to increase voluntary disclosure (e.g., FLD) to avoid legal actions against them resulting from untimely, or inadequate disclosures (Lan et al., 2013). Skinner (1994) found that companies subject to litigation costs are more than twice as likely to disclose their bad earnings news early. On the other hand, managers may voluntarily reduce FLI level as a result of litigation, especially if managers face the risk of being penalized against their forecasts especially if there is uncertainty over the ability of the legal system to distinguish between forecast errors due to chance and those due to management bias (Healy and Palepu, 2001; Graham et al., 2005).
3. Literature Review on Determinants of FLD and Hypotheses Development

In this section, relevant determinants that might encourage managers of companies to issue FLD are identified as firm specific factors and governance specific factors to formulate the research hypotheses. They also can be used as proxies for agency and signaling theory and other costs of disclosure.

Firm Characteristics and FLD

These are factors specific to the firm performance such as dividends yield, profitability, size, liquidity, leverage, competitive environment, and industry type. All derived from literature review on overall voluntary disclosure. Accordingly, these variables are relevant test the validity of the FLD score (e.g., control variables) under the following general hypothesis:

**H1:** There is a positive association between company characteristics and FLD level of Egyptian listed companies

Firm Dividends Policy: Meanwhile, a positive association between dividends and FLD may be explained on the light of agency theory and signaling theories where investors facing higher levels of information asymmetry are likely to derive companies to pay higher dividends and disclose more information (e.g., FLI) to positively signal their future prospects (Hussainey and Al-Najjar, 2011; Baker and Powell 2012). However, a negative or no association may be explained on the light of Miller and Modigliani (MM) theory; dividends irrelevance theory (Miller and Modigliani, 1961), which postulate that whether the investors getting higher or lower dividends from the normal rate does not release a signal that the company is a better investment in the future. Therefore, the following hypothesis is set:

**H11:** There is a positive association between dividends yield and FLD level of Egyptian listed companies

Firm Profitability: Based on the agency theory, managers of profitable companies in Egypt have the desire to disclose more information in order to show and explain to investors that they are acting in their best interests and justify their compensation (Soliman, 2013), and to promote a positive impression of its performance (Ghazali and Weetman, 2006). Likewise, based on signaling theory companies with high profitability tend to provide more discussion and analysis about their profitability in order to signal their favorable results and to distinguish themselves from companies with low profitability, to increase the stock price or to avoid stock price undervaluation, and to improve stock liquidity (Merkely, 2014; Hieu and Lan, 2015). Likewise, a positive relationship between FLI and profitability was observed in prior studies (e.g., Clatworthy and Jones, 2003;

On contrary, companies with bad news may disclose this information to avoid loss of reputation and legal liability if performance declines in the future (Skinner, 1994). Similarly, Merkley (2014) found that companies react to bad earnings performance by increasing discussion on activities with a potential positive effect on future performance. Other prior studies have found negative association between FLI and profitability (e.g., Aljifri and Hussainey, 2007; Hussainey and Al-Najjar, 2011; Wang and Hussainey, 2013; Al-Najjar and Abed, 2014). Whilst, Hossain et al. (2005) and Aljifri et al. (2014) find no such correlation between performance and the extent of FLI. Hence, the following hypothesis is stated:

**H12: There is a positive association between company profitability and FLD level of Egyptian listed companies**

**Firm Size:** A positive association between company size and narrative reporting (e.g., FLD) can be explained from different perspectives. First, based on agency theory, large companies may have spread ownership, which in turn leads to potential conflicts as well as information asymmetry. Accordingly, higher level of disclosure is expected to decrease agency cost resulting from the conflicting interests of shareholders, managers and debt holders (Wang and Hussainey, 2013). Second, based on signaling theory, larger companies are under pressure to signal more value relevant information to their analysts and investors (Iatridis, 2008). Larger company’s investors often expect more narratives to influence the trading, and the prices of their shares. In addition, the signaling of favorable information is not likely to threaten the competitive advantage of larger companies as they often have created and maintained their market share (Meek et al., 1995; Healy and Palepu, 2001). Third, larger companies faces higher political costs (Watts and Zimmerman, 1978) and hence, to promote confidence, they are supposed to provide credible FLI to avoid the political costs of being perceived non transparent in their disclosures (Jouirou and Chenguial, 2014; Nassreddine, 2016). Fourth, larger companies have the resources to pay for preparation and updating costs of annual reports (Hossain et al., 2006). Hence, the following hypothesis is stated:

**H13: There is a positive association between company size and FLD for Egyptian listed companies**

**Firm Liquidity:** The agency theory suggests that managers with low liquidity ratio might provide more disclosure in order to alleviate information asymmetry, reduce agency costs and justify their liquidity status (Wallace et al., 1994; Barako et al., 2006; Lan et al. 2013). Likewise, the signaling theory suggests that high liquidity companies are more inclined to disclose more FLI in order to signal their favorable liquidity results, which
in turn carry positive future investments to investors. Consequently, the following hypothesis is stated:

**H14: There is a positive association between company liquidity and FLD level of Egyptian listed companies**

**Firm Leverage:** A positive association between FLD and leverage is expected based on the agency theory, where highly leveraged companies will be more inclined to show their fulfilment of their debt agreements and accordingly will give more narratives and information on current and future performance in their annual report. Moreover, investors would require a higher rate of stock return to compensate for the increased financial risk, unless the highly leveraged company disclose voluntarily and timely more useful information to reassure both investors and creditors (Moumen, 2014). Likewise, based on signaling theory, Elzahar and Hussainey (2012) argued that high indebted companies will disclose more in their reports to indicate good signals in order to confirm their capability to pay debts and manage risks and to attract more investors. Accordingly, the hypothesis is stated as follows:

**H15: There is a positive association between company leverage and FLD level of Egyptian listed companies.**

**Firm Exposure to Risk:** Agency theory suggests that managers may disclose detailed information in order to assure their investors that they deal with their firm’s risks successfully and to increase their investors’ confidence (Jensen and Meckling, 1976). Similarly, signaling theory suggests that managers may disclose more information to positively signal their quality in identifying and managing risks, and to distinguish themselves from those who could not measure and manage risks in an effective way (Elshandidy et al., 2013). Exposure to market risk is surrogated by stock’s return volatility in this study. Botosan (2006) found that enhanced disclosure will increase share price volatility. Nekhili et al. (2017) found a positive impact of beta on Tobin’s q. Nevertheless, Hussainey and Al-Najjar (2011) and Hassanein and Hussainey, 2015) concluded that market risk is not significantly related to FLI. Whilst, Bravo (2016) posits that that the financial FLI disclosed in annual reports helps to reduce stock volatility. The hypothesis is stated as follows:

**H16: There is a positive association between company market risk (return volatility) and FLD level of Egyptian listed companies.**

**Firm Competitiveness Level:** Firm’s managers may have concerns about competitors’ adverse reactions such as competitive disadvantages costs from revealing future earnings (Hossain et al. 2006). In particular, that constitutes proprietary cost of disclosure. While FLD can be used as a tool to reduce information asymmetry, it might turn to be costly and risky if it revealed sensitive future plans. Hence, the hypothesis is stated as follows:
H17: There is a negative association between company competitiveness and FLD level of Egyptian listed companies

**Firm Industry Type:** Based on political costs theory, management of certain politically sensitive industries is likely to reduce political cost by changes in the content of disclosures (Sukthomya, 2011). Ho and Wong (2001) found that manufacturing companies voluntarily disclose more compared to other sectors. Nevertheless, Desoky (2009) showed that industry type is found to be insignificant with the amount of internet financial reporting in Egypt. However, Alkhatib (2014) found a significant association between industry type and FLD in Amman. Hence, the hypothesis is stated as follows:

H18: There is a positive association between company industry type and FLD level of Egyptian listed companies

**Governance Characteristics and FLD**

Qu et al. (2015) argued that high quality FLD depends on how the company adopts effective governance mechanisms. Furthermore, earlier studies indicated that good reporting requires enhanced monitoring by board of directors (Ho and Wong, 2001; Gul and Leung, 2004). Hence, the hypothesis is stated as follows:

H2: There is a positive association between corporate governance characteristics and FLD in the Egyptian listed companies:

**Individual Ownership Concentration:** Expectations of agency and signaling theories that large shareholders are expected to act for supporting profit seeking projects undertaken by the company. They may motivate managers to reveal more information to outside investors in order to fill the information gap (Eng and Mak, 2003). In addition, Blockholders have the power to replace managers who do not perform well according to their expectations and thus create incentives to control and monitor opportunistic managers’ behavior and thus encourage and demand better FLD. Hence, the hypothesis is stated as follows:

H21: There is a positive association between individual ownership and FLD level of Egyptian listed companies

**Managerial Ownership:** According to the agency theory, the higher ownership of equity by managers, the more emphasis will be in long term management performance, the more conflicts of interests are resolved and disclosure gap is almost disappearing (Smith et al., 2005). Empirical research, however, provided mixed evidences on the effect of managerial ownership on narrative disclosure. For instance, Nagar et al. (2003) found that the extent of management ownership is positively associated with management earnings forecasts. In UK, Hassanein and Hussainey (2016) found that managerial ownership is significantly associated with FLD. The hypothesis is stated as follows:
H22: There is a positive association between managerial ownership and FLD level of Egyptian listed companies

Board Size: Larger board size allows diverse opinions and experiences which increases a board’s control and disclosure policies which potentially leads to more narratives concerning FLD. Consistently, Ntim et al. (2013) found that board size positively related to the extent of risk disclosure. However, Buery and Pae (2020) found insignificant negative association between FLD and board size. The hypothesis is stated as follows:

H23: There a positive association between board size and FLD level of Egyptian listed companies

Size of Audit Firm: Agency theory suggests the contents of annual reports and reporting strategies could be positively influenced by auditors as larger auditors may demand their clients to disclose more reliable information to protect against shareholders’ lawsuits (Wallace et al., 1994). Moreover, larger audit companies are more likely to have higher experienced, trained, and qualified auditors who could impact company’s disclosure quality (Barako et al., 2006). Furthermore, Signaling theory predicts that choosing big auditors is a mean for a company to distinguish itself from others (Healy and Palepu, 2001). The hypothesis is developed as follows:

H24: There is a positive association between audit company size and FLD level of Egyptian listed companies

CEO Duality: CEO duality is common in emerging countries due to the prevail of family ownership. As such, CEO duality is likely to affect disclosure practices in Egypt. According to agency theory, controlling problems often appear when a key decision maker has all power and authority. Consistently, Ahmad et al. (2017) argued that CEO duality makes CEOs less accountable to all stakeholders. The separation of CEOs and Chairmen helps to enhance monitoring and leadership quality, which could help to reduce agency costs and may result in improvements in disclosure (Sukthomya, 2011). However, Huafang and Jianguo (2007) found that the relationship between CEO duality and disclosure is significant and positive. In Egypt, Samaha et al. (2012) found that CEO duality negatively affects disclosure. Hence, the following hypothesis is stated as follows:

H25: There is a negative association between CEO duality and FLD level of Egyptian listed companies
4. Value Relevance of FLD

Examining whether or not the FLD content provided by the company is value relevant for investors is the main objective of the study. Particularly the previous empirical results are mixed regarding the information content of narrative disclosures (e.g., FLD) (Li, 2010a). This response to FLD could be reflected in firm value through either expected cash flows (increase in stock price or return) or reduced cost of capital. This study is interested primarily in investors’ reaction on stock’s expected cash flows. For instance, Hassan et al. (2009) defined firm value as the cash flow expected to be generated by the company in the future, discounted at company’s cost of capital.

Theoretically, the annual report has value relevance if companies give credible signals and report their performance more transparently which fills information gap for investors and enables firm value to increase. Empirically, FLI will be value relevant if it has a predicted association with equity market values (Barth et al., 2001; Campbell et al., 2014). This study measures value relevance of FLD by its predicted association with Tobin’s Q for the following reasons. First, firm value is an economic measure that reflects the market value of the business as a whole and it takes into account the value of company’s debt. Second, both firm value and market capitalization are often used interchangeably. However, firm value provides more accurate valuation of the company than market capitalization (Hassanein and Hussainey, 2015). Prior research (Hussainey and Walker, 2009; Hussainey and Mouselli, 2010; Athanasakou and Hussainey, 2014) indicated that any revealed FLI that changes investor’s expectations about future cash flows will be reflected in stock prices and in turn affects company’s value. This means, FLI will be capturing new information and summarizing firm value. In addition, Tan et al. (2015) argued that FLD could mitigate the problems of sub-optimization (e.g., under or over-investment) of investments resulting from information asymmetry, and that governance promotes voluntary disclosure of FLI.

Nevertheless, the effect disclosure (e.g., FLD) on firm value might not be observable because of one or more of the following reasons: first, evidence suggests also that information in the annual report could contain noises (e.g., boilerplate or bias) that make the expected signals more difficult to interpret accurately and this could cause misperception of firm value (Cheng et al., 2013). For instance, Li (2008) concluded that managers could use their discretion in preparing narrative reporting to strategically mislead investors. Second, concerns exist over timeliness of narratives and it might be anticipated ex ante by other disclosure media. Third, proprietary and litigation costs of disclosure may deter companies from providing informative disclosure because some types of information are very sensitive and can cause a higher cost of capital. The above three reasons make the
The impact of FLD on firm value an empirical issue and, therefore, needs more investigation especially in Egypt case.

The empirical evidence regarding the influence of disclosure on firm value is still inconsistent. Some studies maintain that disclosure adds to firm value (e.g., Elzahar et al., 2015; Tan et al., 2015) while others (e.g., Hassan, et al., 2009; Wang et al., 2013; Aryani, 2015) do not find evidence to support this assumption. The current study hypothesizes that:

**H31**: There is a positive association between FLD and firm value in the Egyptian listed companies

5. Research Design

This part of the study presents the content analysis method for measuring FLD, regression models, and ample selection and data collection.

5.1 Measuring FLD (a Content Analysis Method)

This study uses (an automated) content analysis method in analysing and coding narrative contents. It helps to make replicable and valid inferences from data to their context (Krippendorff, 1980). A form oriented content analysis implies routine counting of words, sentences or other references, while, the meaning oriented approach involves analysis of the underlying themes in the texts (Hussainey et al., 2013). This study employs a form oriented approach through examining sentences for the coding of the quantity of FLD using software Nvivo10, the following steps are followed.

1. Searching annual report and notes for forward looking sentences based on FL keywords that searches in specific order for words/sentences in text files as a coding unit and allows for textual analyses, by following the steps bellow:
   A. Converting whole sample annual report pdfs into word documents.
   B. Developing two lists of keywords; one for forward-looking keywords and one for financial keywords based on: first, preliminary selected list from prior empirical research on FLD (Hussainey et al., 2003; Li, 2010a; Muslu et al., 2011). Second, a randomly selected sample of 30 annual reports from each year (270). All the 270 annual statements are read and any new Egyptian keywords related to the future are updated to the preliminary list. The reading of the sample reveals several new keywords refined to the basic list; new added financial keywords included “Investment, Development, Research, Value, Surplus, Fund,...”, while, new added FL keywords included

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2 This software uses customized dictionary of (forward looking) keyword list to code narrative sections.
“Will, Waiting, Possible, Inshallah, Hoping to, Aiming at, Targeting…”

C. Using Nvivo10 commands, importing all years documents, then creating two queries, one for text searching forward looking keywords (created and updated in step B) with output saved in a node for FLS where each sentence contains at least one forward looking keyword3. The other query for text searching financial information (created in step B) with output saved in a node for financial information sentences where each sentence contains at least one financial keyword.

D. A last query is done for coding forward looking (financial) information from the intersection of both of the previous selected two nodes created in step (C) with output saved to new node FLD sentences. Where each FL sentence contains at least one forward looking and one financial related keyword, and then summary of FLD sentences references can be exported to excel file for counting number of FLD for each year for all companies.

2. FLD score = no of FL references in excel files from step (D)

To validate a measure of disclosure, it should be related to some specific company-related characteristics identified by prior research (Botosan, 1997). Accordingly, the current study empirically examine the association between the disclosure score and company size, profitability, liquidity, leverage, competition environment, ownership structures, industry type, board size and auditor type, which have been identified by prior research as determinants of voluntary disclosure manually derived from the company’s annual reports.

Regression Models

This section details the measurement model for FLD based on company characteristics and corporate governance (Model 1), followed by measurement model for the impact of FLD on firm value (Model 2). The models are specified as follows:

The model equation (1) is used to test company characteristics (H1) and corporate governance (H2) determinants of FLD.

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3 I define a sentence to be forward-looking related if it contains Egyptian words implying the future tense of words such as “will,” “should,” “could”, “believe,” “expect,” “can,” “may,” “might,” “objective,” “goal,” or, “Waiting, Possible, Inshallah, Hoping to, Planning, Aiming at, Targeting, Intending, Projecting, Forecasting, Anticipating...”
Ahmed Mohamed Abd El-Aziz El-Deeb

The Value Relevance of Forward Looking

Model equation (1)

\[ \text{FLD} = \beta_0 + \beta_1 \text{DY} + \beta_2 \text{ROE} + \beta_3 \text{LNMV} + \beta_4 \text{Liq} + \beta_5 \text{Lev} + \beta_6 \text{RetVol} + \beta_7 \text{MktShr} + \beta_8 \text{IND\_TYPE} + \beta_9 \text{INDCON} + \beta_{10} \text{MGOWN} + \beta_{11} \text{BODSZ} + \beta_{12} \text{Big4} + \beta_{13} \text{DUAL} + \epsilon \]

Where:

- **FLD** = Quantity of forward looking disclosure (FLD score)
- **DY** = Firm’s dividend yield (dividend policy measure)
- **ROE** = Firm’s return on equity (profitability measure)
- **LNMV** = Natural logarithm of market value of equity (company size measure)
- **Liq** = Firm’s current assets to current liabilities ratio (liquidity measure)
- **Lev** = Firm’s debt to equity ratio (leverage measure)
- **RetVol** = Firm’s annualized return historical volatility; standard deviation of a sum of daily changes in monthly stock close prices (Merkley, 2011) multiplied by the square root of 252 trading days (Kritzman, 1991) (is a measure of business risk exposure or information uncertainty (Merkley, 2011)
- **MktShr** = Firm’s beginning ratio of sales to total industry sales (competitiveness measure)
- **IND\_TYPE** = Industry type (classification); 1 if the company is classified into one of the six broadly defined industry sectors and 0 otherwise. Basic Resources, Chemicals, Construction and Materials, Personal and Household Products, and Real Estate are considered Manufacturing, Whereas, Food and Beverage, Travel and Leisure, and Healthcare and Pharmaceuticals are considered Non-Manufacturing
- **INDCON** = Individual ownership concentration; total individual ownership of 5% or more of the total stocks
- **MGOWN** = Managerial ownership; the percentage of total stocks owned (5% or more) by a manager in a company
- **BODSZ** = Board Size; No of board directors members
- **Big4** = Auditor type; 1 if the company is audited by one of the big 4 audit companies and 0 otherwise
- **DUAL** = CEO duality; 1 if the CEO is the chairman of the board of directors, 0 otherwise
\[ \alpha, \beta = \text{regression coefficients.} \]
\[ e = \text{error term} \]

Model equation (2) is used to test value relevance of FLD (H3), by measuring the correlation coefficient between FLD and Tobin’s Q. In the multivariate analysis, the study controls for variables that may affect firm value. These variables include company’s variables; dividends policy, profitability, size, liquidity, leverage, capital expenditures, and earnings’ reinvestment and governance variables; individual concentration, managerial ownership, and CEO duality.

\[ \text{LNFV} = \beta_0 + \beta_1 \text{FLD} + \beta_2 \text{DY} + \beta_3 \text{ROE} + \beta_4 \text{LnMK} + \beta_5 \text{Liq} + \beta_6 \text{Lev} + \beta_7 \text{InvGrow} + \beta_8 \text{EarRet} + \beta_9 \text{INDCON} + \beta_{10} \text{MGOWN} + \beta_{11} \text{DUAL} + \epsilon \]

…Model (2)

Where:

\[ \text{LNFV} = \text{Firm value; natural logarithm of company’s Tobin’s Q at the date of annual report: } \text{Tobin’s Q} = \left[ \frac{\text{total debt} + \text{market value of equity}}{\text{book value of total assets}} \right]. \text{ The market value of equity is calculated by multiplying number of outstanding shares, by market value of the share at the year-end} \]

\[ \text{FLD} = \text{Quantity of forward looking disclosure (FLD score)} \]

\[ \text{DY} = \text{Firm’s dividend yield (dividend policy measure)} \]

\[ \text{ROE} = \text{Firm’s return on equity (profitability measure)} \]

\[ \text{LnMK} = \text{Natural logarithm of market value of equity (company size measure)} \]

\[ \text{Liq} = \text{Firm’s current assets to current liabilities ratio (liquidity measure)} \]

\[ \text{Lev} = \text{Firm’s debt to equity ratio (leverage measure)} \]

\[ \text{InvGr} = \text{Investment growth; annual capital expenditure to total assets. It is a proxy for the availability of investment opportunities} \]

\[ \text{EarRet} = \text{Firm’s earnings reinvestment policy; ratio of undistributed earnings per share available for investment (Aryani, 2015)} \]

\[ ^4 \text{Capital investment in firms can be realized in one or more than a year, especially, in case of large projects, benefits are usually collected through several upcoming years after realization. By referring to this long-term nature of capital investments, capital investments from previous year should affect the firm performance in the next year.} \]
INDCO = Individual ownership concentration; total individual ownership of 5% or more of the total stocks
MGOW = Managerial ownership; the percentage of total stocks owned (5% or more) by a manager in a company
DUAL = CEO duality; 1 if the CEO is the chairman of the board of directors, 0 otherwise
α, β = regression coefficients.
E = error term

5.3 Sample Selection and Data Collection

The study uses a sample of annual reports of the listed non-financial companies on the Egyptian stock exchange in the period from 2008 to 2016. All independent variables data is manually collected from the company’s annual reports. Annual reports are collected from company’s official sites and read to identify narrative statements in board of directors, outlook, or notes sections.

After applying the above conditions, the final selected pooled sample size comprises 40 Egyptian non-financial companies with a total number of observations equal to 360 company’s observations (9*40). Companies correspond to several economic sectors as shown in the following table (1).

Table (1) Research Sample Distribution in Economic Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>No. of Companies in Economic Sector</th>
<th>No. of Companies in Sample</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Resources</td>
<td>9</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Chemicals</td>
<td>8</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Construction and Materials</td>
<td>25</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>29</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Personal and Household Products</td>
<td>10</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Real Estate</td>
<td>30</td>
<td>13</td>
<td>32.5</td>
</tr>
<tr>
<td>Travel and Leisure</td>
<td>16</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Healthcare and Pharmaceuticals</td>
<td>13</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total Sample</td>
<td>40</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

6. Multivariate Results
Statistical results include descriptive statistics, multiple regression diagnostics, and research results.
6.1 Descriptive Statistics:

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLD</td>
<td>3.89</td>
<td>4.243</td>
<td>0.000</td>
<td>22</td>
</tr>
<tr>
<td>LnFV</td>
<td>0.25</td>
<td>0.48</td>
<td>-1.13</td>
<td>1.76</td>
</tr>
<tr>
<td>DY</td>
<td>0.037</td>
<td>0.048</td>
<td>0.000</td>
<td>0.228</td>
</tr>
<tr>
<td>ROE</td>
<td>0.118</td>
<td>0.428</td>
<td>-4.060</td>
<td>3.902</td>
</tr>
<tr>
<td>LNMV</td>
<td>20.201</td>
<td>1.477</td>
<td>16.250</td>
<td>23.355</td>
</tr>
<tr>
<td>Liq</td>
<td>1.969</td>
<td>1.268</td>
<td>0.384</td>
<td>6.977</td>
</tr>
<tr>
<td>Lev</td>
<td>0.156</td>
<td>0.266</td>
<td>-0.960</td>
<td>1.954</td>
</tr>
<tr>
<td>RetVol</td>
<td>0.460</td>
<td>0.189</td>
<td>0.000</td>
<td>0.951</td>
</tr>
<tr>
<td>InvGrow</td>
<td>0.027</td>
<td>0.042</td>
<td>0.000</td>
<td>0.319</td>
</tr>
<tr>
<td>EarRet</td>
<td>0.386</td>
<td>0.600</td>
<td>-2.375</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Panel A (B) of Table (2) shows the descriptive statistics of continuous variables (the frequencies for governance dummy variables). There is a low FLD level in the Egypt where maximum value of FLD of the sample
companies is 22, while, the minimum is 0. Average of FL sentences is 3.89 sentences in each annual report and standard deviation 4.243. This indicates large gap that fluctuated between the lowest and the highest number of Egyptian FL keywords. Tobin’s Q maximum value is 1.76, while the minimum is -1.13. This indicates that a variation exists between Egyptian companies in terms of their values. There is a moderate level of value relevance of FLD in the Egyptian environment with a mean equals to 0.25 indicating that these companies have moderate investors’ responsiveness to FLD.

In order to apply parametric statistical analysis, some regression issues have to be tested. To test multi-collinearity problem, Table (3) presents Pairwise Pearson Correlations for all independent variables. From table (3), the Pearson correlation coefficients among all independent variables are relatively low, less than 0.80, suggesting that there is no variables revealing multi-collinearity problem. Furthermore, the Variance Inflation Factor (VIF) table, not tabulated, showed VIF higher than 0.1 and less than 10, meaning those variables did not have a multicollinearity concerns.

Regarding other multivariate regression assumptions, homoscedasticity (the constant variance), normality and linearity can be inspected by plotting the regression of standardized residuals against the predicted value (Field, 2009). Both histogram and normal probability plot of regression standardized residuals indicates that points are symmetrically distributed around zero indicating that the data have normal distribution. In addition, a large number of observations being 360 for the total sample as well as using natural logarithm mitigates the problem of heteroscedasticity of residuals. Another primary assumption of the OLS regression is the non-existence of the problems of multi-collinearity between the independent variables of the current study can be tested as follows:
Table (3) Pearson Correlation

<table>
<thead>
<tr>
<th></th>
<th>DY</th>
<th>ROE</th>
<th>LNMV</th>
<th>Liq</th>
<th>Lev</th>
<th>RetVol</th>
<th>InvGrow</th>
<th>EarRet</th>
<th>MKT</th>
<th>SHR</th>
<th>IND_Type</th>
<th>INDCON</th>
<th>MGOWN</th>
<th>BODSZ</th>
<th>Big 4</th>
<th>DUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>.198**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNMV</td>
<td>.168**</td>
<td>.201**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liq</td>
<td>.136**</td>
<td>0.012</td>
<td>-0.082</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lev</td>
<td>-0.089</td>
<td>-0.217</td>
<td>.220**</td>
<td>-1.161**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RetVol</td>
<td>-.123</td>
<td>-0.008</td>
<td>-.352**</td>
<td>-.041</td>
<td>-.064</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>InvGrow</td>
<td>0.010</td>
<td>-.147**</td>
<td>0.048</td>
<td>-.177**</td>
<td>0.062</td>
<td>-.021</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EarRet</td>
<td>-.540**</td>
<td>-0.013</td>
<td>-.148**</td>
<td>0.014</td>
<td>-0.007</td>
<td>-0.002</td>
<td>0.013</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT SHR</td>
<td>.175**</td>
<td>.141**</td>
<td>.669**</td>
<td>-.195**</td>
<td>.251**</td>
<td>-.207**</td>
<td>0.103</td>
<td>-0.021</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ND_Type</td>
<td>0.080</td>
<td>0.035</td>
<td>.163**</td>
<td>0.065</td>
<td>-0.010</td>
<td>0.006</td>
<td>-.181**</td>
<td>-.080</td>
<td>.176**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDCON</td>
<td>0.004</td>
<td>-0.036</td>
<td>-.185**</td>
<td>-.132**</td>
<td>-.014</td>
<td>-.017</td>
<td>-0.020</td>
<td>0.032</td>
<td>-.136**</td>
<td>-.308**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGOWN</td>
<td>0.048</td>
<td>-0.015</td>
<td>0.072</td>
<td>-.183**</td>
<td>-.064</td>
<td>-.044</td>
<td>0.070</td>
<td>-.040</td>
<td>0.009</td>
<td>-.164**</td>
<td>.526**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BODSZ</td>
<td>0.044</td>
<td>.133**</td>
<td>.398**</td>
<td>0.009</td>
<td>.123**</td>
<td>-.167**</td>
<td>-.108**</td>
<td>0.038</td>
<td>.311**</td>
<td>0.004</td>
<td>0.048</td>
<td>.402**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big 4</td>
<td>0.009</td>
<td>0.034</td>
<td>.368**</td>
<td>.184**</td>
<td>.108**</td>
<td>-.199**</td>
<td>-.204**</td>
<td>0.066</td>
<td>.213**</td>
<td>0.056</td>
<td>-.186**</td>
<td>-.160**</td>
<td>.393**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DUAL</td>
<td>0.083</td>
<td>0.010</td>
<td>-.196**</td>
<td>0.025</td>
<td>-.034</td>
<td>0.051</td>
<td>-.068</td>
<td>-.040</td>
<td>-.036</td>
<td>0.047</td>
<td>.163**</td>
<td>.190**</td>
<td>-.261**</td>
<td>-.414**</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 1% level (two-tailed). Significance at 5% level (two-tailed).
Multiple Regression Analysis: Testing the Relationship between Company Characteristics and FLD Level (Model 1)

<table>
<thead>
<tr>
<th>Panel A Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Table (4) reports in panel (A) that R-square equals to 18.8%, which indicates a moderate correlation between independent variables and FLD. However, in order to test the significance of the model as a whole, F value (6.145) was retrieved from Panel B (ANOVA) indicates that the model is significant at 1% level of significance.

Table (5) Regression Results of Determinants of FLD “Model 1”

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-14.671-</td>
<td>4.559</td>
<td>-3.218-</td>
<td>.001</td>
</tr>
<tr>
<td>DY</td>
<td>-9.047-</td>
<td>4.553</td>
<td>-.103-</td>
<td>.048</td>
</tr>
<tr>
<td>ROE</td>
<td>.382</td>
<td>.527</td>
<td>.039</td>
<td>.468</td>
</tr>
<tr>
<td>LNMV</td>
<td>.769</td>
<td>.219</td>
<td>.268</td>
<td>.001</td>
</tr>
<tr>
<td>Liq</td>
<td>-.031-</td>
<td>.181</td>
<td>-.009-</td>
<td>.862</td>
</tr>
<tr>
<td>Lev</td>
<td>1.966</td>
<td>.862</td>
<td>.123</td>
<td>.23</td>
</tr>
<tr>
<td>RetVol</td>
<td>4.197</td>
<td>1.186</td>
<td>.187</td>
<td>.540</td>
</tr>
<tr>
<td>MktShr</td>
<td>-8.846-</td>
<td>2.375</td>
<td>-.260-</td>
<td>.000</td>
</tr>
<tr>
<td>IND_Type</td>
<td>1.906</td>
<td>.529</td>
<td>.188</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------</td>
<td>---------------------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>INDCON</td>
<td>2.010</td>
<td>2.894</td>
<td>.043</td>
<td>.694</td>
</tr>
<tr>
<td>MGOWN</td>
<td>-3.539</td>
<td>2.999</td>
<td>-.086</td>
<td>-1.180</td>
</tr>
<tr>
<td>BODSZ</td>
<td>-.014</td>
<td>.095</td>
<td>-.010</td>
<td>-.150</td>
</tr>
<tr>
<td>Big4</td>
<td>1.815</td>
<td>.557</td>
<td>.202</td>
<td>3.260</td>
</tr>
<tr>
<td>DUAL</td>
<td>-.145</td>
<td>.531</td>
<td>-.016</td>
<td>-.273</td>
</tr>
</tbody>
</table>

Based on the above regression results in table (5), the following (statistical estimation) model 1 can be used to derive FLD determinants and to test related research hypotheses:

$$FLD = -14.671 - 9.047\ DY + 0.382\ ROE + 0.769\ LNMV - 0.031\ Liq + 1.966\ Lev + 4.197\ RetVol - 8.846\ MktShr + 1.906\ IND\_TYPE + 2.010\ INDCON - 3.539\ MGOWN - .014\ BODSZ + 1.815\ Big4 - 0.145\ DUAL + e$$

The first variables from Dividend Yield (DY) to IND_Type represent company characteristics that may influence FLD in Egypt. However, the results indicate that a significant negative association between dividend yield and amount of FLD, where $\beta$ value of DY is -9.047 ($t = -1.987$) at significance level (sig.) $\alpha = .048$, which means that the DY is negatively associated with FLD. Therefore, H11 is rejected due to the direction of the result. However, this result is in line with both (Baker and Powell 2012, and Bamber and McMeeking, 2012). The result supports dividends irrelevance theory (Miller and Modigliani 1961), that whether the investors get higher or lower dividends does not release a signal that the company is a better investment in the future. Signaling theory also provides an explanation as companies with low FLD signal through higher dividends to compensate for a high risk investment (Hussainey and Walker, 2009).

Inconsistent with H12, the coefficient of profitability (ROE) is 0.382, ($t = 0.726$) at significance level (sig.) $\alpha = 0.468$ indicating an insignificant positive relationship between company profitability and FLD level. This contradicts agency and signaling theory and signifies that Egyptian listed companies reporting their FLD did not consider merely the profitability issue, but the reporting may have been based on other variables or considerations regarding the benefit or disadvantage of disclosure. Prior research shows that managers fear the costs of unattained projections. For instance, Sukthomya (2011) found that 76% of profitable company samples did not voluntarily disclose information about their capital projects to avoid competitive disadvantage costs.
However, this result is in line with some prior studies (e.g. Juhmani, 2013; Hieu and Ian, 2015; Aryani, 2015; Aljifri et al. 2014).

Consistent with H13, the coefficient of LNMV is positive and equals 0.769 at 1% significance level indicating a significant positive relationship exists between company size and FLD. This can be rationalized as, firstly, large companies are under political pressure and monitored by many parties, to decrease information asymmetry through FLD. Second, large companies have the resources to pay for the direct preparation costs of narrative reporting. Third, small companies might think that such disclosure might costly affect their competitive advantage.

Inconsistent with H14, the coefficient of liquidity (Liq) is negative and equals -0.031, and insignificant (p value is 0.862). This indicates that Egyptian companies are not transparent in revealing their future performance in their annual reports, based on the liquidity. They may have been considering cost factors to reporting FLD. The researcher can explain this because companies were unwilling to explain liquidity in more detail, because higher current liquidity could send a negative signal for stakeholders related to future investments. Additionally, the study results are in accordance with Elzahar and Hussiney (2012), Mathuva (2012), and Aryani (2015) who found the relationship between liquidity and disclosure has an insignificant association.

The coefficient of firm leverage (Lev) is 1.966, at significance level (sig.) $\alpha = 0.023$. This result fits with agency theory, which suggests that highly leveraged companies will tend to provide more FLD to explain their current and future performance and attract new investors. Therefore, H15 is accepted. This result agreed with the results of the study of (Francis et al., 2005; Lakhal, 2005; Barako et al., 2006; Dahawy, 2009; Moumen et al., 2015) which found a positive and significant association between the two variables.

Consistent with H16, the coefficient of market risk or Return Volatility (RetVol) is 0.197, at 1% significance level indicating a positive and significant relationship exists between risk exposure and FLD. This study’s result is in line with both agency and signaling theories. Agency theory suggests that managers may disclose detailed information in order to assure their investors that they deal with their companies’ risks successfully and to increase their investors’ confidence. Similarly, signaling theory suggests that managers may disclose more information to positively signal their quality in identifying and managing risks, and to distinguish themselves from those who could not measure and manage risks in an effective way (Elshandidy et al., 2013). Consistently, Botosan (2006) found that enhanced disclosure will increase share price volatility. Nekhili et al. (2017) found a positive impact of beta on Tobin’s q. Nevertheless, Hussainey and Al-Najjar (2011) found that market risk (beta) is not statistically associated with FLI.
The coefficient of firm’s competitiveness environment (MktShare) is -8.846, and is significant at 1% sig. This concompanies theory prediction of proprietary cost of disclosure. Therefore, the hypothesis H17 is accepted. This means that FLD could reveal sensitive information regarding future products and plans for company’s competitors and this may affect its future cash flow. Accordingly, managers may either prefer to non-disclose or simply use of general nonspecific information (i.e. Boilerplate), which could be applied by any company within the same industry. There is little evidence regarding direct association between competitiveness and disclosure. However, Aljifri and Hussainey (2007) argued that competitors can use FLI provided by a company to take advantage of its weaknesses and opportunities. In Egypt, Mokhtar and Mellett (2013) found that competitiveness and disclosure of risk sentences are negatively associated.

Consistent with H18, the coefficient of industry type (IND_TYPE) is significant at 1% sig., positive and equal to 1.906. This result suggests that manufacturing companies disclose more FLI than nonmanufacturing companies. This is also in line with political cost legitimacy theory predictions, where management of certain politically exposed industries tends to reduce political cost by changes in the content of disclosures. This result is also consistent with prior studies (e.g., Ho and Wong, 2001; Haniffa and Cooke, 2002; Beretta and Bozzolan, 2004; Sukthomya, 2011; Baroma, 2013).

In order to test the hypothesis related to governance variables, the coefficient of individual ownership concentration (INDCON) is positive and equal to 2.010 at a significance level (sig.) $\alpha = 0.488$. This suggests that blockholders are not motivating companies to increase FLD. Therefore, H21 is rejected. This study does not fit with expectations of agency and signaling theories that large shareholders are expected to act for supporting future profit seeking projects undertaken by the company, better monitoring and disclosure. They also may retain important future information from the public for insider trading. However, this result agrees with the study of Ghazali (2007) which found that individual ownership is insignificant in explaining the disclosure.

Inconsistent with H22, the coefficient of managerial ownership (MGOWN) is negative and equal to -3.539, at a significance level (sig.) $\alpha = 0.239$, which means that managerial ownership do not create incentives for managers to increase FLD. Theoretically, this result is inconsistent with agency theory and signaling theory in that higher levels of FLD could provide signals that the company is performing well which in turn positively affect manager’s image, expertise and remunerations. However, the result could be explained in the light of management entrenchment where high managerial ownership can be countering to the company because managers are more likely to maximize their private controlling benefits by providing less informative disclosure and
retaining private information (Hassanein, 2015). Consistently, Liu (2015) that found no relationship between managerial ownership and disclosure level.

Inconsistent with H23, the coefficient of board size (BODSZ) is negative and equal to -0.014, at a significance level (sig.) α =.881, which contradicts agency theory expectation that board size increases FLD as larger board size allows diverse experiences and opinions which increase a board’s overseeing ability which potentially leads to more narratives concerning FLD. However, this result is consistent with the study of Buerty and Pae (2020) who found insignificant negative association between FLD and board size in Zimbabwean companies. This may be because bureaucracy problem that occurs when too many members of the board are involved in a decision-making process.

Consistent with H24, the coefficient of auditor type (Big4) is 1.815, at a significance level (sig.) α =.001. This means that the FLD level is higher in companies hiring Big4 auditor. This result is in line with Agency theory which suggests that big external auditors could be one way for resolving the conflict of interest between principals and agents (Watts and Zimmerman, 1978). Therefore, large audit companies are likely to assure reliability of annual reports because they have to maintain a high reputation or because they are more subject to litigation risk for making mistakes (Samaha and Stapleton, 2009). Empirically, the role of auditor type in explaining FLD is consistent with Elshandidy and Neri (2015); Nekhili et al. (2015); Mokhtar and Mellet (2013).

Inconsistent with H25, The coefficient of CEO duality (Dual) is -0.145, at a significance level (sig.) α = 0.785. This finding does not support H25 in that role separation of CEOs and Chairmen helps to enhance monitoring quality and improves disclosure under the agency theory predictions. However, the non-significance results of duality on disclosure companies with the empirical results of Ho and Wong (2001), Haniffa and Cooke (2002), Elzahar & Hussaieny (2012) and Ntim et al., (2013).

To sum up, this study was able to show most of the relationship between the company characteristics, governance characteristics and the FLD in Model 1. The study finds that FLD is statistically associated positively (negatively) with (dividend policy), size, leverage, market risk (competitive environment), industry type, and auditor type. This result adds validity to the score of FLD and that it may captures new information from determinant variables. On the other hand, the P values on ROE, Liq, INDCON, MGOWN, BODSZ, and DUAL are 0.468 (t = 0.726), 0.862 (t = -0.174), 0.488 (t = 0.694), 0.239 (t = -1.180), 0.881 (t = -0.150), and 0.785 (t = -0.273), respectively. These results indicate that FLD is not statistically associated with profitability, Liquidity, Individual Concentration, Managerial Ownership, Board Size, and CEO Duality.
Testing the Relationship between FLD Level and Firm value (Model 2)

This study’s model used a market based measure, which is Tobin’s Q at year-end as a market base dependent variable. Independent variables are total FLD sentences as its endogenous variable and a mixture of company-specific characteristics, and corporate governance control variables (see Table 7 for regression results). Table (6) reports in panel (A) that R-square equals to 23.6 %, which indicates a moderate correlation between independent variables and firm value. However, in order to test the significance of the model as a whole, F value (9.795) was retrieved from Panel B (ANOVA) indicates that the model is significant at 1% level of significance which imply a good overall model fit which explains some variation in firm value.

Table (6) Explanatory Power of the Second Model

<table>
<thead>
<tr>
<th>Panel A: Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The multivariate results of the regression are presented in Table 7 as follows:
Table (7) Regression Results of Value Relevance of FLD “Model 2”

<table>
<thead>
<tr>
<th>Model 2</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1.637</td>
<td>0.366</td>
<td>-4.469</td>
<td>0.000</td>
</tr>
<tr>
<td>FLD</td>
<td>0.020</td>
<td>0.006</td>
<td>0.179</td>
<td>3.632</td>
</tr>
<tr>
<td>DY</td>
<td>-0.398</td>
<td>0.597</td>
<td>-0.040</td>
<td>-0.667</td>
</tr>
<tr>
<td>Roe</td>
<td>0.155</td>
<td>0.058</td>
<td>0.137</td>
<td>2.665</td>
</tr>
<tr>
<td>LNMV</td>
<td>0.092</td>
<td>0.018</td>
<td>0.281</td>
<td>5.149</td>
</tr>
<tr>
<td>Liq</td>
<td>-0.040</td>
<td>0.019</td>
<td>-0.105</td>
<td>-2.097</td>
</tr>
<tr>
<td>Lev</td>
<td>-0.151</td>
<td>0.093</td>
<td>-0.083</td>
<td>-1.618</td>
</tr>
<tr>
<td>InvGrow</td>
<td>0.037</td>
<td>0.569</td>
<td>0.003</td>
<td>0.064</td>
</tr>
<tr>
<td>EarRet</td>
<td>-0.066</td>
<td>0.046</td>
<td>-0.082</td>
<td>-1.441</td>
</tr>
<tr>
<td>INDCON</td>
<td>-0.906</td>
<td>0.307</td>
<td>-0.170</td>
<td>-2.952</td>
</tr>
<tr>
<td>MGOWN</td>
<td>-0.397</td>
<td>0.275</td>
<td>-0.084</td>
<td>-1.443</td>
</tr>
<tr>
<td>DUAL</td>
<td>0.192</td>
<td>0.052</td>
<td>0.183</td>
<td>3.692</td>
</tr>
</tbody>
</table>

LnFV = -1.637 + 0.020 FLD - 0.398 DY + 0.155 ROE + 0.092 LnMK - 0.040 Liq
- 0.151 Lev + 0.037 InvGrow - 0.066 EarRet - 0.906 INDCON - 0.397 MGOWN
+ 0.192 DUAL + e

Based on the above regression results, the following (statistical estimation) model 2 can be used to estimate firm value using FLD and other control variables and to test related research hypotheses:

The coefficient of LnFV equals to 0.020 (t = 3.632) at 1% significance level which indicates that a significant positive relationship between FLD, the endogenous variable, and value relevance (firm value). Therefore, H31 is accepted. Accordingly, the study’s main hypothesis H3 which proposes informative or value relevant FLD is accepted as well. This supports the agency notions that narratives especially FLD would help investors to narrow information asymmetry and bridge the gap between historical information and the economic reality of companies’ operations. This result is also consistent
with the signaling theory, which indicates that managers are willing to signal their value relevant FLD voluntarily to their investors when a company’s expectations are good to be more attractive to investors. Whilst, disclose negative performance expectations to show how they could manage and handle it. These expectations are used by investors for anticipating future cash flows and thus firm value. The purpose of FLD also is to obtain a good market reputation and increase firm value since investors and the rest of the market may misinterpret a company keeping silent as it is withholding the worst possible information (Linsley and Shrives, 2006; Hassan et al., 2009). Moreover, the study’s finding connotes that annual reports are value relevant and agrees with some prior studies (e.g., Elzahar et al. 2015; Plumlee et al. (2015) and Assidi (2020). However, this result is not consistent with some other studies. For instance, Aljifri and Hussainey (2007) concluded insignificant relationship between FLI and firm value. Hassanein and Hussainey (2015) found a negative association exists between change in FLI and in firm value.

In terms of the control variables, the coefficients on company profitability (ROE) and company size (LNMV) is 0.155 (t = 2.665) and 0.092 (t =5.149), respectively. This suggests that highly profitable and larger companies are more valued in the future. This agrees with prior studies (e.g., Al-Akra and Ali, 2012, and Nelwan, 2017). Individual concentration is found to be significant but has negative association with firm value. This may be due to that blockholders have the power to acquire and control value relevant information and block it from other interested parties, in turn, this affects company valuation negatively. The coefficient of CEO duality (Dual) is 0.192, (t = 3.692) at 1% significance level. CEO Duality may be a good governance mechanism in developing countries which is normally prevailed by family ownerships; dual managers may prompt for detailed value relevant information about control to help them in making investment decisions according to stewardship theory. Moreover, CEO often owns experience and leadership, thus influences the decisions in the company. This can have further positive impact on firm value. This result is consistent with the finding of Harjoto and Jo (2009) In addition, Ezzat (2019) found that CEO power has a significant influence on the association between disclosure and company performance in Egypt. Finally, the coefficients of dividends yield (DY), liquidity (Liq), leverage (LEV), capital investment growth (InvGrow), earnings reinvestment (EarRet), and managerial ownership (MGOWN) is not significant.

7. Conclusion

This study contributes to existing disclosure studies that emphasis the economic consequences of narrative reporting by providing evidence on the determinants and value relevance of FLD. As far as the researcher knows, it is the first study in Egypt that examines the measure of FLD in Egyptian annual
reports using automated content analysis technique. The study investigated first the main FLD determinants. Finally, it examined the impact of FLD on firm value FLD.

The results suggest first, that FLD in Egypt are positively associated with company’s size, company’s leverage, company’s market risk, company’s industry type, and auditor type as a governance variable, while, negatively associated with company’s dividend policy, and company’s competitive environment. Second, there is a positive association between FLD and firm value. Other empirical findings reveal that company’s size, company’s profitability, and corporate dual manager positively affect the value of a company, while, company’s liquidity and individual ownership percentage negatively affect the firm value. This suggests that FLI is an important voluntary type of information that should be paid more attention and encouraged more in the Egyptian reporting environment, more insights are given to the importance of the annual report narratives as a good descriptive communication channel for conveying value relevant information, namely FLD to various stakeholders.

The study implications for managers that they should give priority to disclosure policy that provide value relevant information to the stock market, and on how to deliver signals for investors in an understandable and readable style. This narrative reporting strategy can ensure confidence in the performance and reputation of disclosing company and their managers.

The findings suggest that investors need additional information other than reported earnings to adequately anticipate future performance. Investors should be aware of the different styles in narratively expressing their outlook and thereby critically read annual reports, filtering the value relevant information from the whole document in order to remove boilerplate information before making decisions. The results also suggest that stakeholders may desire some assurance and guidance over the discretionary narrative discussion content. Therefore, there is an expected role for external auditors and Egypt regulatory bodies in this regard.

Furthermore, the study developed a novel and valid automated measure for FLD disclosure quantity in Arabic language suggests the possibility of reusing it in some other narrative disclosure or inter-relationships studies, because using different proxies is most likely to provide invalid conclusions. The study, however, has some limitations in the empirical measures and design common to this literature which opens avenues for further research. First, the score employed in the study is an absolute score of the number of FL sentences and adopting a yearly change score or other sophisticated measures of change in narrative reporting such as Turnitin software widely used to check for plagiarism as suggested by Hassanein and Hussainey (2015) could better
capture and measure new information and mitigates the problem of measurement noise due to the repetitive statements. Second, the subjectivity inherent in the content analysis cannot be entirely eliminated. This is because when translating the FL keywords into Egyptian keywords, some FL keywords may have a similar meaning which necessitates a refinement to the Basic English FL keyword list. Furthermore, even though those keywords have been tested by validity and reliability in this study, it would be better if they were retested by a different validity and reliability test if they will be used for other sectors. Third, measuring a firm value using alternative measures of Tobin’s Q such as share price anticipation of future earnings growth using Collin’s et al, 1994 model as suggested by (Moumen, 2014), market-to-book ratio, or Black Schole Merton model as suggested by Aryani (2015), may be an interesting area because sometimes Tobin’s Q correlates with bad economic status. Future research also should examine the quality of FLD as the usefulness of FLI could vary from sentence to sentence and from a FL category to another.
References


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The Value Relevance of Forward Looking Disclosures

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