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# The impact of forward-looking disclosure on the performance-related variables in the annual reports of Egyptian firms registered in the stock Exchange

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## Article History

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## Abstract

**\*Purpose:** The main objective of this study is to investigate the connection among the amount of performance-related variables, which represent the characteristics of firms, & the level of voluntary disclosure, specifically forward-looking disclosure, in the annual reports of Egyptian companies that are listed on the Egyptian Stock Exchange.

The hypothesized influence of performance-related variables on the degree of forward-looking disclosure is empirically examined in this study.

**\*Design/methodology/approach:** This research employs a compilation of prospective-looking keywords to ascertain variations in the extent of forward-looking disclosure among companies operating in distinct industries. The study sample comprised fifty-nine non-financial companies that were publicly traded on the Egyptian Stock Exchange during the years 2017, 2018, & 2019. In order to conduct statistical analysis, multiple linear regression analysis is utilized.

**\*Findings:** Profitability (as measured by earnings per-share) & liquidity ratio exhibited a statistically significant upward trend in 2018 & 2019, in accordance with the degree of forward-looking disclosure. Although they were negligible in 2017 in terms of the extent of forward-looking disclosure,

Nevertheless, for all three years, there was no significant correlation observed between the level of forward-looking information disclosed in the annual reports & profitability, as assessed by the return-equity ratio.

**\*Research limitations/implications:** Among the potential consumers of the findings presented in this article are investors, lenders, & auditors. Users may find these findings useful when conducting business with organizations characterized by low profitability & high financial risk.

Several limitations apply to this investigation. Initially, the research employed the identical inventory of prospective elements utilized in prior investigations. Furthermore, the selected items fail to reflect the degree of significance that users of financial information attribute to them. Furthermore, the research utilized an unweighted approach in order to assess the extent of forward-looking disclosure. In conclusion, the research focused exclusively on non-financial

companies that are publicly traded on the Egyptian Stock Exchange, while excluding those that are involved in finance or insurance.

**\*Originality/value:** As an evaluation of the degree to which Egyptian firms, as a developing nation, disclose forward-looking information regarding the valuation of firm characteristics (performance-related variables), the findings of this research are of greater significance to the investment community. The examination of forward-looking information disclosure in developing countries, with a specific focus on the Middle East, has been the subject of a limited number of studies. Furthermore, while all prior research investigated forward-looking disclosure in annual reports for a duration of one year, the present study spanned a significantly longer time frame of three years.

High leverage & low profitability, according to this study, are the primary impetuses for Egyptian listed companies to increase their disclosure of forward-looking information.

**\*keywords:** performance-related variables, forward-looking disclosure, annual reports, Egyptian Stock Exchange

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## **1. Introduction**

The degree to which financial reporting discloses non-financial information is growing in significance. Since more than four decades ago, the correlation between the degree of non-financial disclosure & corporate attributes has been regarded as the primary aim.

In order to establish their legitimacy, businesses prefer to reveal non-financial information despite the lack of regulatory or mandatory obligations to do so (Parsa, 2001). Conversely, investors require both financial & non-financial data in order to reduce the cost of capital & estimate the beta of a security (Lutfi, 1989).

The correlation between corporate attributes & the extent of voluntary disclosures in developed & developing nations has been the subject of scholarly inquiry. Numerous research studies are implemented in developed nations, including but not limited to the following: Canada (Belkaoui & Kahl, 1978); the United Kingdom (Firth, 1979); the United States of America (Lang & Lundholm, 1993); Japan (Cooke, 1992); Mexico (Chow & Wong-Boren, 1987); & New Zealand (McNally et al., 1982).

Conversely, only a limited number of studies have been implemented in developing nations; these include the following: Egypt (Hassan et al., 2006); Jordan (Naser et al., 2002); Saudi Arabia (Alsaeed, 2006); Bangladesh (Ahmed & Nicholls, 1994); Malaysia (Hossain et al., 1994); Zimbabwe (Owusu-Ansah, 1998); & Barako et al., 2006).

Commonly, firm characteristics are categorized into three categories (Alsaeed, 2006):

- a) Variables associated with structure, including firm age, ownership dispersion, leverage, & firm size
- b) Performance-related variables including liquidity, profitability (profit margin), & return on equity

- c) Market-related variables, including the scale of audit firms, cross-listing, & industry classification.

Subsequent to this, the paper is structured as follows: Section 2 delineates the significance of annual reports as a disclosure source, while Section 3 provides an elucidation of the definition of forward-looking information. Section 4 conducts a comprehensive review of the pertinent literature pertaining to disclosure studies. Section 5 comprises a discussion of variables & the formulation of hypotheses. Section 6 delineates the research methodology, encompassing the description of the sample & the development of models. Section 7 presents the acquired results, while Section 8 encapsulates the conclusions.

## **2. The importance of annual reports as a source of disclosure**

There are numerous sources that may provide investors & other users with pertinent information that will assist them in forecasting the company's future performance. Interim reports, press releases, conference calls, & direct communications with analysts are included in these sources. There are numerous justifications for utilizing annual reports as the primary disclosure source (Hussainey, 2004):

- a) The annual report is a legally binding document that is required to be produced annually; b) The time lag between the conclusion of the fiscal year & the preparation of the annual report is reduced; & c) Due to the formalized structure for generating annual reports, a company's annual report can be compared with those of other companies.
- d) The annual report is favored by the stakeholders group as an informational communication source. e) The annual report exhibits a positive correlation with other financial communication channels (Lang & Lundholm, 1993).
- f) For technical reasons, this research utilizes annual reports, which are available in electronic format for a significant proportion of Egyptian firms.

The primary purpose of the annual report is to furnish pertinent information to a variety of recipients, including investors, managers, customers, creditors, employees, & unions. According to the majority of prior research, the annual report is the most essential source of information; the income statement & direct communication with management are deemed more valuable.

Epstein & Palepu (1999) discovered that financial analysts regard annual reports, particularly the management discussion & analysis (MDandA), as a vital source of information. (Beattie, Pratt, & Scotland, 2002) Management discussion & analysis (MDandA) is a component of annual reports that is most essential for both professional & non-professional users.

### **3-Definition of forward-looking information**

The information contained in the annual report can be categorized into two distinct types: retrospective information & prospective information. Backward-looking information pertains to financial operations & disclosures from the past. Forward-looking information pertains to operational projections for the present & future, which assist information consumers (specifically, investors) in assessing the future performance of a company (Hussainey, 2004).

Forward-looking information comprises various categories of data, including financial data (e.g., cash flow, profitability, revenue fluctuations), anticipated operating results, & anticipated financial resources. Additionally, it encompasses non-financial data, such as substantial risks & uncertainties, which may have an impact on real-world outcomes & differentiate actual results from those anticipated (Khaled Aljifri & Hussainey, 2007). Forward-looking information is denoted by the following terms: probable, imminent, projected, anticipated, estimated, & predicted. More closely associated with the disclosure of forward-looking information are more precise share price estimates & reduced forecast errors.

Distinguishing between backward-looking & forward-looking information can be challenging in certain circumstances, due to the presence of words that pertain to the past but are simultaneously pertinent to the future & thus considered backward-looking. For instance, if the annual report revealed a 10% escalation in expenditures for research & development from the previous year, this data pertained to the past but was indicative of potential future increases (Hussainey, 2004).

Forward-looking information, as defined by the CICA (Canadian Institute of Chartered Accountants) framework (2001), comprises both financial & non-financial data. Its purpose is to enhance the estimation of the value creation impact that operations, transactions, & decisions may have.

Forward-looking information comprises a variety of data points (Beretta & Bozzolan, 2004). These include critical success variables, past results & future results, an explanation of past events, decisions, facts, & results that may have an impact on future results, a vision, strategies, & objectives articulated by management, future events, decisions, opportunities, & risks that may have an impact on future results, & the capacity to deliver results.

Furthermore, forward-looking information is assessed using a variety of methodologies, including organization & corporate governance (ORG), intellectual capital (INT), quantity (QNT), environment (ENV), information about activity (ACT), & coverage (COV). Prior research has established a noteworthy correlation between the extent to which financial forward-looking information is disseminated & the quality of such information (Abad & Bravo, 2010).

#### 4- Literature review

Since the 1960s, there has been a growing interest in accounting disclosure studies. The approaches that were structured for investigating accounting disclosure comprised two distinct categories of methods. The initial approach involved the distribution of questionnaire forms to users, inquiring whether they would prioritize accounting disclosure items in the decision-making process when annual reports were requested. The second method examined the relationship between the level of disclosure (mandatory or voluntary) & firm characteristics (Alsaeed, 2006).

Consequently, a greater number of substantial international studies have been conducted to elucidate the correlation between the attributes of a company & the extent of information disclosed in its annual reports. Many prior studies have employed weight & unweight index scores to assess voluntary disclosure. The weight index score, in particular, was determined by the significance that consumers of annual reports attributed to particular items. On the contrary, unweighted indices assign equal weight to all elements; their purpose is to reduce the subjective aspect of weight determination (Ahmed & Courtis, 1999).

This research primarily aims to investigate the association between the level of voluntary disclosure, particularly forward-looking information, & performance-related measures like liquidity, profitability, profit margin, & return on equity. Prior study commonly analyzed characteristics such as corporate size, listing status, capital structure (leverage), profitability, audit firm size, & corporate listing status to investigate the correlation between these variables & the extent of disclosure in annual reports. The research conducted by Ahmed & Courtis (1999) used many factors such as agency costs, political costs, corporate governance & monitoring, proprietary costs, signaling & information asymmetry, litigation costs, capital requirements, & audit firm reputation to explain this association.

Alsaeed (2006) conducted a study to examine the relationship between corporate characteristics & the level of disclosure in Saudi Arabia. The study assessed twenty items voluntarily to evaluate the level of disclosure in the annual reports of forty companies. An affirmative link was discovered between the magnitude of the company & the degree of disclosure. Nevertheless, no substantial correlations were found between the extent of disclosure & the debt-equity ratio, ownership dispersion, business age, profit margin, industry type, audit firm size, or industry type. Wang & Claiborne (2008) examined the degree to which Chinese listed companies choose to publish information on a voluntary basis in their annual reports. The study's findings indicate a favorable association between the level of disclosure & several parameters, such as the percentage of foreign ownership, the success of the company, & the reputation of the hired auditor. Furthermore, the research discovered no indication that a firm's expense of borrowing funds falls in direct correlation to the extent of voluntarily information it provides.

Aljifri (2008) did additional research on the level of disclosure demonstrated by 31 publicly traded companies in the UAE. The research establishes that the level of disclosure in the UAE is influenced by five specific variables: size (assets), debt-equity ratio, profitability, sector type, & audit firm size. There was a significant correlation between debt-equity &

profitability & the degree of disclosure, according to the study. Nonetheless, there is no correlation between the level of disclosure & sector type, firm size, or audit firm size. Furthermore, the literature review pertaining to performance-related variables revealed that disclosure level & profitability exhibited a positive correlation.

Singhvi & Desai (1971) reached a similar conclusion, stating that managers of firms with high profitability seek to increase the amount of information disclosed to creditors & investors in order to inspire confidence & strengthen the firm's market position. Furthermore, Wallace et al. (1994), Wallace & Naser (1995), & Cooke (1989) all contend that firms with high profitability disclose a greater amount of information in their annual reports as a means of communicating their superior performance to the market. Although Lang & Lundholm (1993) reached the same conclusion, it is only when there is a significant information asymmetry between principals (investors) & agents (managers).

While certain prior investigations have established a positive correlation (Singhvi & Desai, 1971; Wallace et al., 1994), others have obtained inconclusive results (McNally et al., 1982; Lau, 1992; Raffoutnier, 1995). Conversely, additional research has demonstrated a substantial correlation between the aforementioned variables, including that of Belkaoui & Kahl (1978) & Wallace & Naser (1995).

numerous prior studies (Belkaoui & Kahl, 1978; Wallace et al., 1994; Wallace & Naser, 1995) investigated the correlation between liquidity & level of disclosure, but they all concluded that there was no such correlation.

## **5. Variables discussion & hypotheses development**

### **5.1 Firm characteristics (independent variables)**

The firm characteristics that are regarded as predictors of comprehensive disclosure indexes fall into three categories: those associated with the firm's structure, those that are related to performance, & those that are associated with the market (Wallace, Naser, & Mora, 1994). The relationship between firm characteristics & the degree of disclosure in annual reports has been the subject of numerous significant prior studies. These include the works of Singhvi & Desai (1971), McNally et al. (1982), Belkaoui & Kahl (1978), Firth (1979), Chow & Wong-Boren (1987), Cooke (1989, 1991, & 1992), Lang & Lundholm (1993), Malone et al. (1993), Ahmed & Nicholls (1994), Hossain et al. (1995), Beattie et al. (2005), & Hassan et al. (2006).

The majority of prior research has established a significant correlation between level of disclosure & firm size & listing status. However, divergent findings have been reported regarding the influence of audit firm size, profitability, leverage, & profitability on level of disclosure (Ahmed & Courtis, 1999).

Similarly, Alsaeed (2006) established a correlation between the degree of disclosure & firm attributes, which were categorized as variables pertaining to the organization's structure, performance, & market.

## 5.2 Performance-related variables

Accounting information users exhibit interest in performance-related data, including but not limited to the liquidity ratio, earnings return, & profit margin. These variables are subject to periodic variation (Alsaeed, 2006).

Conversely, in order to bolster management's compensation & persuade creditors & investors of the firm's profitability, & in support of increased earnings return or profit margin, company management is incentivized to divulge more comprehensive information regarding its operations (R. S. O. Wallace et al., 1994). Furthermore, a correlation was discovered by T.E. Cooke (1989) between increased disclosure & the financial stability of the company, as measured by a high liquidity ratio. The premise of this relationship is that financially robust organizations are inclined to divulge a greater quantity of information in comparison to their financially feeble counterparts.

### 5.2.1 profitability-related variables (profit margin & return on equity)

The profitability of a firm serves as an indicator of its performance during a particular fiscal year. In the disclosure literature, profitability is regarded as one of the most significant clarifying variables pertaining to performance (Abdel-Fattah, 2008). Furthermore, profitability is regarded as an indicator of investment quality (Prencipe, 2002).

There are two factors that motivate firms with greater profitability to disclose more information regarding their performance (Omar, 2007): firstly, managers desire clarity regarding the sustainability of their positions; secondly, higher profitability signifies an improved standing for the firm in price competition; & thirdly, profitable firms enable owners to prevent the undervaluation of their shares & provide positive news to the market. Conversely, management striving for lower levels of profitability may prefer to obscure subpar performance through the withholding of information (Meek et al., 1995) in order to prevent the adverse impact on the market value of the company.

With respect to the information asymmetry between the principal & agent & agency theory, it is postulated that profitable firms will divulge a greater quantity of information in an effort to enhance their market reputation (Abdel-Fattah, 2008). A similar notion finds support in the political theory which posits that profitable corporations have an incentive to divulge additional information in order to justify their increased profitability (Inchausti, 1997).

The correlation between disclosure level & profitability is a subject of debate, with conflicting findings from prior research (Kamran Ahmed & Courtis, 1999). Prior research has established a strong positive correlation between the degree of disclosure & profitability; for instance, Ali et al. (2004), Haniffa & Cooke (2002), Naser et al. (2002), Patton & Zelenka (1998), & Singhvi & Desai (1971) have all reached this conclusion.

There was no significant correlation between the two variables, according to other research. For instance, in New Zealand firms, Kamran Ahmed & Courtis (1999), Alsaeed



(2006), & McNally et al. (1982) are cited. Additionally, previous research conducted by Ho & Shun Wong (2001), Malone et al. (1993), Meek et al. (1995), & Raffournier (1995) yielded similar findings regarding Spanish firms. Wallace et al. (1994) reached the same conclusion.

An unexpected finding was made by Camfferman & Cooke (2002), which indicated that there was a substantial inverse correlation between the level of disclosure & profit margin in British firms. However, no such correlation was found between return on equity & disclosure level. Furthermore, previous research (Belkaoui & Kahl, 1978; Chen & Jaggi, 2000; R. S. O. Wallace & Naser, 1995) has similarly identified the correlation between the two variables. Although M. Lang & Lundholm (1993) discovered that disclosure influences the performance of a company, the orientation of the relationship between performance & disclosure level remained ambiguous.

Limited prior research has examined the correlation between the degree of forward-looking disclosure & profitability. However, one such study (Khaled Aljifri & Hussainey, 2007) discovered a significant association between profitability & the amount of forward-looking information included in the annual report of the United Arab Emirates. Additionally, Schleicher et al. (2007) discovered that forward-looking information that is included in the narrative sections of annual reports primarily contributes to the failure of profitable firms rather than profitable ones.

Thus, it seems variable to hypothesis that:

**H1: Forward-looking disclosure in the annual reports of Egyptian companies is significantly association with firm profitability as measured by Earnings per-share.**

**H2: Forward-looking disclosure in the annual reports of Egyptian companies is significantly association with firm profitability as measured by return on equity.**

In assessing the profitability of a firm, return on equity & earnings per share serve as surrogates. Return on equity could be calculated by dividing net income available to shareholders by the value of proprietor equity, whereas earnings per share could be calculated by dividing net income available to shareholders by the number of outstanding shares.

### **5.2.2 Liquidity**

The liquidity ratio denotes the capacity of an organization to meet its immediate financial obligations. Liquidity, as defined by the Oxford Dictionary of Accounting (1999), pertains to the degree to which an organization's short term assets are readily convertible into cash within a brief time span. This capability enables the organization to meet its short term obligations without resorting to the liquidation of long term assets (Omar, 2007). Furthermore, liquidity was defined by R. S. O. Wallace & Naser (1995) as "a company's capacity to fulfill its immediate financial obligations without resorting to the sale of its long-term assets or ceasing operations."

Using signaling theory, a number of prior studies elucidated the connection between the degree of disclosure & liquidity. Firms that possess rational liquidity may exhibit a greater incentive to divulge information in order to differentiate themselves from firms that have lower liquidity, according to this theory. As per agency theory, companies that have less liquid assets may be incentivized to include more information in their annual reports in order to appease the demands of their creditors & shareholders, as well as to reduce the likelihood of discord between shareholders & creditors (Camfferman & Cooke, 2002). Furthermore, stakeholders assert that managers might exhibit a keen interest in divulging additional details pertaining to the liquidity ratio & profitability.

In their 1989 study, T.E. Cooke & Wallace discovered a positive correlation between the degree of disclosure & liquidity; that is, companies with greater liquidity are more inclined to divulge information compared to companies with lesser liquidity. In contrast, Wallace et al. (1994) demonstrated that companies with limited liquidity may be incentivized to increase their disclosure in order to allay shareholders' concerns & demonstrate to them that management is cognizant of the issues.

Previous research on disclosure has yielded conflicting findings regarding the correlation between disclosure level & liquidity. For instance, Curtis & Kamran Ahmed (1999) found no correlation between the two variables mentioned earlier.

In Saudi Arabian firms, Alsaeed (2006), Barako, Hancock, & Izan (2006), R. S. O. Wallace & Naser (1995), & Owusu-Ansah (1998) discovered no correlation between the aforementioned variables. Naser et al. (2002) & R. S. O. Wallace et al. (1994) both discovered a statistically significant inverse correlation between the two variables.

Moreover, Camfferman & Cooke (2002) discovered a statistically insignificant negative correlation regarding British firms, but a statistically significant positive correlation regarding Dutch firms.

There is a lack of prior research examining the correlation between the degree of forward-looking disclosure & liquidity within the context of Egypt.

Thus, it seems variable to hypothesis that:

**H3: There is a significant association between liquidity ratio & forward-looking disclosure in the annual reports of Egyptian listed companies.**

An approximation of liquidity could be calculated using the current ratio (current assets minus current liabilities minus current expenses).

## **6. Research Methodology**

### **6.1 Data collection & variables definition**

Although annual financial reports served as the primary sources & primary instruments for gathering information regarding the tested variables, supplementary sources such as television or newspapers may also contribute information.

The sample for this study comprises annual reports of 49 non-financial companies, both listed & unlisted, that are not in the Egyptian stock exchange. These companies represent a variety of sectors, including agriculture, petrochemicals, finance, real estate, & services. The data collection period spanned three years, from 2017 to 2019. The selection of companies was predicated on the accessibility of data. Data collection for the study was impeded in 2020 due to the Egyptian Stock Exchange experiencing setbacks & the COVID-19 pandemic issue, which were precipitated by the Egyptian revolution.

Due to the fact that financial & insurance companies are obligated to comply with particular disclosure regulations, their annual reports cannot be regarded as voluntarily determined in this study.

The research employed cross-sectional regression, specifically Ordinary Least Square (OLS) & multiple regressions, in conjunction with the Minitab software (which is an extension of SPSS), to examine & assess the hypotheses & regression variables gathered from the annual reports.

Various proxies were employed in this study to assess performance-related variables. Earnings per share (calculated by dividing net profit by number of shares) was utilized to measure profitability, return on equity was calculated by dividing net profit by total equity, & current ratio was utilized to evaluate liquidity. The variables in question are quantified as continuous variables.

The study employed the identical inventory of forward-looking words as described in (Hussainey, Schleicher, & Walker, 2003) for the objectives of this research. To ascertain the variations in the degree of forward-looking disclosure exhibited by companies operating in distinct industries. (1)

Forward-looking statements are defined by Study as any sentence that includes the following verbs: will, should, can, could, may, might, expect, anticipate, believe, seek, project, forecast, objective, or aim. The word "shall" was omitted from the study due to its association with legal terminology & repetitive disclosure (Li, 2008).

Furthermore, this research investigated the narrative sections of each company's report (CEO report, director report, & chairman statement), awarding one point per pertinent sentence.

## 6.2 Model development

Numerous previous investigations employed matched-pair statistics to examine the disparity between the disclosure indices of multiple samples (Wallace, Naser, & Mora, 1994). When non-linearity directions & monotonic data were present, cross-sectional regression analysis was applied (Chow & Wong-Boren, 1987).

Lang & Lundholm (1993) implemented ranked Ordinary Least Square (OLS) regression. One notable advantage of OLS is that it can be readily implemented by converting continuous variables into ranked scores.

Conversely, Camfferman & Cooke (2002) provided a rationale for employing unranked (OLS) rather than ranked (ranked OLS) on page 9. They stated, "The primary benefit of substituting ranks with normal scores is that the resultant tests possess precise statistical properties, including the ability to identify significant levels, the significance of F & t-tests, & the utility of regression coefficients derived from normal scores." Additionally, the normal scores approach provides a method for normalizing a dependent variable that is not normally distributed; thus, it has an additional benefit over the ranks approach.

The degree of disclosure was assessed using the ratio of the value of the forward-looking sentences disclosed by the firm to the total number of sentences in its narrative sections. The identical formula utilized in this investigation was that of (Aljifri & Hussainey, 2007):

$$\text{TDS} = \text{FWD} / \text{TD} \quad (1)$$

Where:

TDS= total disclosure score

FWD= total forward-looking sentences disclosed

TD= maximum sentences disclosed for each company

This study prefers to use unranked (OLS), & the regression analysis model, which test the association between the level of voluntary disclosure (forward-looking disclosure) & firm characteristics (performance-related variables), is presented as the following:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + E \quad (2)$$

Where:

Y= voluntary disclosure index level (forward-looking disclosure level)

B<sub>0</sub>= constant value or the value of Y when all X values are zero.

X<sub>1</sub>= profitability variable measured by Earning per share (net profit available to shareholders divided by number of shares)

X<sub>2</sub>= profitability ratio measured by return equity ratio (net profit available to shareholders divided by total owner equity)

X<sub>3</sub>= liquidity ratio (measured by current assets divided by current liabilities)

E= the error term normally distributed about a mean of zero

## 7. Results

This section demonstrates the practical Minitab methods utilized to report the results & assess the study's research hypotheses. Descriptive analysis & regression analysis are its components.

### 7.1 Descriptive statistics

Table (1) presents the findings pertaining to the descriptive analysis, including the minimum, maximum, mean, & SD (with smaller SD indicating more precise future predictions due to reduced variability) for continuous & categorical variables within the sample dataset. Additionally, the table furnishes details regarding disclosure spanning three years, namely 2017, 2018, & 2019. The sample exhibits considerable variability in certain variables, as evidenced by the minimum & maximum values. For instance, in 2017, the dependent variable (DV), which represents the extent of forward-looking disclosure, falls within the range of 3 to 49. The mean value of 17.73 & the SD of 9.76 further illustrate this. The mean earnings per share (EPS) is 3.844 & the SD is 4.98; EPS values range from -4.50 to 16.56. PTE is a metric that varies between -0.180 & 0.610, with a SD of 0.157 & a mean of 0.168. The liquidity ratio (LR) is a metric that varies between 0.270 & 9.370, with an average value of 2.384 & a SD of 2.060.

The dependent variable (DV) for the extent of forward-looking disclosure in the year 2018 varies between 0.00 & 40, with an average value of 13.71 & a SD of 9.26. The mean earnings per share (EPS) is 4.00 & the SD is 6.55; EPS values range from -2.16 to 26.86. PTE is a metric that varies between -0.080 & 0.550, with a SD of 0.135 & a mean of 0.126. The liquidity ratio (LR) is a metric that varies between 0.150 & 22.53, with an average value of 3.245 & a SD of 3.759.

The dependent variable (DV) for the extent of forward-looking disclosure in 2019 varies between \$2.00 & \$38, with an average of \$15.38 & a SD of \$8.02. The variability of earnings per share (EPS) is as follows: -0.14 to 35.96, with a SD of 7.29 & a mean of 5.46. PTE is a metric that varies between -0.0100 & 0.430, with a calculated mean of 0.1365 & a SD of 0.1257. The liquidity ratio (LR) is a metric that varies between 0.26 & 41.69, with an average value of 3.50 & a SD of 6.50. Based on the preceding findings, the profitability ratio (PTE) exhibited the smallest SD, suggesting that future predictions could be deemed more precise due to the reduced variability.

**Table 1:** descriptive statistics

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#### Descriptive Statistics: DV; EPS; PTE; LR (2017)

Variable	N	N*	Mean	Median	TrMean	StDev
DV	40	8	17.73	15.00	17.06	9.76
EPS	27	21	3.844	1.830	3.669	4.987
PTE	29	19	0.1683	0.1600	0.1648	0.1575
LR	29	19	2.384	1.490	2.203	2.060

  

Variable	SE Mean	Minimum	Maximum	Q1	Q3
DV	1.54	3.00	49.00	11.00	23.75

EPS	0.960	-4.500	16.560	0.350	6.340
PTE	0.0293	0.1800	0.6100	0.0700	0.2350
LR	0.382	0.270	9.370	1.110	3.550

**Descriptive Statistics: DV; EPS; PTE; LR (2018)**

Variable	N	N*	Mean	Median	TrMean	StDev
DV	45	3	13.71	14.00	13.39	9.26
EPS	39	9	4.00	1.12	3.02	6.55
PTE	44	4	0.1261	0.1000	0.1185	0.1350
LR	44	4	3.245	2.070	2.727	3.759

Variable	SE Mean	Minimum	Maximum	Q1	Q3
DV	1.38	0.00	40.00	6.50	20.50
EPS	1.05	-2.16	26.86	0.28	6.33
PTE	0.0204	-0.0800	0.5500	0.0325	0.2050
LR	0.567	0.150	22.530	1.363	3.250

**Descriptive Statistics: DV; EPS; PTE; LR (2019)**

Variable	N	N*	Mean	Median	TrMean	StDev
DV	42	6	15.38	14.50	15.11	8.02
EPS	41	7	5.46	4.00	4.36	7.29
PTE	40	8	0.1365	0.1100	0.1286	0.1257
LR	40	8	3.50	1.92	2.46	6.50

Variable	SE Mean	Minimum	Maximum	Q1	Q3
DV	1.24	2.00	38.00	9.00	19.75
EPS	1.14	-0.14	35.96	0.49	6.92
PTE	0.0199	-0.0100	0.4300	0.0425	0.1775
LR	1.03	0.26	41.69	1.21	3.26

**7.2. Assessing the validity of the model or (OLS) regression analysis**

The findings of a multiple regression analysis should be interpreted once it has been determined whether the independent variables are prone to multicollinearity or collinearity. This is a smart step to take before jumping to conclusions. Multicollinearity or collinearity is a phenomenon that occurs when two or more of the independent variables are substantially associated with one another. This phenomenon can have a negative impact on the outcomes of multiple regression exercises. Obtaining an approximation of the link between predictors can be accomplished with the use of a reliable instrument known as the correlation matrix.

Table 2 displays the correlations that exists between the independent factors & the dependent variable, which is referred to as "level of forward-looking disclosure (DV)," throughout the course of a period of three years. As of 2017, there was no evidence of multicollinearity among the variables that were considered independent. Every one of the correlations that were found between continuous variables did not have an overly strong force. With a correlation coefficient of 0.641, the profitability variable, which was assessed by profits per share (EPS), & the profitability ratio, which was evaluated by return equity ratio (PTE),

were shown to have the strongest relationship. Except for the correlation between earnings per share & price-to-earnings ratio (EPS) & price-to-earnings ratio (PTE), which was found to be significant ( $0.000 < 0.05$ ), other correlations were observed to be insignificant at the 0.05 level (two-tailed). It was determined that there was no statistically significant link between the other independent factors & the degree of forward-looking disclosures (DV), which was the dependent variable (p-value that was greater than 0.05).

In 2018, there was no phenomenon of multicollinearity among the variables that were considered independent. Every one of the correlations that were found between continuous variables did not have an overly strong force. A connection of 0.628 was found between the profitability variable, which was evaluated by earnings per share (EPS), & the profitability ratio, which was assessed by return equity ratio (PTE). This correlation was found to be the greatest (as in 2008). The correlation between earnings per share & price-to-earnings ratio (EPS) & price-to-earnings ratio (PTE) was found to be significant ( $0.000 < 0.05$ ), despite the fact that all other correlations were judged inconsequential at the 0.05 level (two-tailed).

Except for the correlation with the return equity ratio (PTE), which was found to be insignificant ( $0.143 > 0.05$ ), the correlation between the dependent variable (DV), the degree of forward-looking disclosures, & the remaining independent variables was found to be significant (p-value  $< 0.05$ ). This was the case with the exception of the PTE connection.

However, there was no evidence of multicollinearity among the independent variables during the year 2019. Every one of the correlations that were found between continuous variables did not have an overly strong force. Both in 2017 & 2018, the profitability variable, which was evaluated by profits per share (EPS), & the profitability ratio, which was assessed by return equity ratio (PTE), displayed the highest correlation (0.560) between the two variables. The correlation between earnings per share & price-to-earnings ratio (EPS) & price-to-earnings ratio (PTE) was found to be significant ( $0.000 < 0.05$ ), despite the fact that all other correlations were judged inconsequential at the 0.05 level (two-tailed).

Except for the correlation with the return equity ratio (PTE), which was found to be negligible ( $0.362 > 0.05$ ), the correlation between the dependent variable (DV), the degree of forward-looking disclosures, & the remaining independent variables was found to be significant (p-value  $< 0.05$ ). This was the case with the exception of the PTE connection.

Furthermore, the findings that were gathered over the course of the three years provide evidence that there is no colinearity among the variables that are considered independent. It was shown that the profitability ratio, which was evaluated by return on equity (PTE), had the strongest link with the profitability variable, which was assessed by earnings per share (EPS). Furthermore, it is worth noting that the association between the variables indicated above was shown to be statistically significant (p-value  $< 0.05$ ) consistently across all three years. In both 2018 & 2019, there was a substantial link between the amount of forward-looking information (the dependent variable DV) & the liquidity ratio (LR) & earnings per share (EPS), which are the independent factors.

**Table 2:** correlations**Correlations: DV; EPS; PTE; LR (2017)**

	DV	EPS	PTE
EPS	0.227 0.287		
PTE	0.217 0.286	0.641* 0.000**	
LR	-0.203 0.321	-0.285 0.150	-0.106 0.584

Cell Contents: Pearson correlation  
P-Value

**Notes:**

\*the highest correlation between independent variables

\*\*correlation is significant at the 0.05 level (two-tailed)

**Correlations: DV; EPS; PTE; LR (2018)**

	DV	EPS	PTE
EPS	0.356 0.028**		
PTE	0.227 0.143	0.628* 0.000**	
LR	0.325 0.033**	-0.142 0.390	-0.091 0.557

Cell Contents: Pearson correlation  
P-Value

**Notes:**

\*the highest correlation between independent variables

\*\*correlation is significant at the 0.05 level (two-tailed)

**Correlations: DV; EPS; PTE; LR (2019)**

	DV	EPS	PTE
EPS	0.358 0.025**		
PTE	0.152 0.362	0.560* 0.000**	
LR	0.522 0.001**	0.047 0.776	-0.010 0.951

Cell Contents: Pearson correlation  
P-Value

**Notes:**

\*the highest correlation between independent variables

\*\*correlation is significant at the 0.05 level (two-tailed)



### 7-3- Multiple regression results

The results of all multiple regressions for the years 2017, 2018, & 2019 were presented in Appendix (A). The OLS regression results presented in Table 3 indicate that the SDof the error terms for the three years are 11.44, 8.18, & 6.207, respectively.

The statistical analysis (ANOVA tests) indicates that the model's predictions for 2017 were not significant, as the F-ratio was 0.44 ( $P=0.727>0.05$ ). However, the model's significance in 2018 & 2019 can be supported by the F-ratios of 4.36 ( $P=0.011>0.05$ ) & 7.66 ( $P=0.000<0.05$ ), respectively. F is in fact equal to T-squared. A nominal P-value indicates that beta has a substantial impact on the model; this merely provides confirmation of the T-test.

Although R2, which represents the proportion of independent variables that account for the variability observed in the dependent variable (specifically, the level of looking-forward disclosure), was 6.2%, 27.8%, & 40.3% over the course of three years, it fell short of the minimum threshold of 75% required to accept an R2 result for a model (i.e., the proportion of dependent variable variance attributable to the variance in independent variables). Therefore, the highest R2 for 2019 was 40.3%, which indicates that independent variables account for 40.3% of the variance in the level of forward disclosure. That is to say, the value of Y (level of looking-forward disclosure) fluctuated; of this, 40.3% was attributable to the model (or to changes in X—independent variables), while the remaining 59.7% was attributable to error or an inexplicable factor.

**Table 3:** model summary

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#### Year 2017

S = 11.44    R-Sq = 6.2%    R-Sq(adj) = 0.0%

#### Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	172.8	57.6	0.44	0.727
Residual Error	20	2618.5	130.9		
Total	23	2791.3			

#### Year 2018

S = 8.180    R-Sq = 27.8%    R-Sq(adj) = 21.4%

#### Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	874.68	291.56	4.36	0.011
Residual Error	34	2275.21	66.92		
Total	37	3149.89			

**Year 2019**

$S = 6.207$      $R\text{-Sq} = 40.3\%$      $R\text{-Sq}(\text{adj}) = 35.1\%$

## Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	885.58	295.19	7.66	0.000
Residual Error	34	1309.82	38.52		
Total	37	2195.39			

The regression outcomes pertaining to the profitability (return on equity ratio) (PTE), profitability (earnings per share) (EPS), & liquidity ratio (LR) for the preceding three years are presented in **Table 4**.

The estimated sample values for the constant alpha (-0.379) & independent beta (-17.43, 0.549, -6.95, & -0.379) for 2017; 8.34, 0.537, 3.01, & 0.902 for 2018; & 11.55, 0.400, -3.44, & 0.585 for the final year, 2019.

**The comment on the results is the following:**

**\*profitability:** (Only in 2017 ( $P > 0.05$ ) was the association between earnings per share & the degree of forward-looking disclosure found to be insignificantly connected; not the other two years, 2018 & 2019, the relationship was substantial ( $P < 0.05$ ). In each of the three years, there was a positive correlation between the amount of forward-looking disclosure & earnings per share. Thus, the previous outcome did not offer an explanation for the variation in the forward-looking statement.

**\*profitability :** (It was discovered that, when evaluated by return equity ratio, there was no significant correlation between the amount of forward-looking disclosure in each of the three years ( $P > 0.05$ ). However, just in 2018; in other years, 2017 & 2019, things were unfavorably

The previous results' direction (coefficient) indicates that firms with higher profitability are more likely to disclose forward-looking information. However, this interpretation contradicts the results of Aljifri & Hussainey (2007).

In support of the aforementioned finding, Lang & Lundholm (1993) discovered that the direction of the relationship between voluntary disclosure levels & performance variables was ambiguous, as the latter could potentially function as an indicator of the information asymmetry that exists between shareholders & management.

In New Zealand firms, Ahmed & Courtis (1999), Alsaeed (2006), & McNally et al. (1982) also corroborated the previous finding. Furthermore, Wallace et al. (1994), Ho & Shun Wong (2001), Malone, Fries, & Jones (1993), Meek, Roberts, & Grey (1995), & Raffournier (1995) have examined the correlation between voluntary disclosure & performance variables.

Conversely, limited prior research has examined the correlation between the degree of forward-looking disclosure & profitability. For instance, Aljifri & Hussainey (2007) discovered a significant association between profitability & the amount of forward-looking information included in the annual report of the United Arab Emirates.

**\*Liquidity:** (The level of forward-looking disclosure was found to be insignificantly correlated with the liquidity ratio (current assets divided by current liabilities) in 2017 ( $P > 0.05$ ). However, the relationship became statistically significant in 2018 & 2019 ( $P < 0.05$ ). In contrast to 2008, when the relationship was negative, it was positive in both 2018 & 2019. One possible explanation for this positive correlation is that executives of exceptionally lucrative companies may furnish investors with more prospective data in an effort to bolster investor confidence & augment their remuneration (Aljifri & Hussainey, 2007).

Prior research, including that of Alsaeed (2006), Barako, Hancock, & Izan (2006), Wallace & Naser (1995), & Owusu-Ansah (1998), supported the insignificance of the relationship. However, in 2019, Wallace et al. (1994) & Naser, Al-Khatib, & Karbhari (2002) discovered a significant relationship. Conversely, there is a dearth of prior research examining the correlation between the degree of forward-looking disclosure & liquidity within the Egyptian context.

**Table (4)** regression results of the effect of the performance-related variables on the level of forward-looking disclosure

Year 2017

Predictor	Coef	SE Coef	T	P
Constant	17.434	5.456	3.20	0.005
EPS	0.5499	0.6390	0.86	0.400
PTE	-6.95	21.72	-0.32	0.752
LR	-0.379	1.194	-0.32	0.755

Year 2018

Predictor	Coef	SE Coef	T	P
Constant	8.348	2.210	3.78	0.001
EPS	0.5377	0.2627	2.05	0.048
PTE	3.01	12.60	0.24	0.813
LR	0.9029	0.3404	2.65	0.012

Year 2019

Predictor	Coef	SE Coef	T	P
Constant	11.552	1.608	7.18	0.000
EPS	0.4007	0.1635	2.45	0.020
PTE	-3.448	9.572	-0.36	0.721
LR	0.5850	0.1535	3.81	0.001

## 8- Conclusions, limitations & further research

The primary objective of annual report preparation is to furnish consumers of financial reports with accurate & timely information; failure by management to deliver this information will result in a depreciation of the firm's value.

The aim of this research article is to investigate the correlation between the degree of forward-looking disclosure & firm attributes (performance-related variables). Additionally, it seeks to ascertain the impact of two key performance-related variables—profitability ratio & liquidity ratio—on the degree of forward-looking information disclosure as documented in the annual reports of non-financial Egyptian companies.

Furthermore, this research paper contributes to the understanding of Egyptian firms' disclosure policies by establishing a correlation between annual reports & performance-related variables that are specific to the firms.

The findings pertaining to the sample of 49 companies indicate that the profitability ratio (as determined by earnings per share) & liquidity ratio have statistically significant positive impacts on the level of forward-looking disclosure during the years 2018 & 2019. However, their correlation with the degree of forward-looking disclosure in 2017 is negligible.

The profitability ratio, as determined by the return on equity ratio, exhibits no statistically significant correlation with the extent of forward-looking disclosure across all three years.

Aljifri (2006) discovered in a prior investigation that there was no statistically significant correlation between the degree of voluntary disclosure (items included in financial statements) & profitability. Consequently, the aforementioned finding supports a significant deduction: the factors influencing the degree of accounting information disclosure may differ from those influencing the degree of forward-looking information disclosure (Aljifri & Hussainey, 2007).

One limitation of this research is that it utilized the identical inventory of forward-looking items as a prior study conducted by Hussainey et al. (2003). Furthermore, the selected items fail to reflect the degree of significance that users of financial information attribute to them. Furthermore, the research utilized an unweighted approach in order to assess the extent of forward-looking disclosure. Fourth, in practice, certain information items hold greater significance for certain consumers of annual reports compared to others; therefore, the weighting of these items should correspond to their relative importance. Fifthly, this research focused exclusively on non-financial companies listed on the Egyptian Stock Exchange. Financial & insurance firms were omitted from the analysis due to the fact that they are obligated to disclose specific information, which renders their annual reports non-voluntary in nature.

### **Additional research might investigate the following recommendations:**

- \*incorporate novel forward-looking elements that were not examined in the present study.
- \*present a compilation of forward-looking disclosure-related items that users perceive as having varying degrees of significance.

\* Conducting a novel investigation to analyze the influence of firm attributes on forward-looking disclosure within the annual reports of publicly traded & unlisted financial & non-financial companies, respectively

\* To strengthen the evidence presented in this study, additional research could be undertaken by extending the time period to over three years, augmenting the number of firms, or incorporating additional variables.

\* The impact of cost of equity (considered an independent variable) on the extent of forward-looking disclosure will be investigated.

**\*notes**

(1) The following terms can be used to describe future financial years or months: accelerate, anticipate, await, convince, confidence, envision, estimate, eventual, expect, forecast, forthcoming, hope, intend (or intention), likely (or unlikely), look-forward (or look ahead), next, novel, optimistic, outlook, planned (or planning), predict, prospect, remain, renew, scope for (or scope to), shall, shortly, should, soon, well positioned, & years ahea.

**Appendix A**

**Descriptive Statistics: DV; EPS; PTE; LR (2017)**

Variable	N	N*	Mean	Median	TrMean	StDev
DV	40	8	17.73	15.00	17.06	9.76
EPS	27	21	3.844	1.830	3.669	4.987
PTE	29	19	0.1683	0.1600	0.1648	0.1575
LR	29	19	2.384	1.490	2.203	2.060

Variable	SE Mean	Minimum	Maximum	Q1	Q3
DV	1.54	3.00	49.00	11.00	23.75
EPS	0.960	-4.500	16.560	0.350	6.340
PTE	0.0293	-0.1800	0.6100	0.0700	0.2350
LR	0.382	0.270	9.370	1.110	3.550

**Correlations: DV; EPS; PTE; LR**

	DV	EPS	PTE
EPS	0.227		
	0.287		
PTE	0.217	0.641	
	0.286	0.000	
LR	-0.203	-0.285	-0.106
	0.321	0.150	0.584

Cell Contents: Pearson correlation

P-Value

**Descriptive Statistics: DV; EPS; PTE; LR (2018)**

Variable	N	N*	Mean	Median	TrMean	StDev
DV	45	3	13.71	14.00	13.39	9.26
EPS	39	9	4.00	1.12	3.02	6.55
PTE	44	4	0.1261	0.1000	0.1185	0.1350
LR	44	4	3.245	2.070	2.727	3.759

Variable	SE Mean	Minimum	Maximum	Q1	Q3
DV	1.38	0.00	40.00	6.50	20.50
EPS	1.05	-2.16	26.86	0.28	6.33
PTE	0.0204	-0.0800	0.5500	0.0325	0.2050
LR	0.567	0.150	22.530	1.363	3.250

**Correlations: DV; EPS; PTE; LR**

	DV	EPS	PTE
EPS	0.356		
	0.028		
PTE	0.227	0.628	
	0.143	0.000	
LR	0.325	-0.142	-0.091
	0.033	0.390	0.557

Cell Contents: Pearson correlation

P-Value

**Descriptive Statistics: DV; EPS; PTE; LR (2019)**

Variable	N	N*	Mean	Median	TrMean	StDev
DV	42	6	15.38	14.50	15.11	8.02
EPS	41	7	5.46	4.00	4.36	7.29
PTE	40	8	0.1365	0.1100	0.1286	0.1257
LR	40	8	3.50	1.92	2.46	6.50

Variable	SE Mean	Minimum	Maximum	Q1	Q3
DV	1.24	2.00	38.00	9.00	19.75
EPS	1.14	-0.14	35.96	0.49	6.92
PTE	0.0199	-0.0100	0.4300	0.0425	0.1775
LR	1.03	0.26	41.69	1.21	3.26

**Correlations: DV; EPS; PTE; LR**

	DV	EPS	PTE
EPS	0.358		
	0.025		
PTE	0.152	0.560	
	0.362	0.000	
LR	0.522	0.047	-0.010
	0.001	0.776	0.951

Cell Contents: Pearson correlation  
P-Value

**Regression Analysis: DV versus EPS; PTE; LR (2017)**

The regression equation is

$$DV = 17.4 + 0.550 \text{ EPS} - 6.9 \text{ PTE} - 0.38 \text{ LR}$$

24 cases used 24 cases contain missing values

Predictor	Coef	SE Coef	T	P
Constant	17.434	5.456	3.20	0.005
EPS	0.5499	0.6390	0.86	0.400
PTE	-6.95	21.72	-0.32	0.752
LR	-0.379	1.194	-0.32	0.755

S = 11.44    R-Sq = 6.2%    R-Sq(adj) = 0.0%

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	172.8	57.6	0.44	0.727
Residual Error	20	2618.5	130.9		
Total	23	2791.3			

Source	DF	Seq SS
EPS	1	143.2
PTE	1	16.4
LR	1	13.2

Unusual Observations

Obs	EPS	DV	Fit	SE Fit	Residual	St Resid
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24	0.5	6.00	12.05	8.49	-6.05	-0.79 X
39	3.1	49.00	17.34	2.53	31.66	2.84R
47	13.1	15.00	20.31	8.30	-5.31	-0.67 X

R denotes an observation with a large standardized residual

X denotes an observation whose X value gives it large influence.

### Regression Analysis: DV versus EPS; PTE; LR (2018)

The regression equation is

$$DV = 8.35 + 0.538 \text{ EPS} + 3.0 \text{ PTE} + 0.903 \text{ LR}$$

38 cases used 10 cases contain missing values

Predictor	Coef	SE Coef	T	P
Constant	8.348	2.210	3.78	0.001
EPS	0.5377	0.2627	2.05	0.048
PTE	3.01	12.60	0.24	0.813
LR	0.9029	0.3404	2.65	0.012

$$S = 8.180 \quad R\text{-Sq} = 27.8\% \quad R\text{-Sq}(\text{adj}) = 21.4\%$$

### Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	874.68	291.56	4.36	0.011
Residual Error	34	2275.21	66.92		
Total	37	3149.89			

Source	DF	Seq SS
EPS	1	398.65
PTE	1	5.13
LR	1	470.90

### Unusual Observations

Obs	EPS	DV	Fit	SE Fit	Residual	St Resid
3	0.1	21.00	28.81	6.59	-7.81	-1.61 X
18	26.9	15.00	26.83	4.91	-11.83	-1.81 X
21	26.0	28.00	23.87	5.72	4.13	0.71 X
39	1.9	40.00	17.37	2.22	22.63	2.87R

R denotes an observation with a large standardized residual

X denotes an observation whose X value gives it large influence.



**Regression Analysis: DV versus EPS; PTE; LR (2019)**

The regression equation is

$$DV = 11.6 + 0.401 \text{ EPS} - 3.45 \text{ PTE} + 0.585 \text{ LR}$$

38 cases used 10 cases contain missing values

Predictor	Coef	SE Coef	T	P
Constant	11.552	1.608	7.18	0.000
EPS	0.4007	0.1635	2.45	0.020
PTE	-3.448	9.572	-0.36	0.721
LR	0.5850	0.1535	3.81	0.001

S = 6.207    R-Sq = 40.3%    R-Sq(adj) = 35.1%

**Analysis of Variance**

Source	DF	SS	MS	F	P
Regression	3	885.58	295.19	7.66	0.000
Residual Error	34	1309.82	38.52		
Total	37	2195.39			

Source	DF	Seq SS
EPS	1	315.40
PTE	1	10.91
LR	1	559.26

**Unusual Observations**

Obs	EPS	DV	Fit	SE Fit	Residual	St Resid
21	36.0	22.00	26.04	4.88	-4.04	-1.06 X
38	6.8	30.00	18.29	2.26	11.71	2.03R
39	7.0	38.00	38.43	5.93	-0.43	-0.24 X

R denotes an observation with a large standardized residual

X denotes an observation whose X value gives it large influence.

## References

- Abad, Cristina and Bravo, Francisco. (2010), "Board of directors' characteristics and forward-looking information disclosure strategies", paper presented at Universidad de Sevilla, Spain.
- Abdel-Fattah, Tarek.M.H. (2008) "Voluntary Disclosure Practices in Emerging Capital Markets: The Case of Egypt", PhD Thesis, Durham University, UK.
- Abd-Elsalam, O. H., & Weetman, P. (2003). Introducing international accounting standards to an emerging capital market: relative familiarity and language effect in Egypt. *Journal of International Accounting, Auditing and Taxation*, 12(1), 63-84.
- Ahmed, K., & Courtis, J. K. (1999). ASSOCIATIONS BETWEEN CORPORATE CHARACTERISTICS AND DISCLOSURE LEVELS IN ANNUAL REPORTS: A META-ANALYSIS. *The British Accounting Review*, 31(1), 35-61. doi: 10.1006/bare.1998.0082
- Ahmed, K., & Nicholls, D. (1994). The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: The case of Bangladesh. *The International Journal of Accounting*, 29(1), 62.
- Ali, M. J., Ahmed, K., & Henry, D. (2004). Disclosure compliance with national accounting standards by listed companies in South Asia. *Accounting and Business Research*, 34, 183-200.
- Aljifri, K. (2008). Annual report disclosure in a developing country: the case of the UAE. *Advances in Accounting*, 24(1), 93-100.
- Aljifri, K., & Hussainey, K. (2007). The determinants of forward-looking information in annual reports of UAE companies. *Managerial Auditing Journal*, 22(9), 881-894.
- Alsaeed, K. (2006). The association between firm-specific characteristics and disclosure; The case of Saudi Arabia. *Managerial Auditing Journal*, 21(5), 476-496.
- Barako, D. G., Hancock, P., & Izan, H. (2006). Factors influencing voluntary corporate disclosure by Kenyan companies. *Corporate Governance: An International Review*, 14(2), 107-125.
- Beattie, V., Pratt, K., & Scotland, I. o. C. A. o. (2002). *Voluntary annual report disclosures: what users want*: Institute of Chartered Accountants of Scotland.
- Beattie, V. (2005). Moving the financial accounting research front forward: the UK contribution. *The British Accounting Review*, 37(1), 85-114.
- Belkaoui, A., & Kahl, A. L. (1978). *Corporate financial disclosure in Canada*: Canadian Certified General Accountants' Association.
- Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *The International Journal of Accounting*, 39(3), 265-288.
- Camfferman, K., & Cooke, T. E. (2002). An analysis of disclosure in the annual reports of UK and Dutch companies. *Journal of International Accounting Research*, 1(1), 3-30.

- Chen, C. J. P., & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy*, 19(4-5), 285-310.
- Chow, C. W., & Wong-Boren, A. (1987). Voluntary financial disclosure by Mexican corporations. *Accounting Review*, 533-541.
- CICA. 2001. *Management's Discussion and Analysis; Guidance on Preparation and Disclosure*, Ottawa: Canadian Institute of Chartered Accountants.
- Cooke, T. E. (1989). Disclosure In The Corporate Annual Reports Of Swedish Compa. *Accounting and Business Research*, 19(74), 113.
- Cooke, T. E. (1989). Voluntary corporate disclosure by Swedish companies. *Journal of International Financial Management & Accounting*, 1(2), 171-195.
- Cooke, T. E. (1991). An assessment of voluntary disclosure in the annual reports of Japanese corporations. *The International Journal of Accounting*, 26(3), 174-189.
- Cooke, T. E. (1992). The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Japanese Listed Corporations. *Accounting and Business Research*, 22(87), 229.
- Cooke, T. E., & Wallace, R. (1989). Global surveys of corporate disclosure practices and audit firms: a review essay. *Accounting and Business Research*, 20(77), 47-57.
- Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, 86, 59.
- Epstein, M. J., & Palepu, K. G. (1999). Features-What Financial Analysts Want-Even Wall Street analysts don't understand some footnotes, according to this survey, which means financial managers aren't doing their job as well as they. *Strategic Finance-Montvale*, 80(10), 48-57.
- Firth, M. (1979). Impact of size, stock market listing, and auditors on voluntary disclosure in corporate annual reports. *Accounting and Business Research*, 9, p. 273.
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349.
- Hassan, O. A. G., Giorgioni, G., & Romilly, P. (2006). The extent of financial disclosure and its determinants in an emerging capital market: the case of Egypt. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1), 41-67.
- Ho, S. S. M., & Shun Wong, K. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure<sup>7</sup>. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139-156.
- Hossain, M., Perera, M. H. B., & Rahman, A. R. (1995). Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial Management & Accounting*, 6(1), 69.

- Hossain, M., Tan, L. M., & Adams, M. (1994). *Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur stock exchange*: Dept. of Accountancy, Massey University.
- 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, Manchester
- Hussainey, K., Schleicher, T., & 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*, 33(4), 275-294.
- Inchausti, A. G. (1997). The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *European Accounting Review*, 6(1), 45-68.
- Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31(2), 246-271.
- Li, F. (2008). Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics*, 45(2-3), 221-247.
- Li, F. (2008). The Determinants and Information Content of the Forward-looking Statements in Corporate Filings - A Naive Bayesian Machine Learning Approach. *SSRN eLibrary*.
- Li, F. 2008. Seeing the future through the eyes of managers: the information content of forward-Looking statements in corporate filings—a naive Bayesian machine learning approach  
Working paper, University of Michigan
- Lutfe. M.M. (1989) "Voluntary Financial Disclosure and the Unlisted Securities Market: An Empirical Investigation", PhD Thesis, Glasgow University, Scotland, UK
- Malone, D., Fries, C., & Jones, T. (1993). An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry. *JOURNAL OF ACCOUNTING AUDITING AND FINANCE*, 8, 249-249.
- McNally, G.M., Eng, L.H. and Hasseldine, C.R. (1982), "Corporate finance reporting in New Zealand: an Analysis of user preferences, corporate characteristics and disclosure practices for Discretionary information", *Accounting & Business Research*, Vol.13, pp.11-20
- Meek, G. K., Roberts, C. B., & Gray, S. J. (1995). Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of International Business Studies*, 555-572.
- Naser, K., & Al-Khatib, K. (2000). THE EXTENT OF VOLUNTARY DISCLOSURE IN THE BOARD OF DIRECTORS'S STATEMENT: THE CASE OF JORDAN. *Advances in International Accounting*, 13, 99-118.

- Naser, K., Al-Khatib, K., & Karbhari, Y. (2002). Empirical evidence on the depth of corporate information disclosure in developing countries: the case of Jordan. *International Journal of Commerce and Management*, 12(3/4), 122-155.
- Omar.B.F. (2007) “Exploring the Aggregate, Mandatory and Voluntary Financial Disclosure Behavior Under A new Regulatory Environment: The Case of Jordan”, PhD Thesis, Hull University, UK.
- Owusu-Ansah, S. (1998). The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting*, 33(5), 605-631.
- Parsa.S. (2001) “Non-Financial Information Disclosure Communication in Large UK Companies”, PhD Thesis, Middlesex University, UK
- Patton, J., & Zelenka, I. (1998). An empirical analysis of the determinants of the extent of disclosure in annual reports of joint stock companies in the Czech Republic. *European Accounting Review*, 6(4), 605-626.
- Prencipe, A. (2002). Proprietary Costs and Voluntary Segment Disclosure: Evidence from Italian Listed Companies. *SSRN eLibrary*. doi: 10.2139/ssrn.319502
- Raffournier, B. (1995b). The determinants of voluntary financial disclosure by Swiss listed companies. *European Accounting Review*, 4(2), 261-280.
- Schleicher, T., Hussainey, K., & Walker, M. (2007). Loss firms’ annual report narratives and share price anticipation of earnings. *The British Accounting Review*, 39(2), 153-171.
- Singhvi, S. S., & Desai, H. B. (1971). An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review*, 46(1), 129-138.
- Wallace, R. S. O., & Naser, K. (1995). Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong. *Journal of Accounting and Public Policy*, 14(4), 311-368. doi: 10.1016/0278-4254(95)00042-9
- Wallace, R. S. O., Naser, K., & Mora, A. (1994). The relationship between the comprehensiveness of corporate. *Accounting and Business Research*, 25(97), 41.
- Wang, K., & Claiborne, M. C. (2008). Determinants and consequences of voluntary disclosure in an emerging market: Evidence from China. *Journal of International Accounting, Auditing and Taxation*, 17(1), 14-30.