



**Accounting Disclosure Tone and Conservative Debt Policy  
Empirical Study on the Egyptian Companies Listed in Stock Exchange**

*By*

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*Scientific Journal for Financial and Commercial Studies and Researches  
(SJFCSR)*

Faculty of Commerce – Damietta University

**Vol.2, No.2, Part 1., July 2021**

**APA Citation:**

**Abdel Rehim, A. I.** (2021). Accounting Disclosure Tone and Conservative Debt Policy: Empirical Study on the Egyptian Companies listed in Stock Exchange, *Scientific Journal for Financial and Commercial Studies and Research*, Faculty of Commerce, Damietta University, 2(1)1, pp.155-190.

**Website:** <https://cfdj.journals.ekb.eg/>

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**Abstract**

The research aims to study the relation between accounting disclosure tone (Positive tone – Negative tone – Net tone) and conservative debt policy (the low-leverage puzzle). The study investigates hypotheses on a sample of 60 Egyptian firms listed in Stock Exchange in the period (2013-2019). Using content analysis and logistic regression to analyze the formulation of news found in financial reports and periodic disclosures published on the Egyptian Stock Exchange. The results indicate a negative and significant relation between positive disclosure tone and conservative debt policy, meaning that with an increase (decrease) in the disclosure tone, firms are less (more) conservative in debt policy. This result is consistent with (Malmendier et al., 2011). The results also indicate that there is a positive and significant relation between (Negative - net) disclosure tone and conservative debt policy. This result can be explained that managers may retain more cash for future investment than their rational counterparts and are reluctant to use external financing. This result is consistent with (Malmendier et al., 2011).

**Keywords:** Accounting Disclosure Tone – conservative debt policy - content analysis - Positive tone – Negative tone – Net tone.

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### **Introduction**

The fact that many firms adopt conservative principles is a persistent and puzzling empirical regularity financial policy. Such firms tend to decrease leverage in that they have lower loans than the predictions of traditional capital structure theories could indicate. (Myers, 1984) illustrate the negative relationship between profit and debt that is well documented through capital structure theories. Lately, (Graham, 2000) shows that conservative debt policy is a common mystery of capital structure, that there are some untraditional firms where borrowings are substantially lower than the amount considered to be ideal. After the seminal work of (Modigliani and Miller, 1958, 1963), several researchs have relied on trade-off theory and pecking order theory to explain the influence of different firms and market attributes on the structure of firm capital. (Frank and Goyal, 2009). Recent studies emphasize the importance of personal characteristics of managers when assessing capital structure (Malmendier et al., 2011). However, there is mystery in the studies that some firms have low leverage and, especially the levels of debt are mostly lower than the ideal level (Graham, 2000). Studies indicate that biases in management (for example, optimistic, pessimistic) play a significant role in understanding organizational policies, suggesting that managers tend to use disclosure tone to impact debt conservatively.

Our measure of disclosure tone is built using content analysis of the annual report tone published on the Egyptian Stock Exchange. It is known that language may illustrate the speaker's psychological biases generally (Garrard et al., 2014). And firm's disclosure content analysis (is being) done to assess the behavioral characteristics of management notably (Li, 2010a). The measure of tone is built on the notion that positive tone can reflect an optimistic tendency of the manager (Davis et al., 2015). The notion is followed by the psychology studies which indicate that positive (optimists) and negative (pessimists) managers vary in how they deal with difficulty. In particular, optimism is sometimes related to such management methods like the 'positive rephrasing' of solving problems in light of their other positive sides (Carver and Scheier, 2002). Optimism is usually related to positive thought, which seeks to find the advantage in

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poor circumstances and focuses less on negative sides of their experience (Carver and Scheier, 2002). We, therefore assume that positive manager (optimistic) prefers to use many positive sentences and less negative sentences. And negative managers (pessimistic) also prefer to use many negative sentences and less positive sentences.

In academic literature, accounting disclosure tone receives considerable attention in deciding the capital structure of firms (Heaton, 2002 & Hackbarth, 2008 & Malmendier et al., 2011 & Graham et al., 2013). Recent studies indicate that the disclosure tone of management can either raise or reduce debt. For instance, (Hackbarth, 2008) expands the theory of trade-off to illustrate that positive managers who overvalue the rate of earnings growth use more debt relative to realistic managers. On the other hand, (Malmendier et al., 2011) indicates that optimism of management, which is related to the overvalue of expected investment profits, may lead to conservative use of debt because positive (optimistic) managers overvalue external funding costs and favor equity fundings. Therefore, the optimism of management has the ability to justify the reduce in leverage. These results are focused primarily on a time-invariant optimism measure focused on the option that catches the propensity of managers to keep their cash choices way long. To manage firm fixed effects, (Malmendier et al., 2011) compares financial leverage of different managers running the same firm and indicate that positive (optimistic) managers prefer to increase leverage than other realistic managers. (Graham et al., 2013) investigate the relationship between the measure of optimism that rely on survey and financial leverage. However, they have not managed firm fixed effects. The primary difference in the approach between this research and the literature above is that literature is concerned with studying the effect of the optimistic tone only on Conservative Debt Policy, while the current study will be interested in studying the effect of the accounting disclosure tone, whether optimistic (positive tone), pessimistic (negative tone) or net tone on Conservative Debt Policy. The study will be based on the method of content analysis of the tone of the annual reports.

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## **1. Research objective**

This research aims to study the effect of the disclosure tone (optimistic/pessimistic or positive/negative and Net tone) on Conservative Debt Policy.

### **Research Contribution**

**In two ways, this research contributes to the literature.**

- 1.** This research tries to fill the gap in the literature of accounting Disclosure tone and conservative debt policy.
- 2.** This research provides the literature with new empirical evidence on the relation between the accounting disclosure tone and the conservative Debt policy. In specific, the research presents evidence from an emerging market about how Conservative Debt Policy can be explained by the disclosure linguistic tone.

This research is organized as follows. **In Section 2**, we describe Corporate Disclosure Tone. **Section 3** presents a literature review of how accounting disclosure tone affects a firm's debt conservative. **In Section 4**, we developed hypothesis. **Section 5** describes the methodology of research. The results of research are discussed **in Section 6**, and **Section 7** Conclusion of the study.

### **2. Corporate Disclosure Tone: An Overview**

The accounting disclosure tone means the formulation of the accounting disclosures used to disclose good or bad news. What determines the type of news that must be disclosed, whether that news is good or bad, is the performance of the firm in general and the performance of management in particular as an agent for shareholders. Many studies have presented similar definitions for the accounting disclosure tone. The study of (Arena et al., 2014 & Arena et al., 2013) showed that accounting disclosure tone refers to the use of an optimistic or pessimistic tone in disclosure, which is a feature of narrative disclosure. It is done through the use of actions that express the bias of managers.

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The study of (Kang et al., 2018) also indicated that the tone of the accounting disclosure is the tone that describes the firm's performance and its future trends, positively or negatively, in the financial reports. (Aly et al., 2018) refers to that the management discloses news through the signals it sends to the users of the financial statements and reports and periodic disclosures that are published, whether these news relate to the profitability, the level of growth, financial position of the firm, its ability to pay debts, and strategic information related to productivity and competitive strategies, research, development and quality Products, performance of different sectors of the firm. That is, the accounting disclosure formulation is the positive tone (good news) or negative tone (bad news) that is used by management when disclosing current or future financial performance with financial reports and how it affects users positively or negatively when making decisions.

The study of (Gonzalez et al., 2019) also confirmed that accounting disclosure tone is closely linked to the actual and potential performance of the firm. The study of (Davis & Tama-Sweet, 2012) also showed that the tone of disclosure that managers use is influenced by the actual and potential financial performance and contractual arrangements. The study also showed that managers tend to use a tone more positive and less negative with regard to economic gains, which means that the use of a positive tone in accounting disclosure is related with lower future returns. This indicates that managers may use the positive tone as more appropriate to disclose future information. Firms' financial decisions are still an ignored field of study, while shareholders can explain the tone of disclosure as providing important soft information. Prior literature indicate that the tone of disclosure could be utilized to (1) 'notify' shareholders and therefor decrease the asymmetry of information, (2) purposely mislead' shareholders by managers who want to influence the perception of shareholders, or (3) 'accidentally mislead' shareholders by positive managers whose languages and/or behavior are probably to be influenced by their biased optimism.

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The tone of disclosure is depending on three different explanation from information asymmetry, perception of management, and optimistic point of view respectively. From an information asymmetry point of view, shareholders can view a positive tone of disclosure as providing additional information to shareholders, and therefore decrease the asymmetry of information between managers and shareholders (Merkl-Davies and Brennan,2011). The tone of information asymmetry analysis is built on the premise that shareholders are reasonable and capable of undoing reporting bias. Thus, provided that reporting bias might decrease stock price performance and reputation of management (Baginski et al., 2000), there is no reason for managers to participate in prejudiced (biased) reporting. (Lang andlundholm,2000). By Examining voluntary disclosure practice related to share offers and its effects on stock price, they indicate that firms experience comparatively smaller price reductions at the announcement date with a higher standard of transparency. This is due to that disclosure decrease the cost of information which related to share offering. In additional, (Kothari et al., 2009) shows that positive disclosure tone is correlated negatively with the cost of capital equity and volatility in returns that is consistent with the notion that disclosure may reduce information asymmetry (Diamond and Verrecchia, 1991& Easley and O'Hara, 2004).

***Impression management perspective:*** ‘Purposely trying to mislead the tone of disclosure of investors may be seen as a form of impression management that the executives aim to 'purposely mislead' shareholders or manipulate the perception of firm success by shareholders. More precisely, the impression of management maybe due to agency problems between managers and shareholders where biased reporting is a strategic choice for self-interested managers to maximize their personal wealth (Merkl-Davies and Brennan, 2007). In addition, the impression of management can be utilized as another tool besides ‘reduction of information asymmetry’ to minimize equity costs, called ‘hyping’ (Lang and Lundholm, 2000).

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Empirically, (Lang and Lundholm 2000) indicate that a significant rise in firms' disclosure during the six months prior to offering the stock leads to increase of the price before offering the stock. However, there are more negative returns for those firms at and after the disclosure. This argument consisting accidentally mislead' shareholders, positive tone of disclosure may be a product of managerial optimism \ hubris from a behavioral/psychological perspective, (Merkl-Davies and Brennan, 2011). This means that, shareholders are 'accidentally misled by irrational managers. However, existing literature on corporate disclosure largely neglects this behavioral interpretation of tone (Brennan and Conroy, 2013).

(Amernic and Craig, 2007) highlight the value of controlling repetitive narcissistic words often utilized by narcissist managers in their shareholders messages. Numerous studies indicate evidence of management bias that was observed using the firm disclosure manual and linguistic analysis. For instance, (Craig and Amernic, 2011) observe harmful narcissism in Enron, Starbucks and General Motors managers built on shareholder messages from managers. (Brennan and Conroy ,2013) also perform content analysis of perception in bank manager messages to shareholders in a similar vein for revealing personality characteristics of manager (manager attribution).

In addition, Computational content analysis of news release on earnings (Hilary et al., 2016) and manager conference Tweets and earnings calls (Lee et al., 2017) are used to assess the optimism of management. (Davis et al., 2015) investigates the impact of management method on the tone of earnings conference calls. This group of recent evidence supports the notion that the tone used in firm disclosures can be influenced by a manager's unintended tendencies that are overly positive or negative. (Davis et al., 2015). From this view point, positive tone may be perceived as a measure for the optimism of management. (Li, 2010a) indicate that assessing characteristics of management (behavioral) and exploring their consequence is an important area of research on firm disclosures. Thus, this research provides a valuable contribution by studying if conservative debt is associated with disclosure tone and whether this may aid to understand the mystery of low-leverage. This contributes substantially to the under-researched behavioral view point of the disclosure tone.

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### **3. Literature review**

A review of the previous literature shows that there is an increasing literature of accounting and finance that discusses disclosure tone (through using optimistic/pessimistic or positive/negative disclosure words) for different firms. A study (Jegadeesh and wu, 2013) indicated that there is a positive relationship between positive disclosure tone and return volatility. (Huang et al., 2014) also provided practical evidence that managers sometimes use disclosure tone strategically to mislead different stakeholders about future performance of the firm. The results indicate that using positive disclosure tone is associated with poor future performance of the firm. The results of the study (Aly et al., 2018) also indicated that there is a positive relationship between accounting disclosure tone (good news and bad news) in the financial reports and financial performance of the firm, and that there is a mutual influence between accounting disclosure tone and financial performance.

The results of the study (Ferreira et al., 2019) also indicated that there is a positive relationship between accounting disclosure tone and current, future performance. In this context the results of (Caserio et al., 2020) indicate that firms with a strong financial performance, managers use disclosure tone to help them explain current performance and enable them to predict future performance. While firms with a weak financial performance, managers rely on optimistic disclosure tone in an attempt to mislead users about the reality of poor financial performance. (Ahmed and Xu, 2019) also found that the optimistic tone of the disclosure is positively related to both the rise in future performance and the continuation of earnings, and negatively related to the decrease in volatility and bankruptcy risk. In this context, the results of (Del Gaudio et al., 2020) indicated that the information obtained through the pessimistic tone of accounting disclosure helps banks to explain the risks of bankruptcy. In a study (Gonzalez et al., 2019), it was concluded that the market value of the firm and the accounting financial performance are positively affected by the optimistic tone of disclosure and negatively by the pessimistic tone of disclosure.

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Several studies have also focused on studying the relationship between tone of accounting disclosure of various firms' disclosures including Managerial Discussion (Li, 2010b& Feldman et al., 2010& Davis and Tama-Sweet, 2012& Huang et al., 2014). press releases on earnings (Henry, 2008& Davis et al., 2012&Huang et al., 2014& Henry and Leone, 2016&Hilary et al., 2016). Conference calls and earnings (Price et al., 2012&Larcker and Zakolyukina, 2012&Davis et al.,2015&Lee et al.,2017). In specific, this line of research investigates if disclosure tone of different firms is linked to, for instance, cost of capital, variability of return, and analyst forecasts (Kothari et al., 2009), shareholder litigation (Rogers et al., 2011), financial misreporting (Larcker and Zakolyukina, 2012), earnings quality (Li, 2010b), and market pricing (Henry, 2008& Li, 2010b& Feldman et al., 2010& Davis et al., 2012).

#### **4. Developed Hypotheses**

Traditional firms financing theories. The theory of trade-offs (Modigliani and Miller, 1958, 1963) and pecking order theory (Myers and Majluf, 1984) are two prevalent funding decision theories. The traditional trade-off theory assume that funding decisions are built on the exchange between the benefits of tax and cost of bankruptcy. This means that there is an optimal level of leverage which happens when the marginal benefits of debt equal the marginal costs of debt. Pecking order theory assumes that internal rather than external funding is preferred, and in the case of insufficient internal funding, firms preferred debt to equity. This is due to the fact that internal funding is not exposed to any costs (zero cost) of information, although equity is more probably to be underestimated by external shareholders and information cost is higher than debt. Between these two conflicting ideas of theories, a great effort was put into running empirical research. Although such two conventional method to the structure of capital are not especially helpful in explaining most of the essential literature puzzle .one such puzzle is keeping low- level of debt puzzle, referring to the fact that firms frequently retain comparatively low level of debt. (Graham, 2000& Strebulaev and Yang, 2013).

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This result is confusing due to it opposing the trade-off hypothesis that firms will raise leverage, primarily to keep tax advantage, specifically, if the firm's leverage is less than its ideal level. In addition, according to pecking-order theory, firms that reduce its leverage might make more conservative use of equity. Nevertheless, this prediction is frequently incompatible with the empirical evidence and many big leverage determinants are often not accounted for by this theory (Fama and French, 2002& Frank and Goyal, 2003). Therefore, (Graham,2000) implies that all explanations of those theories do not provide a complete explanation, this is for firms that keep low levels of leverage. The incomplete explanation of conventional theories may be due to the rigid presumption that there are no behavioral biases among managers.

The following discussion highlights the impact of behavioral bias, in a firm's funding decision called accounting disclosure tone of management. The importance of a managerial characteristic is usually ignored in the traditional capital structure studies. We add to the studies by examining the relationship between disclosure tone and financial leverage that can be used to understand conservative of debt. Our principal hypothesis is built on behavioral models that linked the tone of accounting disclosure to funding decisions (Heaton, 2002 Hackbarth, 2008&Malmendier et al., 2011& Rogers et al., 2011). New studies suggest that, disclosure tone expresses the manager's tendency for optimism (positive) or pessimism (negative)' (Davis et al., 2015).

In other terms, by using more positive words in their firm's disclosures, optimistic managers can accidentally mislead investors. According to this point, (Hilary et al., 2016) and (Lee et al., 2017) analyze the tone of management words to assess positive and negative executive managers. Hence, the results suggest that accounting disclosure tone can catch a specific attribute or belief of executive's managers especially optimism or pessimism. Therefore, the development of this study hypothesis highlights the impact of this specific attribute of managers (not of firms or markets).

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The impacts of accounting disclosure tone (optimistic, pessimistic, and net) on leverage are discussed. On the other hand, (Malmendier et al., 2011), indicate that positive (optimistic) management may contribute to increasing debt, because of management's bias for debt rather than financing by equity. That is, positive managers who will overestimate the average investment return to issuing equity in a more conservative manner than debt. Additionally, (Heaton, 2002) indicates that a positive manager who overestimates the comparable strong performance of the firm assume that equity is underestimated by external shareholders and therefore favor leverage (debt) over equity. Moreover, the trade-off theory indicates that, positive managers who overestimate the rate of earnings growth, and reduce the financial risks of debt, would Consequently continue to use leverage compared to realistic managers (Hackbarth, 2008). Through this viewpoint, management optimism might be positively correlated with leverage. In contrast, management optimism would contribute to decrease the level of debt (debt conservatism) according to (Malmendier et al., 2011) concerning firms that have adequate internal funding (retained earnings).

This is especially true because positive managers can hold cash for potential investment. (Huang-Meier et al. ,2016) illustrate that positive managers keep more capital than their realistic peers. Their results are in line with the argument (Malmendier et al., 2011) that positive managers are often more cautious to use external financing, as positive managers rely on keeping more cash. That is, managerial optimism may lead the firm to give up tax advantages and thus be under-leveraged according to the ideal level of debt. To test the empirical proposition that accounting disclosure tone could contribute to the conservative debt policy, the current study will test the following hypothesis.

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**The following hypothesis was developed by the researcher as a result of scanning the literature review:**

**H1:** There is a relation between accounting disclosure tone and conservative debt policy

**The following Sub- hypotheses are derived from this main hypothesis.**

**H1\1:** There is a relation between positive (optimistic) tone and conservative debt policy.

**H2\1:** There is a relation between negative (pessimistic) tone and conservative debt policy.

**H3\1:** There is a relation between net tone and conservative debt policy

## **5. Methodology of the research**

In order to achieve the key research objectives, the data of the firms listed in the Egyptian exchange market for the period 2013-2019 will be analyzed, with a total number of firms equal to 60 firms. A review of the literature on the research variables will be performed by the researcher and the content analysis will be used to analyze the formulation of news contained in financial reports and periodic disclosures published on the Egyptian Stock Exchange. To measure the values of the other variables the researcher will use secondary data that requires more processing from the annual reports of the firms. In order to test the research hypotheses, the researcher will perform a statistical analysis using SPSS package with the use of the descriptive analysis, Pearson correlation analysis, and logistic regression analysis.

### **5.1 Variable description**

#### **Independent Variable**

##### **Disclosure Tone**

It means the type of news disclosed in reports, whether it is good, bad or regular. It is measured through:

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■ **Positive tone**

It is the news that gives a positive impression of the firm's performance and management performance and is represented in (information related to the increase in the share price, information related to the increase in sales and profits, information related to the increase in cash flows, information related to the firm's ability to pay obligations, excellence in strategies related to research and development and quality products, information on low costs). measured through: *Positive Words<sub>it</sub> / Total Words<sub>it</sub>*.

■ **Negative tone**

It is the news that gives a negative impression of the firm's performance and management performance and is represented in (information related to the decrease in the share price, information related to the decrease in sales and profits, information related to a decrease in cash flows, information related to the firm's inability to pay obligations, a decrease in excellence in strategies related to research and development and quality products, information related to cost increase). Measured through: *Negative Words<sub>it</sub> / Total Words<sub>it</sub>*.

■ **Net tone**

It is news that relates to the ordinary matters of the firm and does not affect stock prices, and is related to.

- Disclosing an invitation to the Ordinary General Assembly to consider the result of the firm's business

- Announcing the publication of the disclosure report on the stock exchange trading screens

Disclosure of the date of the beginning and end of the firm's financial year.

- Repeated disclosure of the number of shares and the nominal value of the share measured through: *Positive Words<sub>it</sub> – Negative Words<sub>it</sub> / Total Words<sub>it</sub>* (Wu et al., 2019&Aly et al., 2018).

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The measure of accounting disclosure tone is established, focusing on the annual report's linguistic tone. Content analysis method is used to analyze the formulation of news found in financial reports and periodic disclosures published on the Egyptian Stock Exchange website related to: The stock price and profitability, the level of growth or decline in assets, the increase or decrease in sales, costs and cash flows, the firm's ability to pay debts, strategic information related to productivity and research and development. Then the formulation of that news is classified into positive tone – negative tone – Net tone. To ensure the correct classification of this news, annual reports were presented to some specialists to read and sort sentences in reports and classify them into positive, negative and net tone. (Aly et al., 2018)

## **5.2 Dependent variable**

### **- Conservative Debt Policy**

Financial conservatism has been defined as a continuing financial policy of low leverage. This research measure financial policy over a seven-year time period to catch continuity over time. A firm is classified as financially conservative (i.e., with low leverage) if its annual ratio of long-term debt (including the current portion of long-term debt) to total assets is in the bottom 20 % of all firms for three consecutive years. Whereas, using a definition based on one year is not clearly able to distinguish between temporary and permanent conservative debt policy (Minton and Wurck,2002). The firms are classified by a dummy variable that takes the value one if the firm is conservative in financial leverage, zero otherwise.

To achieve this, five overlapping groups were formed for a period of 3 years ending in (2015 - 2016-2017-2018-2019). As shown in table (1).

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**Table (1): observation of research**

|                | 2013          | 2014          | 2015          | 2016          | 2017          | 2018 | 2019 |
|----------------|---------------|---------------|---------------|---------------|---------------|------|------|
| <b>Group 1</b> | (2013 - 2015) |               |               |               |               |      |      |
| <b>Group 2</b> |               | (2014 - 2016) |               |               |               |      |      |
| <b>Group 3</b> |               |               | (2015 - 2017) |               |               |      |      |
| <b>Group 4</b> |               |               |               | (2016 - 2018) |               |      |      |
| <b>Group 5</b> |               |               |               |               | (2017 - 2019) |      |      |

### 5.3 Control variables

- **Dividend**

Previous studies indicate mixed results regarding the relation of distributions paid with financial leverage (Dang, 2013) in an analysis of the characteristics of firms freed from financial leverage during the period from 1980-2007. The firms that use a conservative debt policy pay more distributions .It is measured by the ratio of dividends paid to total assets.

- **Size**

With regard to the relation of financial leverage with the size of the firm, a study (Chen et al., 2014 & Loncan and Caldeira, 2014) found a positive relation between the size of the firm and financial leverage, meaning that difficult firms are characterized by low financial leverage, as a study (Dang, 2013) showed that firms which use a conservative debt policy are small. It is measured by the natural log of total assets at the end of the year.

- **Growth rate**

Consistent with the pecking order theory, (Loncan and Caldeira, 2014) indicated that firms with great growth opportunities maintain low levels of financial leverage (conservative in financial leverage) and this relationship supports the point of view that firms under great growth opportunities have the motivation which is preventive, and this is also consistent with capital structure studies that provide evidence of a negative relationship between leverage and growth opportunities (Barclay et al., 2006). It is measured by the rate of change in sales.

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▪ **Operating cash flow**

A study (Ferreira and Vilel, 2004) indicated that firms that have large cash flows do not need external funding, and therefore, there is probably an adverse relation between financial leverage and cash flows, as a study (Minton and Wruck, 2001) showed that firms with Conservative leverage have sufficient cash flows to fund the expenditures. It is measured by Cash flows from operating to total assets

▪ **Cash holding**

Firms are expected to retain more cash in light of low debts, because firms are exposed to less market control. Furthermore, the cost of funds rises with financial leverage, contributing to a rise in the cost of holding liquid securities (Sun et al.,2012). This is in line with the findings of (Chen et al., 2014). It is measured by the ratio of cash and cash equivalents to total assets at book value. (Tran et al.,2020) find that positive(optimistic) managers keep cash for potential investment options more than negative(pessimistic) managers do.

**5.5 Research models**

The researcher depends on the hypothesis of the research test on three models of logistic regression to test the effect of both positive tone, negative tone, net disclosure tone and Conservative Debt Policy.

**Model (A): testing the effect of a positive disclosure tone on Conservative Debt Policy.**

$$\text{Log}\left(\frac{P}{1-P}\right) \text{ or Log (Odds)} = \beta_0 + \beta_1 \text{ Positive tone}_{it} + \beta_2 \text{ CFO}_{it} + \beta_3 \text{ Divid}_{it} + \beta_4 \text{ Size}_{it} + \beta_5 \text{ Grow}_{it} + \beta_6 \text{ CASH}_{it} + \varepsilon_{it}$$

For CDP<sub>it</sub> (1)

**Whereas:**

|                                   |   |
|-----------------------------------|---|
| <b>CDP<sub>it</sub></b>           | <b>: Conservative Debt Policy of firm i in fiscal year t.</b>             |
| <b>Positive tone<sub>it</sub></b> | <b>: Good disclosure tone of firm i in fiscal year t.</b>                 |
| <b>CFO<sub>it</sub></b>           | <b>: operating cash flow of firm i in fiscal year t.</b>                  |
| <b>Divid<sub>it</sub></b>         | <b>: dividend paid of firm i in fiscal year t .</b>                       |
| <b>Size<sub>it</sub></b>          | <b>: natural log of total assets in fiscal year t.</b>                    |
| <b>Grow<sub>it</sub></b>          | <b>: rate of change in sales of firm i in fiscal year t.</b>              |
| <b>CASH<sub>it</sub></b>          | <b>: ratio of cash and cash equivalents to total assets at book value</b> |
| <b>ε<sub>it</sub></b>             | <b>: Error of firm i in fiscal year t .</b>                               |

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**Model (B): testing the effect of negative disclosure tone on Conservative Debt Policy.**

$$\text{Log}\left(\frac{P}{1-P}\right) \text{ or Log (Odds)} = \beta_0 + \beta_1 \text{Negative tone}_{it} + \beta_2 \text{CFO}_{it} + \beta_3 \text{Divid}_{it} + \beta_4 \text{Size}_{it} + \beta_5 \text{Grow}_{it} + \beta_6 \text{CASH}_{it} + \varepsilon_{it}$$

For CDP it (2)

**Whereas:**

**Negative tone<sub>it</sub> : Bad disclosure tone of firm i in fiscal year t.**

**Model (C): testing the effect of Net disclosure tone on Conservative Debt Policy**

$$\text{Log}\left(\frac{P}{1-P}\right) \text{ or Log (Odds)} = \beta_0 + \beta_1 \text{Nettone}_{it} + \beta_2 \text{CFO}_{it} + \beta_3 \text{Divid}_{it} + \beta_4 \text{Size}_{it} + \beta_5 \text{Grow}_{it} + \beta_6 \text{CASH}_{it} + \varepsilon_{it}$$

For CDP it (3)

**Whereas:**

**Nettone<sub>it</sub> : Net disclosure tone of firm i in fiscal year t.**

In this section, the researcher used a set of statistical methods to test the research hypotheses. Statistical methods included descriptive analysis and Pearson correlation analysis. This part of the research will begin with showing the results of the descriptive analysis.

### **6.1 Descriptive analysis**

Table (2) shows descriptive analysis results of the research variables: disclosure tone (Positive tone, Negative tone, and Net tone), Conservative Debt Policy, growth, Operating cash flow, Size and dividend. The results of descriptive analysis are for the data tested by the researcher that are obtained from Egyptian exchange market for the period( 2013-2019).

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**Table (2): Descriptive analysis**

| <b>variables</b>                  | <b>N</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|-----------------------------------|----------|----------------|----------------|-------------|-----------------------|
| <b>Positive tone<sub>it</sub></b> | 300      | .21            | .96            | .5617       | .20040                |
| <b>Negative tone<sub>it</sub></b> | 300      | .11            | .90            | .5551       | .22780                |
| <b>Nettone<sub>it</sub></b>       | 300      | .10            | .96            | .4041       | .19369                |
| <b>SIZE<sub>it</sub></b>          | 300      | 7.3250         | 9.9789         | 8.425182    | .5465967              |
| <b>Grow<sub>it</sub></b>          | 300      | .21            | .99            | .5638       | .14604                |
| <b>CDP<sub>it</sub></b>           | 300      | 0              | 1              | .58         | .494                  |
| <b>divid<sub>it</sub></b>         | 300      | .01            | .93            | .3741       | .20952                |
| <b>CFO<sub>it</sub></b>           | 300      | 5.02           | 9.49           | 7.2827      | .80032                |
| <b>CASH<sub>it</sub></b>          | 300      | .001           | .982           | .32748      | .249364               |
| <b>Valid N (listwise)</b>         | 300      |                |                |             |                       |

Table (2) shows the results of the minimum, maximum and the standard deviation for the research variable disclosure tone where the Positive tone of the firm ranged from (0.21 to 0.96 ),with standard deviation(0.20) , Negative tone of the firm ranged from(0.11 to 0.90) with mean (0.55) and standard deviation(0.22),and net tone of the firm ranged from (0.10 to 0.96) with mean (0.40) and standard deviation (0.19), The results give an overview of the data that shows the existence of a wide range between the values of the accounting disclosure tone variables among the research sample firms. The results also showed that the firm size mean (log of total assets) is (8.425182) with a standard deviation of (0.5465967). And the mean of (growth, dividend, operating cash flow) are (0.5638 & 0.3741& 7.2827) respectively.

## **6.2 Correlation Analysis**

The Pearson correlation analysis was performed to determine the direction and significance of correlation among the variables of the study (Positive tone, Negative tone, Net tone, Conservative debt policy, Size, dividend, operating cash flow, and Cash holding) as follows.

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**Table (3): Pearson correlation analysis**

|              |                     | Correlations |              |              |         |        |        |         |        |        |
|--------------|---------------------|--------------|--------------|--------------|---------|--------|--------|---------|--------|--------|
|              |                     | CDPit        | Positivetone | Negativetone | Nettone | SIZEit | Growit | dividit | CFOit  | CASHit |
| CDPit        | Pearson Correlation | 1            |              |              |         |        |        |         |        |        |
|              | Sig. (2-tailed)     |              |              |              |         |        |        |         |        |        |
|              | N                   | 300          |              |              |         |        |        |         |        |        |
| Positivetone | Pearson Correlation | .578**       | 1            |              |         |        |        |         |        |        |
|              | Sig. (2-tailed)     | .000         |              |              |         |        |        |         |        |        |
|              | N                   | 300          | 300          |              |         |        |        |         |        |        |
| Negativetone | Pearson Correlation | .563**       | .538**       | 1            |         |        |        |         |        |        |
|              | Sig. (2-tailed)     | .000         | .000         |              |         |        |        |         |        |        |
|              | N                   | 300          | 300          | 300          |         |        |        |         |        |        |
| Nettone      | Pearson Correlation | .534**       | .575**       | .419**       | 1       |        |        |         |        |        |
|              | Sig. (2-tailed)     | .000         | .000         | .000         |         |        |        |         |        |        |
|              | N                   | 300          | 300          | 300          | 300     |        |        |         |        |        |
| SIZEit       | Pearson Correlation | -.017        | .059         | -.032        | -.051   | 1      |        |         |        |        |
|              | Sig. (2-tailed)     | .774         | .307         | .579         | .382    |        |        |         |        |        |
|              | N                   | 300          | 300          | 300          | 300     | 300    |        |         |        |        |
| Growit       | Pearson Correlation | .077         | .183**       | .082         | .235**  | -.033  | 1      |         |        |        |
|              | Sig. (2-tailed)     | .184         | .001         | .154         | .000    | .566   |        |         |        |        |
|              | N                   | 300          | 300          | 300          | 300     | 300    | 300    |         |        |        |
| dividit      | Pearson Correlation | .143         | .430**       | .325**       | .132    | .227** | .026   | 1       |        |        |
|              | Sig. (2-tailed)     | .013         | .000         | .000         | .023    | .000   | .653   |         |        |        |
|              | N                   | 300          | 300          | 300          | 300     | 300    | 300    | 300     |        |        |
| CFOit        | Pearson Correlation | .154**       | .497**       | .262**       | .196**  | .085   | .134   | .619**  | 1      |        |
|              | Sig. (2-tailed)     | .008         | .000         | .000         | .001    | .142   | .020   | .000    |        |        |
|              | N                   | 300          | 300          | 300          | 300     | 300    | 300    | 300     | 300    |        |
| CASHit       | Pearson Correlation | .128         | .298**       | .100         | .110    | .080   | .157** | .450**  | .349** | 1      |
|              | Sig. (2-tailed)     | .027         | .000         | .084         | .056    | .165   | .006   | .000    | .000   |        |
|              | N                   | 300          | 300          | 300          | 300     | 300    | 300    | 300     | 300    | 486    |

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

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

The results from Table (3) showed the Pearson correlation matrix of the dependent variable, Conservative debt policy (CDP), and the independent variables. The results of the correlation of Pearson show that there is a positive correlation between the variable of the accounting disclosure tone (positive tone) with a value of (0.578) at the level of (0.000), and this is an indication of the increase in conservative debt policy. With the increase in the tone of positive disclosure, we also note that there is a positive correlation between the variable of the tone of disclosure (negative tone) and conservative debt policy with a value of (0.563) at the level of (0.000).

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These results are consistent with the view of (Malmendier et al., 2011), optimism in management (positive tone) can lead to greater leverage. This is because optimistic managers prefer debt rather than equity financing. In contrast, pessimistic managers would lead to decrease the level of debt (debt conservatism) because pessimistic managers will maintain cash for future investment.

**With regard to the control variables**

The results showed a negative and non-significant relationship between the variable of firm size and conservative debt policy with a value of (-0.017) at the level of (0.774). Also, the variable of the sales growth rate and conservative debt policy have a positive and non-significant relation with a value of (0.077) at the level of (0.184). The result also showed a positive and significant relationship among (dividend, operating cash flow, and Cash holding) at the level of (0.013 & 0.008 & 0.027) respectively.

**6.3 Results of logistic regression analysis**

**6.3.1 Results of the first hypothesis test for the relationship between the positive disclosure tone and conservative debt policy.**

First, the validity of the logistic regression model as a whole should be checked by the following statistical methods:

▪ **Chi-Square Test**

Table (4) shows the results of the test **Chi-Square** and the level of significance associated with it. It shows out that the test results are equal for each of (Step & model & block) due to the lack of use of the block command in the treatment of sequential regression. It is clear from the table that **Chi-Square** equals (165.479) at 6 degrees of freedom and the level of significance (0.000). This means that the model that was reconciled is statistically significant and that the variables explained in the model are of significance.

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**Table (4): chi- square test**

| <b>Omnibus Tests of Model Coefficients</b> |       |                   |           |             |
|--|-------|-------------------|-----------|-------------|
|  |       | <b>Chi-square</b> | <b>df</b> | <b>Sig.</b> |
| Step 1                                     | Step  | 165.479           | 6         | .000        |
|  | Block | 165.479           | 6         | .000        |
|  | Model | 165.479           | 6         | .000        |

▪ **R<sup>2</sup> Test**

Table (5) show (-2 Log likelihood"-2LL") . It is used in testing the efficiency of the model and its statistical value equals (246,079). This statistical value reflects the extent to which the model is able to predict conservative debt policy. A lower statistical value reflects a better model. The value of the correlation coefficient (R<sup>2</sup>) is calculated in two ways:

Coefficient of Cox& SnellR Square & and coefficient of Nagelkerke R square, they are two statistical measures for expressing (R<sup>2</sup>). They are reliable in interpreting the results, and the (Cox & SnellR<sup>2</sup>) scale is more conservative compared to the Nagelkerk R<sup>2</sup> scale. The Nagelkerke parameter indicates that the variables included in the model explain 58.8% of the changes in conservative debt policy.

**Table (5)**

| <b>Model Summary</b> |                      |                      |                     |
|----------------------|----------------------|----------------------|---------------------|
| Step                 | -2 Log likelihood    | Cox & Snell R Square | Nagelkerke R Square |
| 1                    | 246.079 <sup>a</sup> | .424                 | .568                |

▪ **Classification Efficiency Test**

Table (6) displays a summary of the correct classification efficiency and proportion in the logistical model. The table shows that the predicted event (conservative debt policy) was correctly classified with a ratio of  $(84 \div 132) = 63.6\%$ . This means the ratio of correct observations to unfulfilled observations (prediction sensitivity). Note also that  $(147 \div 168) = 87.5\%$  of observations were classified that predicted event (conservative debt

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policy) was not achieved (Specificity prediction). In general, it is clear that the predictions were correct in  $(147 + 84) = 231$  observation from a total of 300 observation with a rate of 77%, which is a good percentage.

**Table (6) Classification efficiency**

| Observed           |                     |     | Predicted         |      |                    |
|--------------------|---------------------|-----|-------------------|------|--------------------|
|                    |                     |     | CDP <sub>it</sub> |      | Percentage Correct |
|                    |                     |     | 0                 | 1    |                    |
| Step 1             | CDP <sub>it</sub> 0 | 147 | 21                | 87.5 |                    |
|                    | CDP <sub>it</sub> 1 | 48  | 84                | 63.6 |                    |
| Overall Percentage |                     |     |                   | 77.0 |                    |

By comparing the current classification with the initial classification shown in Table (7), it is clear that there has been a significant improvement in the correct rating which the model was achieved, as the rating percentage increased from 56% in step (0) to 77% in step (1).

**Table (7) Classification Table**

| Observed           |                     |     | Predicted         |       |                    |
|--------------------|---------------------|-----|-------------------|-------|--------------------|
|                    |                     |     | CDP <sub>it</sub> |       | Percentage Correct |
|                    |                     |     | 0                 | 1     |                    |
| Step 0             | CDP <sub>it</sub> 0 | 168 | 0                 | 100.0 |                    |
|                    | CDP <sub>it</sub> 1 | 132 | 0                 | .0    |                    |
| Overall Percentage |                     |     |                   | 56.0  |                    |

▪ **Goodness of Fit Test**

(Hosmer-Lemeshow "HL) test (Chi-Square) shows whether the model is sufficiently adequate for the data. As the null hypothesis indicates that the model is good enough for the data, and that null hypothesis (i.e., the model has poor quality) will be rejected if P is greater than 5%, meaning that the higher the value of P the better. As shown in Table (8) of the H-L test, where (P = .351), which is greater than 5%, this is not significant, indicating that the model is good (corresponds well to data).

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**Table (8) Hosmer and Lemeshow Test**

| Step | Chi-square | df | Sig. |
|------|------------|----|------|
| 1    | 8.903      | 8  | .351 |

▪ **Results of the model**

The results of the logistic regression in Table (9) show the relation between the positive disclosure tone and conservative debt policy (at a fixed rate of 20%). The results indicate that there are a negative and significant relations between the positive disclosure tone and the conservative debt policy, meaning that in light of the increase (decrease) in the positive disclosure tone, firms are less (more) conservative in debt policy. This finding supports the validity of the first hypothesis that there is a relation between the positive disclosure tone and conservative debt policy. This result is consistent with trade –off perspective, where managers using positive disclosure tone and tending to overestimate earnings growth would underestimate related costs debt of financial distress and thus continue to use more leverage (less conservative) than their reasonable counterparts. (Malmendier et al., 2011 & Heaton,2002& Hackbarth,2008).

**Table (9) the relation between the positive disclosure tone and conservative debt policy.**

|                     | B       | S.E. | Wald   | df | Sig. | Exp(B)  |
|---------------------|---------|------|--------|----|------|---------|
| Positivetone        | - 4.998 | .623 | 64.379 | 1  | .000 | 148.123 |
| SIZE <sub>it</sub>  | -.001   | .036 | .000   | 1  | .984 | .999    |
| Grow <sub>it</sub>  | -.630   | .753 | .700   | 1  | .403 | .533    |
| divid <sub>it</sub> | -.381   | .665 | .329   | 1  | .566 | .683    |
| CFO <sub>it</sub>   | -2.068  | .811 | 6.499  | 1  | .011 | .126    |
| CASH <sub>it</sub>  | -1.414  | .626 | 5.107  | 1  | .024 | 4.111   |
| Constant            | -3.057  | .681 | 20.158 | 1  | .000 | .047    |

a. Variable(s) entered on step 1: Positivetone, SIZE<sub>it</sub>, Grow<sub>it</sub>, divid<sub>it</sub>, CFO<sub>it</sub>, CASH<sub>it</sub>.



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The results of the logistic regression in Table (10) show the relation between the negative disclosure tone and conservative debt policy (at a fixed rate of 20%). The results indicate that the negative disclosure tone and the conservative debt policy have a positive and significant relationship, meaning that in light of the increase (decrease) in the negative disclosure tone; firms are more (less) conservative in debt policy. This finding supports the validity of the second hypothesis that there is a relation between negative disclosure tone and conservative debt policy. Managers using negative tone may retain cash for future investment (sufficient internal finance) and are cautious to use external funding and thus keep cash than their reasonable peers. This result is in line with the results of a study (Huang- Meier et al.,2016& Malmendier et al.,2011). In short, managerial pessimism would make the firm give up the tax advantage and thus decrease leverage according to the ideal level of debt.

With regard to the control variables the results indicated that dividend and conservative debt have a negative and significant relation. This means reducing dividend payments would reduce the external funding needs for the firm. If the manager is optimistic (positive) about possible investment options, the manager could keep much earnings and decrease dividend payments in order to fulfill potential funding needs. As expected by the model (Deshmukh et al., 2013), optimistic (positive) managers overestimate the importance of new investments considering external funding expenses and attempt to build financial recession by reducing dividends. The negative relationship between management optimism and dividend payments would help in understanding the negative disclosure tone and debt relationship, because the firm will be dependent on lower dividend payments.

**Thus, the equation of logistic regression for the second model.**

$$\text{Log}\left(\frac{P}{1-P}\right) \text{ or Log (Odds)} = -3.416 + 3.140\text{Negative tone}_{it} + 1.608\text{CFO}_{it}$$

$$\text{For CDP}_{it} = -1.221\text{Divid}_{it} + .036\text{Size}_{it} - 0.557\text{Grow}_{it} + 1.109 \text{CASH}_{it} + \varepsilon_{it}$$

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**6.3.3 Results of the Third hypothesis test for the relation between the net disclosure tone and conservative debt policy.**

**Table (11) the relation between the Net disclosure tone and conservative debt policy**

| <b>Variables in the Equation</b> |                     |          |             |             |           |             |               |
|----------------------------------|---------------------|----------|-------------|-------------|-----------|-------------|---------------|
|                                  |                     | <b>B</b> | <b>S.E.</b> | <b>Wald</b> | <b>df</b> | <b>Sig.</b> | <b>Exp(B)</b> |
| Step 1 <sup>a</sup>              | Nettone             | 3.574    | .464        | 59.289      | 1         | .000        | 35.663        |
|                                  | SIZE <sub>it</sub>  | -.002    | .036        | .002        | 1         | .963        | .998          |
|                                  | Grow <sub>it</sub>  | -.919    | .643        | 2.040       | 1         | .153        | .399          |
|                                  | divid <sub>it</sub> | .520     | .540        | .927        | 1         | .336        | 1.682         |
|                                  | CFO <sub>it</sub>   | -.182    | .598        | .093        | 1         | .760        | .833          |
|                                  | CASH <sub>it</sub>  | .196     | .455        | .185        | 1         | .668        | 1.216         |
|                                  | Constant            | -2.096   | .554        | 14.295      | 1         | .000        | .123          |
| Chi-Square test                  |                     | 103.727  |             |             |           |             |               |
| Classification efficiency        |                     | 76.7     |             |             |           |             |               |
| Hosmer and Lemeshow              |                     | 0.434    |             |             |           |             |               |
| Cox & Snell R Square             |                     | 0.292    |             |             |           |             |               |
| Nagelkerke R Square              |                     | 0.392    |             |             |           |             |               |

The results of the logistic regression in Table (11) show the relation between the Net disclosure tone and conservative debt policy (at a fixed rate of 20%). The results indicate that net disclosure tone and the conservative debt policy have a positive and significant relation, meaning that in light of the increase (decrease) in the Net disclosure tone, firms are more (less) conservative in debt policy. This finding supports the validity of the third hypothesis that there is a relation between the tone of net disclosure and conservative debt policy. Managers using net tone may be reluctant to use external financing and therefore keep much cash than their reasonable peers. This result is agreeing with the results of a study (Malmendier et al.,2011).

**Thus, the equation of logistic regression for the third model.**

$$\text{Log}\left(\frac{P}{1-P}\right) \text{ or Log (Odds)} = -2.096 + 3.574\text{Nettone}_{it} - 0.182 \text{ CFO}_{it} + 0.520\text{Divid}_{it} - 0.002\text{Size}_{it} - 0.919\text{Grow}_{it} + 0.196\text{CASH}_{it} + \varepsilon_{it}$$

For CDP<sub>it</sub>

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## **7. Conclusion**

This study examining the relation between accounting disclosure tone and leverage in depth offering evidence that conservatism in debts (The mystery of low leverage) is linked to management positive tone, negative tone and net tone. Hence, the disclosure tone can also help to understand the mystery of low leverage. Built on the computational linguistic study of Egyptian firm's disclosure, the study builds management terms based on optimistic (positive), pessimistic (negative), and net tone. The results indicate that positive tone and conservative debt policy have a negative and significant effect. This results supports ( Malmendier et al., 2011) assumption that positive management tone , known as the overvalued of average cash flow , is related to conservatism of debts . The results show that positive disclosure tone has a negative and significant impact on cash holdings and payment of dividends, indicating that a key explanation that make firms with (positive) managers have less debt, is that these firms keep cash and pay less dividends and therefore do not need external funding. The results indicate also that managers using negative tone may retain cash for future investment (sufficient internal finance) and are hesitant to use external funding and thus keep more cash than their reasonable peers. The results also indicated net disclosure ton and conservative debt policy have a positive and significant relation.

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## References

- Ahmed, Y., and Xu, B. Soft Information Matters: Voluntary Corporate Disclosure Tone and Financial Distress. *available online at: [https://scholargoogle.com/scholar?hl=en&as\\_sdt=0,5&cluster=3386314224948754145](https://scholargoogle.com/scholar?hl=en&as_sdt=0,5&cluster=3386314224948754145), July, 1-49.*
- Aly, D., El-Halaby, S., and Hussainey, K. (2018). Tone disclosure and financial performance: evidence from Egypt. *Accounting Research Journal*, 31 (1), 63-74.
- Amernic, J. H., and Craig, R. J. (2007). Guidelines for CEO-speak: editing the language of corporate leadership. *Strategy and leadership*, 35, (3): 25–31.
- Arena, C., Bozzolan, S., and Michelon, G. (2013). Why are managers optimistic? An investigation of corporate environmental disclosure Tone. *available online at: <https://pdfs.semanticscholar.org/f382/168037d30a55df46103d53124a3b8c6d1878.pdf>, August.*
- Arena, C., Bozzolan, S., and Michelon, G. (2015). Environmental reporting: Transparency to stakeholders or stakeholder manipulation? An analysis of disclosure tone and the role of the board of directors. *Corporate Social Responsibility and Environmental Management*, 22(6), 346-361.
- Atallah, A., Vivian, A., and Xu, B. (2015). Do Actions Speak Louder Than Words? Optimistic Disclosure Tone, Insider Trading and Capital Structure. Working Paper, Loughborough University, School of Business and Economics, Loughborough, UK. Abgerufen von <http://www.busman.qmul.ac.uk/newsandevents/events/eventdownloads/bfwgconference2013acceptedpapers/114954.pdf> [02].
- Baginski, S. P., Hassell, J. M., and Hillison, W. A. (2000). Voluntary causal disclosures: Tendencies and capital market reaction. *Review of Quantitative Finance and Accounting*, 15(4), 371-389.

**Dr. Asmaa Abdel Rehim**

- 
- 
- Barclay, M. J., Smith, Jr, C. W., and Morellec, E. (2006). On the debt capacity of growth options. *The Journal of Business*, 79(1), 37-60.
  - Bertrand, M., and Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly journal of Economics*, 118(4), 1169-1208.
  - Ben-David, I., Graham, J. R., and Harvey, C. R. (2013). Managerial miscalibration. *The Quarterly Journal of Economics*, 128(4), 1547-1584.
  - Brennan, N. M., and Conroy, J. P. (2013). Executive hubris: The case of a bank CEO. *Accounting, Auditing and Accountability Journal*, 26, (2),172–95
  - Cadenillas, A., Cvitanić, J., and Zapatero, F. (2004). Leverage decision and manager compensation with choice of effort and volatility. *Journal of Financial Economics*, 73(1), 71-92.
  - Caserio, C., Panaro, D., and Trucco, S. (2019). Management discussion and analysis: a tone analysis on US financial listed companies. *Management Decision*,58(3),510-523.
  - Chang, X., Dasgupta, S., Wong, G., and Yao, J. (2014). Cash-flow sensitivities and the allocation of internal cash flow. *The Review of Financial Studies*, 27(12), 3628-3657.
  - Chen, Y., Zhang, X., and Liu, Z. (2014). Manager characteristics and the choice of firm “low leverage”: Evidence from China. *American Journal of Industrial and Business Management*, 4(10), 573- 584
  - Craig, R., and Amernic, J. (2011). Detecting linguistic traces of destructive narcissism at-a-distance in a CEO’s letter to shareholders. *Journal of Business Ethics*, 101(4), 563-575.
  - Dang, V. A. (2013). An empirical analysis of zero-leverage firms: New evidence from the UK. *International Review of Financial Analysis*, 30, 189-202.
  - Davis, A. K., and Tama-Sweet, I. (2012). Managers’ use of language across alternative disclosure outlets: Earnings press releases versus MD&A. *Contemporary Accounting Research*, 29(3), 804-837.

**Dr. Asmaa Abdel Rehim**

- 
- 
- Davis, A. K., Piger, J. M., and Sedor, L. M. (2012). Beyond the numbers: Measuring the information content of earnings press release language. *Contemporary Accounting Research*, 29(3), 845-868.
  - Davis, A. K., Ge, W., Matsumoto, D., and Zhang, J. L. (2015). The effect of manager-specific optimism on the tone of earnings conference calls. *Review of Accounting Studies*, 20(2), 639-673.
  - Del Gaudio, B. L., Megaravalli, A. V., Sampagnaro, G., and Verdoliva, V. (2020). Mandatory disclosure tone and bank risk-taking: Evidence from Europe. *Economics Letters*, 286, 1-50.
  - Diamond, D. W., and Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *The journal of Finance*, 46(4), 1325-1359.
  - Deshmukh, S., Goel, A. M., and Howe, K. M. (2013). CEO overconfidence and dividend policy. *Journal of Financial Intermediation*, 22(3), 440-463.
  - Easley, D., and O'hara, M. (2004). Information and the cost of capital. *The journal of finance*, 59(4), 1553-1583.
  - Fama, E. F., and French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The review of financial studies*, 15(1), 1-33.
  - Feldman, R., Govindaraj, S., Livnat, J., and Segal, B. (2010). Management's tone change, post earnings announcement drift and accruals. *Review of Accounting Studies*, 15(4), 915-953.
  - Ferreira, M. A., and Vilela, A. S. (2004). Why do firms hold cash? Evidence from EMU countries. *European financial management*, 10(2), 295-319.
  - Ferreira, F. R., Fiorot, D. C., Motoki, F. Y. S., and Moreira, N. C. (2019). Voluntary disclosure: Empirical analysis of the tone used in conference calls, *Journal of Business Management* (59), 4 July/August.271-284.
  - Frank, M. Z., and Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of financial economics*, 67(2), 217-248.

**Dr. Asmaa Abdel Rehim**

- 
- 
- Frank, M. Z., and Goyal, V. K. (2009). Capital structure decisions: which factors are reliably important? *Financial management*, 38(1), 1-37.
  - Garrard, P., Rentoumi, V., Lambert, C., and Owen, D. (2014). Linguistic biomarkers of Hubris syndrome. *Cortex*, 55, 167-181.
  - Graham, J. R. (2000). How big are the tax benefits of debt? *The Journal of Finance*, 55(5), 1901-1941.
  - González, M., Guzmán, A., Tellez, D. F., and Trujillo, M. A. (2019). What you say and how you say it: Information disclosure in Latin American firms. *Journal of Business Research*, 31 May,1-17.
  - Graham, J. R., Harvey, C. R., and Puri, M. (2013). Managerial attitudes and corporate actions. *Journal of financial economics*, 109(1), 103-121.
  - Hackbarth, D. (2008). Managerial traits and capital structure decisions. *Journal of financial and quantitative analysis*, 43(4),843-881.
  - Heaton, J. B. (2002). Managerial optimism and corporate finance. *Financial management*,31(2), 33-45.
  - Henry, E. (2008). Are investors influenced by how earnings press releases are written? *The Journal of Business Communication*, 45(4), 363-407.
  - Henry, E., and Leone, A. J. (2016). Measuring qualitative information in capital markets research: Comparison of alternative methodologies to measure disclosure tone. *The Accounting Review*, 91(1), 153-178.
  - Hilary, G., Hsu, C., Segal, B., and Wang, R. (2016). The bright side of managerial over-optimism. *Journal of Accounting and Economics*, 62(1), 46-64.
  - Huang, X., Teoh, S. H., and Zhang, Y. (2014). Tone management. *The Accounting Review*, 89(3), 1083-1113.
  - Huang-Meier, W., Lambertides, N., and Steeley, J. M. (2016). Motives for corporate cash holdings: the CEO optimism effect. *Review of quantitative finance and accounting*, 47(3), 699-732.

**Dr. Asmaa Abdel Rehim**

- 
- 
- Jegadeesh, N., and Wu, D. (2013). Word power: A new approach for content analysis. *Journal of financial economics*, 110(3), 712-729.
  - Kang, T., Park, D. H., and Han, I. (2018). Beyond the numbers: The effect of 10-K tone on firms' performance predictions using text analytics. *Telematics and Informatics*, 35(2), 370-381.
  - Kothari, S. P., Li, X., and Short, J. E. (2009). The effect of disclosures by management, analysts, and business press on cost of capital, return volatility, and analyst forecasts: A study using content analysis. *The Accounting Review*, 84(5), 1639-1670.
  - Larcker, D. F., and Zakolyukina, A. A. (2012). Detecting deceptive discussions in conference calls. *Journal of Accounting Research*, 50(2), 495-540.
  - Lang, M. H., and Lundholm, R. J. (2000). Voluntary disclosure and equity offerings: reducing information asymmetry or hyping the stock? *Contemporary accounting research*, 17(4), 623-662.
  - Lee, J. M., Hwang, B. H., and Chen, H. (2017). Are founder CEOs more overconfident than professional CEOs? Evidence from S&P 1500 companies. *Strategic Management Journal*, 38(3), 751-769.
  - Li, F. (2010a), 'Textual Analysis of Corporate Disclosures: A Survey of the Literature', *Journal of Accounting Literature*, (29), 143-65.
  - Li, F. (2010b). The information content of forward-looking statements in corporate filings—A naïve Bayesian machine learning approach. *Journal of Accounting Research*, 48(5), 1049-1102.
  - Loncan, T., and Caldeira, J. (2014). Capital structure, cash holdings and firm value: a study of Brazilian listed firms: A Study of Brazilian Listed Firms. *Revista Contabilidade and Finance*, 25(64), 46-59.
  - Malmendier, U., Tate, G., and Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *The Journal of finance*, 66(5), 1687-1733.
  - Malmendier, U., and Zheng, H. (2012). Managerial duties and managerial biases. University of California at Berkeley *Working Paper*.

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- 
- Merkl-Davies, D. M., and Brennan, N. M. (2007). Discretionary disclosure strategies in corporate narratives: incremental information or impression management? *Journal of accounting literature*, 27, 116-196.
  - Merkl-Davies, D. M., and Brennan, N. M. (2011). A conceptual framework of impression management: new insights from psychology, sociology and critical perspectives. *Accounting and business research*, 41(5), 415-437.
  - Minton, B. A., and Wruck, K. H. (2002). Financial conservatism: Evidence on capital structure from low leverage firms. *Available at [http: papers.ssrn.com](http://papers.ssrn.com)*
  - Myers, S. C., and Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13( 2), 187–221.
  - Modigliani, F., and Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3), 261-297.
  - Modigliani, F., and Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. *The American economic review*, 53(3), 433-443.
  - Price, S. M., Doran, J. S., Peterson, D. R., and Bliss, B. A. (2012). Earnings conference calls and stock returns: The incremental informativeness of textual tone. *Journal of Banking & Finance*, 36(4), 992-1011.
  - Rogers, J. L., Van Buskirk, A., and Zechman, S. L. (2011). Disclosure tone and shareholder litigation. *The Accounting Review*, 86(6), 2155-2183.
  - Strebulaev, I. A., and Yang, B. (2013). The mystery of zero-leverage firms. *Journal of Financial Economics*, 109(1), 1-23.
  - Scheier, M. F., Carver, C. S., and Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-

**Dr. Asmaa Abdel Rehim**

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- 
- mastery, and self-esteem): a reevaluation of the Life Orientation Test. *Journal of personality and social psychology*, 67(6), 1063.
- Sun, Q., Yung, K., and Rahman, H. (2012). Earnings quality and corporate cash holdings. *Accounting and Finance*, 52(2), 543-571.
  - Tran, L. T. H., Tu, T. T. K., and Hoang, T. T. P. (2020). Managerial optimism and corporate cash holdings. *International Journal of Managerial Finance*. <https://www.emerald.com/insight/1743-9132.htm>
  - Wu, G. G. R., Hou, T. C. T., and Lin, J. L. (2019). Can economic news predict Taiwan stock market returns? *Asia Pacific Management Review*, 24(1), 54-59.
  - Tran, L. T. H., Tu, T. T. K., & Hoang, T. T. P. (2020). Managerial optimism and corporate cash holdings. *International Journal of Managerial Finance*.

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نغمة الإفصاح المحاسبي وسياسة التحفظ في الدين  
دراسة اختبارية على الشركات المصرية المدرجة في البورصة

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ملخص

يهدف البحث إلى دراسة العلاقة بين نغمة الإفصاح المحاسبي (النغمة الايجابية - النغمة السلبية - النغمة الصافية) وسياسة التحفظ في الدين (لغز الرافعة المالية المنخفضة). وقد اجريت الدراسة على عينة مكونة من ٦٠ شركة مصرية مقيدة بالبورصة في الفترة (٢٠١٣-٢٠١٩). وتم استخدام تحليل المحتوى والانحدار اللوجستي لتحليل صياغة نغمة الإفصاح (الاجابية – السلبية – الصافية) الموجودة في التقارير المالية والإفصاحات الدورية المنشورة في البورصة المصرية. وقد اشارت نتائج الدراسة إلى وجود علاقة سلبية ومعنوية بين نغمة الإفصاح الإيجابية وسياسة التحفظ في الدين، مما يعني أنه مع زيادة (انخفاض) نغمة الإفصاح، تصبح الشركات أقل (أكثر) تحفظاً في سياسة الديون. تتوافق هذه النتيجة مع ما توصلت اليه دراسة (Malmendier et al.,2011). كما أشارت النتائج إلى وجود علاقة إيجابية ومعنوية بين نغمة الإفصاح (السلبية - الصافية) وسياسة التحفظ في الدين. يمكن تفسير هذه النتيجة أن المديرين قد يحتفظون بمزيد من السيولة للاستثمار في المستقبل ويترددون في استخدام التمويل الخارجي. تتوافق هذه النتيجة ايضا مع ما توصلت اليه دراسة مع (Malmendier et al.,2011).