

**MODERATING VARIABLES OF THE RELATIONSHIP BETWEEN  
CAPITAL STRUCTURE AND ACCOUNTING CONSERVATISM: AN-  
EMPIRICAL STUDY ON LISTED COMPANIES ON THE EGYPTIAN  
STOCK EXCHANGE**

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**ABSTRACT**

The purpose of this paper is to examine the effect of capital structure on the level of accounting conservatism and the impact of operational characteristics of the firm (firm age - firm size) and auditor characteristics (auditor retention- audit firm size- industrial specialization), as moderating variables on the previous relationship. This study uses simple regression model to test the relationship between capital structure and accounting conservatism and multiple regression model to investigate the effect of moderating variables on this relationship. The population of the study consists of all firms listed in the Egyptian Stock Exchange during the period 2012-2017. The sample consists of 82 firms and the number of observations are 530 firm- year observations. Findings of the study showed that equity financing has a significant negative impact on the level of accounting conservatism, and there is also a significant effect of firm size, while there is insignificant effect of firm age on the previous relationship, and there is insignificant effect of auditor characteristics (auditor retention- audit firm size- industrial specialization) on this relationship.

**Keywords:** Accounting Conservatism, Capital Structure, Equity Financing, Auditor Characteristics, Operational Characteristics of the Firm.

**1. INTRODUCTION**

Conservatism has been one of the most debated topics in accounting over the past decade. Despite criticisms against this principle, it plays an important role in accounting practices (Watts, 2003). Today, in the middle of the waves of doubt and uncertainty regarding financial reports, compliance with this principle became a distinctive aspect for corporations with reference to the

transparency of their financial reports and a standard for classifying countries according to adherence to accounting principles and accounting conservatism (Hamdan, 2011; Watts, 2003).

Accounting conservatism is one of the most important accounting beliefs, because it has a significant impact in increasing the quality of financial reports. (Huang and Watson, 2015) indicated that accounting conservatism is an essential means to mitigate the moral hazard, resulting from the asymmetry of information, because the adoption of minimum values of assets and revenues, and higher values of liabilities and expenses, leads to limit the ability of the management of the company to bias in accounting information, and limit the ability of the management to practice opportunistic behavior that achieves its personal interests at the expense of the other parties, which lead to protect the shareholders and improve the quality of financial reporting.

On the other hand, capital structure refers to the combination of debt and equity used by the company to finance its assets. Capital structure decisions are one of the most important decisions taken by corporates managements. Most of the corporates managements try to reach the optimal level of capital structure, where the cost of capital is minimal. One of the main objectives that the CFO of any company, regardless of its activity, seeks to achieve is to reduce the cost of capital as it relates to maximizing profits (Habib and Hossain, 2013; Olakunle & Oni 2014; Salama and Putnam, 2015).

Some studies (LaFond & Watts,2008; Suo et al., 2013; Peek et al., 2010; Ball et al., 2008 ) indicated that the equity financing affects on accounting conservatism, but its clear that there is a paucity, within the limits of the researcher's knowledge, in the studies that tested this relationship, which is considered an addition to the current research. Several studies indicated that there are some control variables that affect on accounting conservatism as a dependent variable in its relation with capital structure. Some studies such as (Dalvi and Mardanloo, 2014; Hamdan, 2011; Moeinaddin et al., 2012; Al-Sehli , 2009; Ramalingegowda & Yu, 2011; Khan & Watts, 2009) pointed out that these control variables include the determinants of the accounting conservatism that relating to the operational characteristics of firms, such as firm size and firm age, as well as several studies ( Reyad, 2012; Paulo et al., 2013; Ayorinde & Babajide, 2015; Hamdan et al.,2012; Khodayar-e-Yeganeh et al.,2012 ) showed that these control variables include the determinants of the accounting conservatism that relating to the characteristics of the auditor, such as Industrial specialization, auditor retention, and the size of the audit firm. Although the previous studies (Dalvi and Mardanloo, 2014; Hamdan, 2011; Moeinaddin et al., 2012; Al-Sehli, 2009; Ramalingegowda & Yu, 2011; Khan & Watts, 2009; et al., 2013; Ayorinde & Babajide, 2015; Hamdan et al.,2012; Khodayar-e-Yeganeh et al.,2012) examined

these variables as control variables, the present research seeks to study the moderating effect of these variables on the previous relationship, which is considered an addition to this research.

**Research problem:**

Accounting conservatism is considered one of the most important accounting principles that are still the focus of researchers, because it has many advantages. The decision of the capital structure is considered one of the most important decisions adopted by the management of the company. So this study focus on examine the effect of capital structure on accounting conservatism. The previous studies show that there are some control variables that affect the accounting conservatism as well as its impact on the capital structure as an independent variable (Dalvi and Mardanloo, 2014; Hamdan, 2011; Moeinaddin et al., 2012; Al-Sehli, 2009; Ramalingegowda & Yu, 2011; Khan & Watts, 2009; Reyad, 2012; Paulo et al., 2013; Ayorinde & Babajide, 2015; Hamdan et al., 2012; Khodayar-e-Yeganeh et al., 2012). But there is a scarcity in the studies that address these determinants as moderating variables of the relationship between capital structure and accounting conservatism. Therefore, the problem of research can be expressed by the following questions; What is the accounting conservatism and its types and motivations as an accounting convention?, What is the capital structure of companies and its theories from an accounting perspective?, When and how does the capital structure affect the level of accounting conservatism in listed companies on the Egyptian Stock Exchange?, What are the most important variables that can affect the relationship between capital structure and accounting conservatism in listed companies on the Egyptian Stock Exchange?.

**Research objective:**

This study aims to analysis and examine the effect of capital structure on the level of accounting conservatism, and test the effect of operational characteristics of firm (firm age, firm size) and auditor characteristics (auditor retention, audit firm size, industrial specialization) on the relationship between capital structure and accounting conservatism in non-financial companies listed on the Egyptian Stock Exchange.

**2. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT:**

**2.1 Accounting Conservatism, Its Definition, Types and Motivations:**

**2.1.1 Definition of Accounting Conservatism:**

Several of the previous studies indicated that, despite the importance of accounting conservatism and it is a very important feature of generally accepted accounting principles, there is no uniform definition of this concept (Watts, 2003). Accounting conservatism is traditionally defined as

“anticipate no profits but anticipate all losses” (Bliss, 1924). (Basu, 1997) defined it as “the tendency of an accountant to recognize "bad news" earlier than "good news", this means that conservatism requires a higher degree of verification to recognize good news as a profit than to recognize bad news as losses”. This means that one of the aspects of the conservatism was the tendency to be pessimistic, not optimistic when preparing financial reports (Hamdan, 2011). Conservatism is defined as “the differential verifiability required for recognition of profits versus losses” (Watts, 2003).

Despite the significant effect of the concept of accounting conservatism on the preparation of the financial statements, professional bodies and organizations that interested in the accounting profession did not specify a specific formal concept for conservatism. The Financial Accounting Standards Board (FASB) has described conservatism in Statement of Financial Accounting Concepts No. 2 as “a prudent reaction to uncertainty to try to ensure that uncertainties and risks inherent in business are adequately considered” (Neag & Maşca, 2015). FASB Statement No. 2 states that “Prudent reporting based on a healthy skepticism builds confidence in the results and, in the long run, best serves all of the divergent interests”( Lin, 2016).

According to the foregoing studies, accounting conservatism can be defined as uncertainties that require more evidences for recognizing revenues and gains than for recognizing expenses or losses, which resulting in understatement the value of assets and revenues and overstatement the value of liabilities and expenses.

### **2.1.2 Types of Accounting Conservatism:**

Previous studies have distinguished between two important types of accounting conservatism (Beaver and Ryan, 2005; Lin, 2016; Zhong & Li, 2017).<sup>1</sup> First, is the conditional conservatism, also called news dependent or ex post conservatism, meaning that the book values of net asset are written down in case of unfavorable circumstances but are not written up under favorable circumstances. Examples of conditional conservatism include lower of cost or market accounting for inventory and impairment accounting for long-lived tangible and intangible assets.

Second, is the unconditional conservatism, also called news independent or ex ante conservatism, meaning that aspects of the accounting process determined at the inception of assets and liabilities yield the expected unrecorded goodwill. Examples of unconditional conservatism include immediate expensing of the cost of internally developed intangible assets,

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<sup>1</sup>There are other types of accounting conservatism such as Balance Sheet Conservatism and Earnings Conservatism, Mandatory Conservatism and Voluntary Conservatism, Ex ante Conservatism and Ex post Conservatism, Consistent Conservatism and Temporary Conservatism, Partial Conservatism and Absolute Conservatism, Maximum Conservatism and Minimum Conservatism.(Bagnoli and Watts, 2005; Lara and Mora, 2004; Hellman, 2008; Smith, 2011; Pope and Walker, 2003 )

use specific way to depreciate the fixed assets such as accelerated depreciation that is more accelerated than economic depreciation and historical cost accounting for projects that have positive net present value ( Beaver and Ryan, 2005; Lin, 2016; Zhong & Li,2017).

### **2.1.3 Motivations of Accounting Conservatism:**

(Watts,2003; Zhong & Li,2017; Thijssen & Latridis, 2016; LaFond & Watts,2008; Gotti, 2007) pointed out that there are several motivations which increase the demand on accounting conservatism such as a contracting motivation, a litigation motivation, a taxation motivation and a regulation motivation. Contracting motivation is one of the most important of these motivations, which includes debt and management compensation contracts. Several studies (Salama and Putnam, 2015; Habib and Hossain, 2013; Ball et al., 2008; Haw et al., 2014) have confirmed that the main motivation of an accounting conservatism is enhancing the value of creditors and improving the efficiency of debt contracts by mitigating agency problems of debt, where these problems arise from a conflict of interests between shareholders and debtholders when shareholders try to transfer wealth from their creditors by doing practices that reduce external debts, such as investing in shares of other companies or merging with a high-risk company, or making unjustified dividends to shareholders or investing in projects with a negative net present value . The accounting conservatism improves contracting efficiency in debt markets by delaying the recognition of revenues and accelerating the recognition of expense. In terms of management compensation contracts, (Watts, 2003; Watts, 1993; Gotti, 2007; LaFond & Watts, 2008) indicate that an accounting conservatism restricts the accounting practices that enable the management to maximize the profits and overstate the firm's net assets.

Litigation motivation is another source of conservatism that results from the desire of management and auditors to avoid legal responsibility. (Watts, 2003; Watts ,1993; Basu, 1997; Gotti, 2007; Thijssen & Latridis, 2016) suggest that litigation costs are much more likely when earnings and net assets are overstated, not understated, which indicating that the demand for conservatism is increasing during the period of increasing litigation against the auditors .

On the other hand, the motivation behind the accounting conservatism may be taxation motivation, where asymmetric recognition of gains and losses enables managers of profitable firms to reduce the present value of taxes and increase the value of firm (Watts, 2003; Thijssen & Latridis, 2016; Gotti, 2007).

Finally, regulation motivation is another source of conservatism. Standard setters and regulators have their own incentives to favor conservative accounting to avoid the political costs, where accounting conservatism aims to understate the value of assests or revenues and overstate the

value of liabilities and expenses and that lead to reduce the political costs (Watts, 2003; Thijssen & Latridis, 2016).

The researcher concludes from the above that there are four explanations for the conservatism: a contracting explanation, a litigation explanation, a taxation explanation and a regulatory explanation, and each of these explanations represent an essential reason to increase the demand for conservatism.

## **2.2 Capital Structure, Its Definition, Theories:**

### **2.2.1 Definition of Capital Structure:**

Some studies (Haqqani & Zehra, 2015; Adewale & Ajibola, 2013) defined capital structure as "the combination of equity and debt through which the firm finances its operations. Debt can be classified as bonds or long term notes payable, whereas equity classified in the form of common stock, preferred stocks or retained earnings". (Al Ani & Al Amri, 2015) indicated that the capital structure is the mixture of sources of funds a company uses (debt, preferred stock, common stock and retained earnings), and the amount of debt that a company uses to finance its assets is called leverage. (Subramanyam & Wild, 2009) also defined it as the method of companies financing that consists of debt and owners' equity, which often measures the relative size of different sources of funding. (Stephen, 2012) defined capital structure as a mixture of a company's debts (long-term and short-term), common equity and preferred equity.

### **2.2.2 Theories of Capital Structure:**

#### **2.2.2.1 Modigliani-Miller Theory:**

(Modigliani & Miller, 1958, 1963) examined the relationship between the company financing choice and its value. The theory believes that the market value of the company is determined by its earning power and the risk of its underlying assets of the firm, and the value of the company cannot be increased by changing the capital structure. In other words, the value of the company is independent of capital structure (Siyaparani & Kashani 2014; Haqqani & Zehra, 2015; Olakunle & Oni 2014). The Modigliani and Miller (1958, 1963) study contributed to the development of alternative theories of capital structure. Alternative theories include Trade-off Theory, Agency Cost Theory, and Pecking Order Theory.

Modigliani and Miller were the founders of modern financial management in 1958. The study of (Modigliani & Miller, 1958) is one of the most important studies that examined the relationship between capital structure and the market value of the company in the absence of tax. Their theory based on a set of assumptions such as, no taxes, no transaction costs, no bankruptcy costs,

no agency costs, complete and perfect market assumption (Song, 2005). MM proposition states that the market value of the company is independent from its capital structure. That means that the market value of the firm does not affect with its capital structure, but the market value of the company depends on the return on these investments and the risks associated with this return (Stephen, 2012; Siyaparani & Kashani, 2014; Haqqani & Zehra, 2015).

(Modigliani and Miller, 1963) conducted a research entitled "Corporate Income Tax and Capital structure Cost" to study the impact of capital structure on the market value of the company in the presence of taxes. This research found that the leverage has a positive impact on the market value of the company. This is explained by the fact that the interest expenses that is paid by the entity on such loans is deductible from tax, which achieve tax savings for the borrowing companies, thus reducing the cost of capital structure. The Modigliani and Miller (1958, 1963) study contributed to the development of alternative theories of capital structure. Alternative theories include Trade-off Theory, Agency Cost Theory, and Pecking Order Theory.

#### **2.2.2.2 Trade-off Theory:**

The trade-off theory predicts that there are benefits and costs associated with the use of debt versus owners' equity. Thus, when the company chooses the debt, the trade-off between the benefits of debt financing (e.g. tax savings) and the costs of debt (e.g. bankruptcy costs and agency costs of debt) leads to the optimal capital structure that companies seek over (Olakunle & Oni 2014; Siyaparani & Kashani 2014; Haqqani & Zehra, 2015). The trade-off theory predicts that the more profitable companies should finance their operations through debt because they have more profits to protect them from bankruptcy, and by the use of debt the company will benefit from the advantages of debt such as tax savings (Olakunle & Oni 2014).

#### **2.2.2.3 Agency Cost Theory:**

The Agency Cost theory examined the conflict of interest between shareholders, managers and debt holders. The Company finances its operations through debt and equity. In case of equity financing, this may lead to agency costs that arise from conflict of interest between managers (agent) and shareholders (principal), if the proportion of owners manager's interest is low and that will encourage the managers to engage in activities that might not be beneficial in the long run because of the reduced equity stake. If the company issues debt, this may lead to agency cost that arise from conflict of interest between debt holders and shareholders, where the shareholders may try to transfer the wealth from debt holders by doing some activities that reduce external debts, such as investing in projects with negative net present value (Olakunle & Oni, 2014; Jensen & Meckling 1976).

#### **2.2.2.4 Pecking Order Theory:**

The Pecking Order theory predicts that external capital (debt and equity) will be relatively expensive and costly compared to internal capital (retained earnings), because of the information asymmetry between the company (managers / insiders) and external investors regarding the real value of both current operations and future cash flow. Therefore, The Pecking Order theory suggests that companies should finance their investments through retained earnings, debt and equity, and that small and medium size companies are considerably more reliant on external finance than large firms (Olakunle & Oni, 2014; Al Ani & Al Amri, 2015).

### **2.3 Analysis the Relationship between Capital Structure and Accounting Conservatism and Formation of the First Hypothesis:**

Previous studies have examined the relationship between capital structure and accounting conservatism and reached to different results. (LaFond & Watts, 2008; Suo et al., 2013 ) found that equity financing leads to increase the demand for accounting conservatism, because the accounting conservatism reduces information asymmetry between internal parties (managers) and external parties (shareholders), which limits agency problems between these parties. This result agree with (Abdul-Malik, 2017), which indicated that financing equity has a positive effect on the level of accounting conservatism, but not agree with (Peek et al., 2010), which found that the debt financing has a greater impact on the level of accounting conservatism than equity financing, also (Ball et al., 2008) indicated that equity financing has a negative effect on the level of accounting conservatism but debt financing has a positive effect on the level of accounting conservatism.

It is clear that there is a paucity, within the limits of the researcher's knowledge, in the studies that examined the effect of equity financing in the capital structure on accounting conservatism, which represents a motivation to test this relationship in the present study and derive the first hypothesis of the research as follows:

**H1:** Capital structure has a significant effect on the level of accounting conservatism.

### **2.4 Analysis the Effect of Modified Variables on the Relationship between Capital Structure and Accounting Conservatism and Formation of the Hypotheses:**

In the following will discuss the operational characteristics and the auditor characteristics that affect on the relationship between capital structure and accounting conservatism as moderating variables. The operational characteristics are (firm age, firm size), and the auditor characteristics are (auditor retention, audit firm size, industrial specialization).

## **2.4.1 Analysis the Effect of Operational Characteristics on the Relationship between Capital Structure and Accounting Conservatism and Formation of the Second and Third Hypotheses:**

### **2.4.1.1 Firm Size:**

Firm size refers to its capacity and ability to generate operational revenue from its operations. ( Dalvi & Mardanloo 2014) found that the relationship between the firm size and accounting conservatism differed according to the model that is used to measure accounting conservatism, where two models were used to measure the conservatism: the first was the (Beaver and Ryan, 2000) model and the second (Givoly and Hayn , 2000). In the second model, it was observed that there was no statistically significant relationship between the firm size and conservatism, but in the first model there was a statistically significant negative relationship. The two models contrast with the results of some studies (Hamdan, 2011; Moeinaddin et al., 2012), where they concluded that there is a positive relationship between the size of the company and the level of the conservatism. This is due to the fact that large companies are more exposed to political issues and bear costs than smaller companies, which leads to the disclosure of profits and assets at low values. In contrast, (Al-Sehli, 2009) concluded that there is no relationship between the firm size and the conservatism, since the size of the company does not affect the level of accounting conservatism.

### **2.4.1.2 Firm Age:**

Firm age is the period between the initial creation of a firm and the present time (Kieschnick & Moussawi, 2018). Studies (Khan & Watts, 2009, Ramalingegowda & Yu, 2011) stated that there is negative relationship between the age of the company and accounting conservatism, and therefore younger companies are more conservative, because younger firms tend to have more growth opportunities, and higher information asymmetry both between managers and investors and between managers and lenders, which lead to increase the demand on accounting conservatism to reduce the agency costs generated by those information asymmetries.

It is clear from the above that most of the previous studies address the impact of the operational characteristics of the company on the accounting conservatism as a control variables, but in the present research will study these variables as a moderating variables of the relationship between capital structure and accounting conservatism, and therefore **the second and third hypotheses of the research can be derived as follows:**

**H2:** The firm size has a significant effect on the relationship between capital structure and accounting conservatism.

**H3:** The firm age has a significant effect on the relationship between capital structure and accounting conservatism.

#### **2.4.2 Analysis the Effect of Auditor Characteristics on the Relationship between Capital Structure and Accounting Conservatism and Formation of the fourth, fifth and sixth Hypotheses:**

##### **2.4.2.1 Industry Specialization:**

According to (Arens et al., 2011) "Auditor specialization is auditor as having deep understanding (knowledge) and long experiences of the client's specific business and industry, having knowledge about the company's operations, and specific accounting and auditing guidance which are essential for doing a high quality audit" (Sarwoko and Agoes, 2014). The nature of the client's business and industry affects clients' business risk and the risk of material misstatements in the financial statements (Sarwoko and Agoes, 2014). (Reyad, 2012; Hamdan et al., 2012) stated that the specialization in the client's industry has a significant positive effect on the level of conservatism. This result is not consistent with (Paulo et al., 2013) which stated that the specialization in the client's industry does not affect on the quality of auditing and the level of conservatism.

##### **2.4.2.2 Audit Firm Size:**

There are different results with respect to the effect of audit firm size on the accounting conservatism (Hamdan et al., 2012; Paulo et al., 2013) stated that the audit firm size has a positive impact on the accounting conservatism. This result is not consistent with (Khodayar-e-Yeganeh, et al., 2012) which concluded that the audit firm size does not affect the level of conservatism in financial reporting of firms listed in Tehran Stock Exchange. (Reyad, 2012) also found a significant positive impact of international audit firms on the accounting conservatism

##### **2.4.2.3 Auditor Retention:**

Auditor Retention is the number of years that the current auditor has worked for the firm (Ayorinde & Babajide, 2015). There are different results with respect to the effect of auditor retention on the accounting conservatism. (Reyad, 2012; Ayorinde & Babajide, 2015) found that the auditor tenure period has a positive effect on the level of accounting conservatism. This result is not consistent with (Khodayar-e-Yeganeh, et al., 2012), which concluded that the the auditor tenure period does not affect the level of accounting conservatism in financial reporting of firms listed in Tehran Stock Exchange, also does not agree with (Paulo et al., 2013) , which stated that the conservatism is negatively affected by the length of the auditor tenure period. While (Hamdan et al., 2012) found that the auditor tenure period has insignificant positive impact on the level of

conservatism in case of using BTM to measure the conservatism, while this relationship is significant negative in case of measuring the conservatism by abnormal accruals model.

It is clear from the above that most of the previous studies address the impact of the auditor characteristics on the accounting conservatism as control variables, but in the present research will study these variables as a moderating variables, that can interact with independent variable (capital structure) then it may affect on the relationship between capital structure and accounting conservatism, and therefore **the fourth, fifth and sixth Hypotheses of the research can be derived as follows:**

**H4:** The Audit Firm Size has a significant effect on the relationship between capital structure and accounting conservatism.

**H5:** The Auditor Retention has a significant effect on the relationship between capital structure and accounting conservatism.

**H6:** The Industry Specialization has a significant effect on the relationship between capital structure and accounting conservatism.

### **3. METHODOLOGY**

The research is based on the empirical methodology, in order to test its hypotheses, which focus on studying the effect of equity financing on level of accounting conservatism and the impact of operational characteristics of firm (firm age - firm size) and auditor characteristics (auditor retention – audit firm size- industrial specialization) on the relationship between equity financing and accounting conservatism as moderating variables.

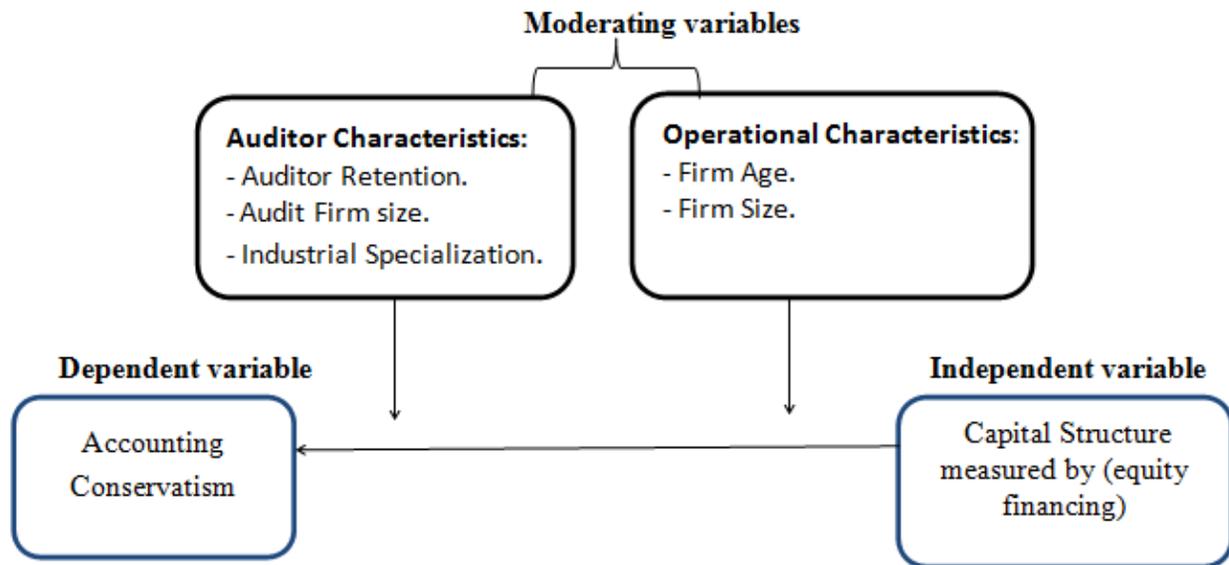
#### **3.1 Population and Sample Selection:**

The population of the study consists of all firms listed in the Egyptian Stock Exchange during the period from 2012 to 2017. The sample consists of 82 industrial and trading firms. The number of observations is 530 firm- year observations, where the researcher follows the Firm-Year-Observation approach according to (Haw, et al., 2014). The sample excluded the financial institutions because the nature of their activities are different from the nonfinancial institutions, the separate laws they follow, and these firms' capital structures are likely to be different from the capital structures of nonfinancial firms ( Tosi and Paidar, 2015; Salama and Putnam, 2015 , Haw, et al., 2014), also excluded firms with incomplete financial reports and firms that the researcher cannot obtain their financial reports or their stock price in addition to firms whose financial reports were prepared in foreign currency.

#### **3.2 Research Model & Measurement of Variables:**

**3.2.1 Research Model:**

The hypotheses of the research show that the independent variable is capital structure measured by equity financing, the dependent variable is accounting conservatism, moderating variables are operational characteristics of firm (firm age, firm size) and auditor characteristics (auditor retention, audit firm size, industrial specialization). According to these variables, the research model is as following:



**3.2.2 Measurement of Variables:**

Name of variable	Type of variable	Measurement
<b>Capital Structure</b>	Dependent variable	Measured by equity financing as follows: Equity Financing = Net Equity / Total Asset, where Net Equity = Sale of common and preferred stock - Purchase of common and preferred stock ( Goh et al., 2017).
<b>Accounting Conservatism</b>	Independent variable	Measured by MTB as follows: MTB=market value of equity <sup>2</sup> / book value of equity

<sup>2</sup> Where the market value of equity is calculated using the following formula:

Market value of equity = Book value of equity – Issued and paid up capital + (number of common shares outstanding \* stock price), as the stock price represents the closing price in the next day to the date of the auditor's report. The number of common shares outstanding is calculated by the following equation:

<b>Firm Size</b>	Moderating Variable	Measured by the natural logarithm of total assets (Al Ani & Al Amri, 2015).
<b>Firm Age</b>	Moderating Variable	Measured by the period between the initial establishment of the firm and the present time (Kieschnick & Moussawi, 2018)
<b>Auditor Retention</b>	Moderating Variable	A dummy variable which is equal to “1” for Less than one year, “2” for more than one years but less than 3 years and “3” for more three years( Ayorinde & Babajide, 2015).
<b>Specialization</b>	Moderating Variable	Measured as the number of clients in the particular industry for auditor divided by total number of clients in that industry ( Hope et al., 2009).
<b>Audit Firm size</b>	Moderating Variable	A dummy variable which is equal to “1” if the company audited by one of the big 4 audit firms and “0”, otherwise ( Paulo et al., 2013) .

**3.3 Data Collection and Analysis:**

This research depends on the secondary data that collected from the financial reports for the firms that used in this study, where the financial reports include the financial statements. The financial reports were used to determine the date of auditor's report and the date of establish of a firm. Market prices of stocks are collected from the mubasher information site ([www.mubasher.info/EGX/stocks-Prices](http://www.mubasher.info/EGX/stocks-Prices)). Financial ratios used in the study were calculated, then emptying this data in Microsoft excel sheet and analyzing it by using SPSS to test the research hypotheses.

**3.4 Statistical Methods and Research Models:**

The simple regression model was used to test the first hypothesis and the multiple regression model was used to test the second and the third hypotheses of the research as follows:

**3.4.1 Testing the First Hypothesis:**

The objective of this hypothesis is to test the effect of the equity financing on the accounting conservatism, based on the simple regression model according to the following equation:

$$CON_{it} = \beta_0 + \beta_1 \text{Equity Issuance} + \epsilon_{jt} \tag{1}$$

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Number of common shares outstanding = sale of common stock - purchase of common stock (Treasury stock) ( Goh et al., 2017).

Where: **CON**: accounting conservatism, **Equity Issuance**: financing by equity,  $\beta_0$ : Intercept,  $\beta_1$ : coefficient of the equity issuance,  $\epsilon_{jt}$ : random error

### 3.4.2 Testing the Second and Third Hypotheses:

The objective of this hypotheses are to test the effect of the operational characteristics of the companies as modified variables on the relationship between capital structure and accounting conservatism, based on the multiple regression model according to the following equation:

$$\text{CON}_{it} = \beta_0 + \beta_1 \text{Equity Issuance} + \beta_2 \text{SIZE} + \beta_3(\text{SIZE} * \text{Equity Issuance}) + \beta_4 \text{Age} + \beta_5(\text{Age} * \text{Equity Issuance}) + \epsilon_{jt} \quad (2)$$

Where: **CON** : accounting conservatism, **Equity Issuance**: financing by equity, **SIZE**: firm size, **Age**: firm age, **SIZE\* Equity Issuance**: Interactive impact of the firm size on the relationship between equity issuance and accounting conservatism, **Age\* Equity Issuance**: Interactive impact of the firm age on the relationship between equity issuance and accounting conservatism,  $\beta_0$ : Intercept,  $\beta_1$ : coefficient of the equity issuance,  $\beta_2, \beta_4, \beta_6$ : coefficient of (firm size, firm age), Respectively,  $\beta_3, \beta_5, \beta_7$ : coefficient of moderating variables,  $\epsilon_{jt}$ : random error.

### 3.4.3 Testing the Fourth, Fifth and Sixth Hypotheses:

The objective of this hypotheses are to test the effect of the auditor characteristics as modified variables on the relationship between capital structure and accounting conservatism, based on the multiple regression model according to the following equation:

$$\text{CON}_{it} = \beta_0 + \beta_1 \text{Equity Issuance} + \beta_2 \text{AZ} + \beta_3(\text{AZ} * \text{Equity Issuance}) + \beta_4 \text{AT} + \beta_5(\text{AT} * \text{Equity Issuance}) + \beta_6 \text{SP} + \beta_7(\text{SP} * \text{Equity Issuance}) + \epsilon_{jt} \quad (3)$$

Where: **CON** : accounting conservatism, **Equity Issuance**: financing by equity, **AZ**: Audit Firm size, **AT**: Auditor Retention, **SP**: Specialization, **AZ \* Equity Issuance**: Interactive impact of the Audit Firm size on the relationship between equity issuance and accounting conservatism, **AT\* Equity Issuance**: Interactive impact of the Auditor retention on the relationship between equity issuance and accounting conservatism, **SP\* Equity Issuance**: Interactive impact of the Specialization on the relationship between equity issuance and accounting conservatism,  $\beta_0$ : Intercept,  $\beta_1$ : Coefficient of the equity issuance,  $\beta_2, \beta_4, \beta_6$ : Coefficient of (Audit Firm size, Auditor retention, Specialization), Respectively,  $\beta_3, \beta_5, \beta_7$ : Coefficient of moderating variables,  $\epsilon_{jt}$ : random error.

## 4. RESULTS AND DISCUSSIONS:

### 4.1 The Results of Testing the First Hypothesis:

**Table (1)**

Model	Beta	P-Value
Constant	2.606	.000
Issuance Equity	-0.097	.025
R <sup>2</sup>		.009
Adjusted R <sup>2</sup>		.008
Sig (F)		.025

In **Table (1)** the simple regression analysis shows that the model is significant where ( p-value < 0.05). The value of Adjusted R<sup>2</sup> is (.008) , which indicates that equity issuance as an independent variable explains (0.8%) of the total changes in the level of the accounting conservatism as a dependent variable , the remaining balance can belong the other variables that do not included in the model and the random error. The regression model shows that the p-value of equity issuance is equal to (.025) less than 5%, which means that the equity issuance has a significant effect on the level of accounting conservatism; **therefore the first hypothesis is accepted.**

The results show that equity issuance has a significant negative effect on the level of accounting conservatism, and it can be explained that firms which use equity financing do not have motivations to demand the conservatism because they do not want to reduce the net profit, but they want to increase this number and thus increase the distributions which result in increasing the demand for shares in the market. Also this significant negative effect can be because of decreasing information asymmetry and therefore the company does not need the conservatism. This result is inconsistent with (LaFond & Watts,2008 ) which concluded that the equity financing leads to increase the demand for accounting conservatism, as it limits the agency problems, also inconsistent with (Ball et al., 2008) which found that the equity financing does not affect the level of the accounting conservatism.

**4.2 The Results of Testing the Second and Third Hypotheses:**

The results of the multiple regression model shows that the model is insignificance, where P-Value is greater than 5%. To solve this problem, the outlier values of the accounting conservatism are excluded and the number of observations will be 529 observations. There is also multicollinearity among the independent variables, where the variance inflation factor (VIF) for all variables is greater than 10, and the tolerance value is lower than 0.1. This problem is solved by using

regression analysis based on Bootstrap Standard Error or a Robust Regression Methods method by using the Stata 14 (Zahari et al., 2014).

**Table (2)**

Model	Beta	Robust Std. Error	T	P >  t
Constant	-3.273555	1.186722	-2.76	0.006
Issuance Equity	9.356122	2.813386	3.33	0.001
Firm Size	1.117755	.2065512	5.41	0.000
Firm Age	.0004768	.0155586	-0.03	0.976
Firm Size* Equity Issuance	-2.142078	.6404057	-3.34	0.001
Firm Age* Equity Issuance	-.009389	.0341944	-0.27	0.784
<b>Number of obs.</b>	530			
R <sup>2</sup>	0.0198			
Adjusted R <sup>2</sup>	0.0105			
<b>Prob &gt; F</b>	0.000			

In **Table (2)** the multiple regression analysis shows that the model is significant where (p- value < 0 .05). The value of Adjusted R<sup>2</sup> is (.0105), which indicates that the interaction between the equity issuance and the operational characteristics of the company as moderating variables explains (1.05%) of the total changes in the level of accounting conservatism as a dependent variable. The regression model also shows that there is significant effect to firm size on the relationship between equity issuance and accounting conservatism, where (p-value < 0.05), but there is insignificant effect to firm age on this relationship, where P-Value is greater than 5%, therefore **the second hypothesis is accepted and the third hypothesis is rejected.**

The impact of firm size on the relationship between equity financing and accounting conservatism can be explained by the fact that the firm size affect the level of the accounting conservatism, which is agrees with (Hamdan, 2011; Moeinaddin et al., 2012), where these studies found that the firm size has a significant effect on the level of accounting conservatism and do not agree with (Al-Sehli, 2009) which found that the size of firm does not affect the accounting conservatism.

Also the results show that the firm age does not impact on the relationship between equity financing and accounting conservatism, and that can be explained by the fact that the age of the firm does not effect on the level of the accounting conservatism, which is inconsistent with (Khan & Watts, 2009; Ramalingegowda & Yu, 2011), where these studied show that younger companies are more conservative, which means that the age of the firm has a significant negative effect on the level of accounting conservatism.

**4.3 The Results of Testing the Fourth, Fifth and Sixth Hypotheses:**

The results of the multiple regression model shows that the model is insignificance, where P-Value is greater than 5%. To solve this problem, the outlier values of the accounting conservatism are excluded and the number of observations will be 528 observations. There is also multicollinearity among the independent variables, where the variance inflation factor (VIF) for all variables is greater than 10, and the tolerance value is lower than 0.1. This problem is solved by using regression analysis based on Bootstrap Standard Error or a Robust Regression Methods method by using the Stata 14 (Zahari et al., 2014)..

**Table (3)**

Model	Beta	Robust Std. Error	T	P >  t
Constant	2.462935	.7985991	3.08	0.002
Issuance Equity	-1.879807	1.819156	-1.03	0.302
Audit firm size	.0809379	.4767162	0.17	0.865
Retention	.0019129	.2483438	0.01	0.994
Specialization	-2.117637	2.206629	-0.96	0.338
Audit firm size * Equity Issuance	.2678016	.955377	0.28	0.779
Retention * Equity Issuance	.1001587	.6084186	0.16	0.869
Specialization * Equity Issuance	2.104029	4.881315	0.43	0.667
<b>Number of obs.</b>	529			
R <sup>2</sup>	0.0645			
Adjusted R <sup>2</sup>	0.0519			

<b>Prob &gt; F</b>	0.000
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In **Table (3)** the multiple regression analysis shows that the model is significant where (p- value < 0 .05). The value of Adjusted R<sup>2</sup> is (.0519), which indicates that the interaction between the equity issuance and auditor characteristics of the company as moderating variables explains (5. 19%) of the total changes in the level of the accounting conservatism as a dependent variable. The regression model also shows that there are insignificant effect to (Audit firm size, Retention, Specialization) on the relationship between equity issuance and accounting conservatism, where (p-value > 0.05), **therefore the Fourth, Fifth and Sixth Hypotheses are rejected.**

The results show that the audit firm size, Retention and Specialization do not impact on the relationship between equity financing and accounting conservatism, and that can be explained by the fact that these auditor characteristics do not affect on the level of accounting conservatism, which is consistent with (Khodayar-e-Yeganeh, et al.,2012 ), where this study found that the size of audit firm has insignificant effect on the level of the accounting conservatism, and do not agree with ( Hamdan et al., 2012; Paulo et al., 2013 ; Reyad, 2012), which indicated that the size of the audit firm had a significant effect on the level of the accounting conservatism. Also these results do not agree with several studies (Reyad, 2012; Ayorinde & Babajide, 2015; Paulo et al., 2013), which found that the auditor retention has a significant effect on the level of the accounting conservatism. but agree with (Khodayar-e-Yeganeh, et al., 2012) which pointed out that the auditor retention has insignificant affect on the level of the accounting conservatism, and do not agree with (Reyad, 2012; Hamdan et al., 2012) where these studies indicated that the industrial specialization has a significant effect on the level of accounting conservatism, and agree with (Paulo et al., 2013) which indicated that there is no significant effect of industrial specialization on the level of accounting conservatism.

## **5. CONCLUSIONS**

The importance of this study stems from the fact that there is a paucity in the studies that examined the effect of equity financing on the level of accounting conservatism and the studies that examined the operational characteristics and the characteristics of the auditor as moderating variables on the previous relationship, and therefore this research is considered an addition to the current studies.

The study concluded that equity financing has a significant negative impact on the level of accounting conservatism and that because the firms which use equity financing desire to increase the net profit and thus increase the distributions, which result in increasing the demand for shares in the market, so the first hypothesis is accepted. Moreover the results showed that the firm size as

one of operational characteristics of the firm that has a significant impact on the relationship between equity financing and accounting conservatism, while firm age has insignificant impact on this relationship, thus the second hypothesis is accepted and the third hypothesis is rejected. With regard to the Fourth, Fifth and Sixth Hypotheses, the study found that the auditor characteristics (audit firm size, auditor retention, industrial specialization) have insignificant impact on this relationship, so the Fourth, Fifth and Sixth Hypotheses are rejected.

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