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The Effect of Auditing Quality Characteristics on Accounting Conservatism: The Case of Egypt

تأثير خصائص جودة المراجعة على التحفظ المحاسبي: دراسة مطبقة على بيئة الاعمال المصرية

Abstract

Purpose

Prior literature on accounting conservatism examines the effect of audit quality on conservatism show mixed results about this relationship, in this study, researchers extend previous studies by investigating the impact of the audit quality which is measured by audit firm size and auditor tenure on the enhancement of the level of accounting conservatism in the financial reports of the most active 50 non-financial companies listed in the Egyptian stock exchange across nine years of period from 2007 to 2015.

Design/methodology/approach

This study has used on non-probability-purposive sample as it focuses on the most actively traded Egyptian non-financial companies listed in the Egyptian Stock Exchange, according to disclosure book -50 most active companies, over the period 2007-2015. Research data used to measure accounting conservatism, audit quality and other variables collected mainly from Thomson Reuters Eikon database and disclosures

ملخص البحث

أظهرت الدراسات السابقة التي تناولت العلاقة بين التحفظ المحاسبي وجودة المراجعة نتائج مختلطة حول طبيعة هذه العلاقة، ومن هنا يهدف هذا البحث لدراسة هذه العلاقة وذلك للوقوف على طبيعتها في بيئة الاعمال المصرية من خلال دراسة العلاقة بين حجم مكتب المراجعة ومعدل دوران مكتب المراجعة كمقاييس لجودة عملية المراجعة، ومستوى التحفظ المحاسبي في التقارير المالية، بالإضافة إلى تأثير مجموعة من العوامل الخاصة بالشركة محل المراجعة على مستوى التحفظ بها (حجم الشركة - نسبة الرافعة المالية - الربحية) وذلك على عينة من الشركات غير المالية المقيدة في البورصة المصرية خلال الفترة ٢٠٠٧ - ٢٠١٥. وقد تم تجميع بيانات الدراسة من قاعدة بيانات تومسون روينز ليكون والاصحاحات التي نصدرها هيئه البورصة المصرية، وقد تم الاعتماد على تحليل الانحدار في اختيار فروض الدراسة. وقد توصل البحث إلى أن حجم مكتب المراجعة يلعب دوراً رئيسياً في التأثير على مستوى التحفظ المحاسبي، حيث توجد علاقة إيجابية حجم مكتب المراجعة ونسبة الرافعة المالية ومستوى التحفظ المحاسبي، في حين توجد علاقة عكسية بين ربحية الشركة ومستوى التحفظ المحاسبي بها، ومن جهة أخرى لا توجد علاقة معنوية احصائية بين حجم الشركة ومعدل دوران مكتب المراجعة ومستوى التحفظ.

books issued by the Egyptian Stock Exchange Authority. Intensive analysis of the results obtained was conducted, starting with the descriptive analysis for the data, and followed by the correlation analysis of variables. After that testing the research hypotheses by utilizing the regression analysis to identify whether these hypotheses will be accepted or rejected.

Findings

After excluding outliers from the study data set, the regression analysis shows that audit firm size, firm leverage and firm profitability play a major role in affecting accounting conservatism in the Egyptian firms whereas audit firm size has a positive significant relationship with accounting conservatism which enhances the rule of big audit firms in the quality of financial reports, firm leverage has a positive significant relationship with accounting conservatism, and firm profitability has a negative significant relationship with accounting conservatism, while firm size and auditor tenure have a weak role whereas firm size has a positive insignificant relationship with accounting conservatism, and auditor tenure has a negative insignificant relationship with accounting conservatism. Based on these results, the study provided recommendations to the interested parties.

Research limitations/ implications

This study advances the literature as it examines this relationship for some selected companies in a developing country, Egypt, along with examining the impact of some moderating variables on this relationship. However, a more longitudinal and qualitative research is re-

quired to investigate whether the financial crisis and Arab Spring had any effect on this relationship especially that the period of study was between 2007 and 2015. In addition, the R square of the study model is only (.120), which means that only 12% variation in the dependent variable (accounting conservatism) is explained by the independent and moderating variables (Audit firm size, Auditor Tenure, Leverage, Firm Size and Profitability); therefore, this study misses some other variables that might affect accounting conservatism. A quantitative study should be conducted on a larger sample to generalize findings to all industry sectors.

Practical implications

The financial information reported by a firm is of great importance to the stakeholders as it directs their decisions. Stakeholders take several decisions including investing decisions by investors and institutions and providing loans decisions by banks and other lenders, and many other decisions are based on the information provided by firms. Therefore, in order to avoid the risk of losing the financial information credibility and the trust of the financial information users and in order not to face problems with the auditing firms, firms must have an accounting conservatism to provide credible and reliable information.

Social implications

Professional associations in Egypt and the government should work to improve the auditing quality in Egypt, as the characteristics of auditing quality have impacted the enhancement of the level of conservatism, through enhancing laws and regulations that enforce companies to adopt accounting conservatism principle in their financial sys-

tem, also encourage audit firms to increase audit quality and focus on auditing companies accounting conservatism practices. This has a very high influence on the community and civil society, both now and in the future.

Originality/value

Limited research addressed the relationship between audit quality characteristics and Accounting conservatism in developing countries. Therefore, the importance of this study emerges from two main aspects; firstly, the literature review that provides a meaningful discussion of the audit quality and its effect on financial reporting quality. Secondly, an analysis of the existence of audit quality in different firms that is provided to show the consistency and divergence of the results across firms.

Key words: Audit Quality Characteristics, Accounting Conservatism, Stock-Listed Companies, Developing Countries, Empirical Study.

Paper category: Research paper

1. Introduction

The adoption of International Financial Reporting Standards (IFRS) represents one of the most significant regulatory changes in financial reporting.

The International Accounting Standards Board (IASB) has succeeded in establishing IFRS as the accepted set of financial reporting standards in more than 100 countries, with the primary objective of developing a single set of high quality, understandable, enforceable and globally accepted financial reporting standards (IASCF Constitution, part 2). These standards should help investors and other market participants to

make informed resource allocation and other economic decisions (IFRS Foundation, 2011; Cutillas-Gomariz et al., 2016).

Conservatism principle is one of the most significant and longstanding principles in Accounting, Watts (2003) described conservatism principle as the general concept of recognizing expenses and liabilities as soon as probable when there is an uncertainty about the outcome in order to only recognize revenues and assets when they are assured of being received. This tends to yield more conservative reporting of profits and losses. So under the conservatism principle, if there is an uncertainty about incurring a loss, you should tend to take it into consideration by making allowances and reserves. Conversely, if there is an uncertainty about recording a gain, you should not record the gain, till it is recognized.

There are many definitions for conservatism in accounting literature, for example Basu (1997) defined conservatism as having a high degree of confirmation to recognize good news such as profit, against recognition of bad news such as loss. This definition describes conservatism from its profit and loss view. Another definition is the balance sheet view, according to this view, when there is a doubt about selection of several reporting methods, the method selected should have the least desirable effect on rights of stockholders (Feltham and Ohlson, 1995). The third definition is the combinational view of balance sheet besides profit and loss, thus, conservatism is an accounting concept that causes decrement of reported accumulated profit by late recognition of

income and early recognition of cost (Givoly and Hayn, 2000).

In recent years, there have been many critical changes in the business environment; mainly these changes resulted from the collapse of accounting scandals, e.g. Enron 2001, WorldCom 2002, and Adelphia 2002. These scandals brought a question about the effectiveness of the management in companies, and whether companies work for the best interest of shareholders or not. These events have led to increasing calls for an increase of the quality and effectiveness of the auditing process (Farinha, 2003).

The growing issues regarding the quality of audit and accounting conservatism have long been regarded and seemed as a hot debate since both could impact the capital market efficiency. This study tried to answer whether audit quality of firms listed in Egypt Stock Exchange could have a significant effect on accounting conservatism in financial reporting quality. This study aimed to investigate the effect of several attributes of audit quality such as audit firm size and auditor tenure on accounting conservatism, taking into consideration three moderating variables which are firm size, profitability and leverage.

An independent and skillful audit firm is able to recognize misrepresentation of addressed financial statements, and can be effective on its correct presentation to its employer so that the reliable financial information is reported. To achieve this, the desired objective completely depends upon the attributes of audit institutions which can positively or negatively be associated with audit quality. According to Titman and

Truman (1989), audit with more quality improves the credibility of the provided information and let investors obtain more accurate estimation from the company's value, and its effect on accounting conservatism should be tracked explicitly (PourKarim, 2009, p.3). This study highlights whether the audit quality affects companies accounting conservatism practices that are listed on the Egyptian Stock Exchange, and the relationship between audit quality and accounting conservatism is analyzed empirically through correlation and regression analysis. Therefore, the study will contribute to the clarification of the relationship between audit quality and accounting conservatism in the Egyptian firms by collecting data over the period 2007-2015 of 50 companies, the most active companies in the Egyptian stock exchange.

2. Literature Review

2.1 Audit Quality

Recent financial conditions have highlighted the critical importance of qualitative characteristics of useful financial information which are relevance and faithful representation, so audit quality is frequently used to enhancing comparability, verifiability, timeliness and understandability of financial information.

There were many attempts to define the concept of audit quality either on professional organizations level, or academic level. On the professional organizations level: for example, International Federation of Accountants (IFAC) pointed to the concept of auditing quality in the international standard on quality control. It stated that "the objective of the audit firm is to establish and maintain a system of quality control to pr-

ovide it with reasonable assurance that: (a) The firm and its personnel comply with professional standards and applicable legal and regulatory requirements; and (b) Reports issued by the firm or engagement partners are appropriate in the circumstances" (IFAC, 2009). This means that the concept of quality from the perspective of (IFAC) lies in the compliance with professional standards and legal and regulatory requirements.

In the field of academic studies, it is clear that these studies did not agree on one definition of the concept auditing quality. For instance, DeAngelo (1981) has defined the auditing quality as "*the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach*" (DeAngelo, 1981, p.186).

This means that audit quality is about the possibility of the auditor detecting and honestly reporting the fundamental errors and misrepresentations in the financial statements of the client. So, this ability to detect fundamental errors and misrepresentations in the financial statements of the client depends on the efficiency and eligibility of the auditor and technical capability while the possibility of the auditor reporting fundamental errors and misrepresentations in the financial statements of the client depends on the degree of the auditor independence.

Several researchers such as Knapp (1991), Flint (1988), Moizer (1997), and Lennox (2005) followed DeAngelo's idea about the concept of auditing quality, for example Lennox claimed that auditing quality is measured by the possibility to detect problems or the possibility of the auditor reporting the existing pr-

oblems. Additionally Chaney et al. (2003) clarified that the auditing quality lies in the efficiency or the possibility of detecting violations, independence and the possibility of the auditor honestly reporting the detected violations.

On the other hand, Lee et al. (1999) investigated the concept of audit quality from another point of view; he defined auditing quality as the failure of the auditor to issue a clean or non-conservative report for the financial statements that contain substantial errors and misrepresentations. Also, Davidson and Neu (1993) adopted a concept of auditing quality based on the validity and accuracy of the information given by the auditor as they showed that the high levels of auditing quality lie in the high likelihood of detecting and getting rid of the fundamental errors and misrepresentations that exist in the financial statements of the client, resulting in obtaining accurate information by the auditor. Moreover, Mujahid (2001) claimed that auditing quality can be defined as the audit facility executing an efficient and effective auditing to serve the user's goals and requirements in accordance with the conventional professional standards.

Furthermore, Copley and Doucet (1993) have adopted a different concept in this area as it explained that the concept of auditing quality is limited to the compliance with all field work and reporting standards.

Depending on what has been previously mentioned, researchers conclude that the concept of auditing **quality is about:**

- The possibility of the auditor detecting and honestly reporting the fundamental errors and misrepresentati-

- ons in the financial statements of the client.
- The application of professional standards including the code of conduct of the auditing profession.
 - The fact that auditor doesn't issue a clean or non-conservative report for the financial statements that contain substantial errors and misrepresentations.
 - The auditor achieving high levels of quality in many areas, such as the clear demonstration of audit reports, objectivity and fairness of the basis of the given estimates and opinions, the authenticity and reliability of the views or results, and finally the effectiveness of auditing planning and execution.

Researchers assert that auditing quality can be defined as the auditor efficiently and effectively engagement in all stages of the auditing process (planning, implementing and reporting), with commitment to professional standards and code of ethics in order to serve the objectives as well as requirements of the beneficiaries of the auditing results.

Since Fama (1980) introduced the concept of agency problems which arose in companies as a result of the conflict of interest between shareholders and the company management, this conflict emerged when managers had incentives to pursue their own interests at shareholder's expense (Agrawal and Knoeber, 1996); as a result, there were many attempts to solve this problem.

In the light of that, external audit is considered one of the important governance mechanisms through which shareholders can monitor management as it carries out the inspection and verification of the financial statements prepared

by management and shows the necessary reports on the quality of these statements to the shareholders. Therefore, the significance of auditing quality lies in the reduction and mitigation of the agency conflicts, providing confidence and credibility in the information included in the audited financial statements (Sullivan, 2000).

Besides that, auditing quality contributes to the reduction of earnings management, for instance, Hsieh and Tsai (2004) showed that there is a negative impact of the aggregate audit adjustments¹, which were used as a measure of auditing quality, on earnings management¹. They found that more qualified auditors are not just connected with low levels of discretionary accruals, but they can also reduce the large amount of unjustified errors in client revenues before inspection and auditing.

Once a misstatement occurs, the auditor should be motivated to discover it promptly because of the reputational damage associated with restatements (e.g., Skinner and Srinivasan, 2012; Mande and Son, 2013; Hennes et al., 2014; Irani et al., 2015). A longer lasting misstatement is evidence of less timely discovery of material misreporting, and is thus an indicator of lower audit quality. The timely discovery of misstatements by an auditor is of great importance to firms and to market investors as well, because not only does it prevent missta-

¹ Which is defined as the difference between the amount of revenue before the inspection and auditing and the amount of revenue after the inspection and auditing. This represents an objective measure of the ability of the auditor to detect errors and misrepresentations in the financial statements and make the necessary adjustments.

² Measured using the discretionary accruals.

tements from exacerbating, but it also helps investors to promptly adjust firms' valuation, resulting in a lower likelihood of extreme stock price volatility and crashes.

On the other hand, auditing quality is important to the auditor; this arises from the non-exposure to the judicial proceedings, to which the auditor might be exposed as a result of the decline of the performance level from the required quality level. Khurana and Raman (2004) examined that whether the big four auditors² provide audit services at a higher quality compared to other small auditors in both United States (which is known for high risk of litigation) and other Anglo-American countries (characterized by low risk of litigation), such as Canada, Australia and the United Kingdom. The results showed that the costs of equity capital of the big four auditors' clients are lower than small auditors' clients only in the United States, which means that big four auditors provide services of higher quality, and that is only in the United States. This explains that the non-exposure to lawsuits is the reason for the high quality of audit services provided by big four auditors and the high credibility of the financial reports.

Some studies have found that audit quality is the main feature in changing the auditor. Woo and Koh (2001) showed that the quality of the auditing process is one cause of changing the auditor. The study found that the rates of changing the auditor in the companies contracting with small auditors are high because the small auditors have few resources and capabilities in general, and

it provides services of low quality since audit quality is positively related to the size of the auditors. Therefore, this is reflected on the rates of changing auditors.

Depending on what has been previously mentioned, researchers conclude that the importance of audit quality lies in the reduction and mitigation of agency conflicts, providing confidence and credibility in the information included in the financial statements that have been audited, the non-exposure to judicial proceedings to which the auditor might be exposed as a result of the decline of performance levels from the required quality, as well as its contribution to the reduction of earnings management through the low levels of discretionary accruals. Audit quality is also considered a basic feature in auditors' changing and one of the criteria of choosing auditors.

2.2 Accounting Conservatism

Accounting conservatism concept is one of debatable issues in accounting literature as a result of different views among researchers about the advantages and disadvantages of implementing this concept. For instance, Givoly and Hayn (2000), Watts (2003) and Lafond and Watts (2008) have shown that conservatism has increased overtime and attributed the existence and the continuous increase of conservatism mainly to contracting, litigation, taxation and regulation that enhance the demand for conservatism.

The importance of the principle as an ingredient of commercial law was also recognized through its incorporation into the laws of other European countries. So, there were many denotations and names for accounting conser-

² Pricewaterhouse Coopers, Deloitte Touche Tohmatsu, KPMG and Ernst and Young

vatism, for example, Abdel Malek (2010) and Al Hyaly (2008) pointed out that some consider the accounting conservatism a principle; others call it a determinant such as Hussain (2007); moreover, some call it a method like Al Azama (1986), and others call it a limit (El Shirazy, 1990). On the other side, sometimes accounting conservatism is called prudence; for example, the International Accounting Standards Board (IASB) uses the term of prudence to refer to accounting conservatism (Pothof, 2011). Depending on that, Rashed (2010) pointed out that there is no way to separate between the conservatism and the prudence terms because the differentiation between them is just a linguistic terminological differentiation in the framework of drafting the texts of the various accounting publications.

Accounting conservatism can be defined as accounting policies or tendencies that result in the downward bias of accounting net asset value relative to economic net asset value. It is one of the most fundamental features of accounting information, dating back centuries (Basu, 1997; Watts, 2003a; Ruch and Taylor, 2015).

Based on that, there are many attempts at accounting professional bodies' level to define accounting conservatism concept, for instance, Financial Accounting Standards Board (FASB) has defined accounting conservatism as "*a prudent reaction to uncertainty to try to ensure that uncertainty and risks inherent in business situations are adequately considered*" (FASB 1980, SFAC No. 2). Also, International Accounting Standards Board (IASB) stated that accounting conservatism, or as it is called prudence, is "*the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty so that assets or income are not overstated, and liabilities or expenses are not understated*" (IASC, 1988).

Furthermore, Riahi-Belkaoui (1985) and El Allali (2010) defined accounting conservatism as the disclosure of the highest values of obligations and expenses besides the disclosure of the least values of assets and revenues, while Beaver and Ryan (2005) and Abdel Malek (2010) stated that conservatism is the reduction amount of the book value of company net assets from its market value. In addition, Balachandran and Mohanram (2011) followed Beaver and Ryan (2005) and Abdel Malek (2010) approach in defining accounting conservatism, so they claimed that accounting conservatism is the accounting selection of (by organizational authorities, standards creator or companies) the potential processing to reduce the net assets and accumulative income, and they implied that the previous studies measure conservatism as the reduction of the book values in relation to market values.

Additionally, Abdel Malek (2010) stated that conservatism is the consideration of potential losses apart from potential profits in all accounting factors, which lead to a reduction of the book values of assets from market values. Moreover, Chan et al. (2009) implied that accounting is conservative if the percentage of the book value of operating assets to the assets market value is less than one. Also, Lara et al. (2010) pointed out that conservatism is the timely recognition of losses in the income statement.

In addition, Salama (2012) defined accounting conservatism as a conditional conservatism, which is practiced through the disclosure and measurement of potential losses and postponement of disclosure of potential profits, and an unconditional conservatism due to the desire and ability of the management to choose among accounting policies and select the conservative methods and policies in order to avoid inflating assets and income or reducing the obligations and expenses, which promotes and supports the quality of financial reports.

Depending on what has been previously mentioned, researchers conclude that there is a multiplicity of names and definitions given to accounting conservatism, and the presence of argument about the survival of the conservatism as a part of the conceptual framework or not, especially among international professional organizations in some of the criteria on one side, and between them and some academic studies on the other side. Besides, the previous studies differ among themselves about defining the concept of accounting conservatism. Researchers agree with the concept adopted by Rashed (2010) since he depended on several previous studies and reached the definition of the conservatism that is consistent with the intellectual framework and does not contradict with the international standards as much as possible, which states that accounting conservatism is the entry or the conventional orientation to be followed by accountants while preparing the financial statements to reflect the effect of the uncertainties surrounding and inherent in the practice of the company's economic activity on the information content of the financial statements so as

to achieve the non-disclosure of inflated values of assets and income or low values of the obligations and expenses under uncertainty, provided that the accounting conservatism does not lead to the intentional disclosure of low values of the assets and income or inflated values for obligations and expenses.

According to the increasing interest of accounting conservatism concept, as mentioned above, many researchers tried to find an accurate measure for this concept; after investigating these measures, researchers will utilize the measure of Givoly and Hayn (2000) that used the Cumulative Negative Non-operating Accruals as the most convenient measure of accounting conservatism for this study because other measures have critical disadvantages. Givoly and Hayn (2000) argued that conservative accounting results in persistently negative accruals; more negative average accruals reflect more conservative accounting. Accruals are expected to reverse over time; therefore, persistence in the level of cumulative negative accruals should reflect a conservatism bias within the firm's accounting system rather than the transitory nature of accruals.

A number of issues arise when implementing this measure. The first issue is related to what the appropriate accumulation period should be, however, Lara et al. (2009) besides Ahmed and Duellman (2007) have adopted a 3-year period from $t-1$ to $t+1$. A further criticism is that the exclusion of depreciation from the accruals measure is likely to introduce an error given the importance of depreciation within the accrual accounting although the extent and direction of the resulting bias are unknown (Wang et al., 2009). However, although these criticism, the measure of

Givoly and Hayn (2000) is still the most commonly used measure that aims to reduce the effect of temporary large accruals which tend to reverse in one or two years (Richardson et al., 2005), and many researchers used Givoly and Hayn (2000) measure like Lara et al. (2009), Ahmed and Duellman (2007) and Soliman (2014).

2.3 Relationships between Audit Quality and Accounting Conservatism and Hypotheses Development

The relationship between audit quality and accounting conservatism has become the subject of an active field of empirical research in accounting (Soliman, 2014). There is a claim that there is a appositive relationship between audit quality and accounting conservatism (Hamdan et al., 2012); this claim based on the idea that audit role is represented in reducing the degree of information asymmetry between managers and the stakeholder parties in the project. Therefore, the high-quality audit will encourage the accounting policies that lead to the reduction of information asymmetry and restrict the policies that lead to increased information asymmetry (Cano, 2010). Reviewing this relationship will depend on how the audit quality is being measured. Many researchers have measured audit quality by using audit firm size and auditor tenure such as DeAngelo (1981), DeFond and Subramanyam (1998), Francis et al.(1999), Sori et al.(2006), Fargher et al.(2008), Choi et al.(2010), and Lennox et al. (2012).

2.3.1 Audit Firm Size

Becker et al. (1998) showed that companies audited by larger audit firms have lower levels of opportunistic behavior, and also Piot and Janin (2005), based on a sample of French companies, presented results that corroborated the findings of Becker et al. (1998). In the same context, Cano (2010) found that the level of conditional accounting conservatism and accounting information quality rises in the companies that are audited by large auditing firms compared to the companies that are audited by small auditing firms. Basu et al. (2001) found that big auditors have incentives to determine earnings more conservatively than non-big auditors because of their greater legal liability exposure; also Chung et al. (2003) supported this finding.

Furthermore, Francis and Wang (2008) examined whether earnings conservatism is jointly affected by the investor's protection environment where a firm is located, and the firm's choice is a big4versus non-big 4auditors. Their finding confirmed the existence of a positive relation between conditional conservatism and big auditors for those countries with a high level of investor protection.

In addition, based on the financial reports of the most active 50 non-financial companies listed at the Egyptian stock exchange across four years, Soliman (2014) showed that auditor firm size had significant positive relation with accounting conservatism.

Thus, according to the literature, audit quality positively affects the quality of accounting information. With respect

to conservatism, it is expected that accounting conservatism is greater in the financial statements of companies that use the big four auditing services.

H₁: It is expected that conservatism level of the companies audited by larger audit companies will be greater.

2.3.2 Auditor Tenure

Ghosh and Moon (2005), Jenkins and Velury (2008) and Azevedo and Costa (2012) claimed that when the relationship between an auditor and its client is longer, this allows the auditor to obtain more knowledge about the client's activities, leading to better service. Thus, in case of longer relationships between an auditor and a client, the quality of audit services should be higher, and the quality of the accounting information reported is supposed to be better.

On the other hand, many authors, for instance DeFond and Subramanyam (1998), Geiger and Raghunandan (2002), Arel et al. (2005), Chi et al. (2009) and Li (2010) asserted that long auditor rotation has a negative impact on audit quality, as demonstrated by Enron scandal which is unraveled and filed for Chapter 11 bankruptcy on Dec. 2, 2001.

Based on that, researchers agree with the idea that the long relationship between auditor and company causes the auditor to have greater proximity to his/her client, which might negatively affect the quality of services provided, so if the relationship is longer, the quality of audit services should be lower, and the quality of the accounting information reported will be worse.

H₂: It is expected that conservatism level of the companies having a longer relationship between the auditor and the client will be lower.

2.3.3 Firm Size

Many studies focused on the relationship between accounting conservatism as a dependent variable and other factors, and they used the company's size as the other variable. This is all based on the claim that there is a negative association between company's size and accounting conservation (Arabahmadi et al., 2013). In the same context, Hamdan et al. (2012) found that big companies adopt conservative accounting policies, and the study explained that depending on big companies will apply conservative accounting policies to avoid political costs; also Soliman (2014) found that there is a positive relationship between companies' size and accounting conservatism.

H₃: It is expected that there is a significant relationship between conservatism level and the company's size.

2.3.4 Firm's Financial Leverage

According to Chartered Institute of Management Accountants (CIMA) Official Terminology, financial leverage is defined as "amount of debt in relation to equity in the capital structure of an entity or debt interest in relation to profit" (CIMA 2005). Also, financial leverage is sometimes called Debt ratio which is a solvency ratio that measures a firm's total liabilities as a percentage of its total assets, so companies with higher levels of liabilities compared with assets are considered highly leveraged and more risky for lenders; as a result, financial leverage re-presents other cr-

editors' claims on the assets of the company. Based on that, many authors, for example Kim and Jung (2007), Scott (2012) and Soliman (2014) asserted that these claims may lead creditors to force company's management to apply more conservatism practices.

H₄: It is expected that there is a significant relationship between conservatism level and the company's financial leverage.

2.3.5 Firm's Profitability

Profitability is a class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time (Ahmed et al., 2002, Investopedia 2015, online). There are many measures of profitability such as profit margin ratio, return on assets and return on equity, residual income and Tobin's Q.

Many studies explained the relation between company's profitability and conservative accounting, for example, according to Ahmed et al. (2002), companies with higher profitability are expected to use more conservative accounting because the cost of making a conservative accounting choice is lower for low-profitability companies (Soliman, 2014, p.356).

H₅: It is expected that there is a significant relationship between conservatism level and the company's profitability.

3. Research Methodology

The research problem is determined according to the research aim and objectives which is whether the audit qu-

ality has a significant effect on accounting conservatism for the most active firms listed in the Egyptian stock exchange. The hypotheses previously developed are required to test the relationship between audit quality variables which are audit firm size and audit tenure and other moderating ones with the accounting conservatism of the listed companies in Egypt. Applied research will be used in this paper as it is an appropriate strategy when there are testable hypotheses. Afterwards, statistical tools and techniques are implemented to test these hypotheses using quantifiable data which are stemmed from the financial statements of the companies listed on the Egyptian stock market.

3.1 Sample Selection and Data Collection

This study has used on non-probability – purposive sample, so some units in the population have had a higher chance of being selected (Greener, 2008). Besides that, purposive sample (also known as a judgmental sample), which is one type of non-probability sampling, was used because the main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable to test the research hypotheses (Greener, 2008). In this context, the study focuses on the most actively traded Egyptian non-financial companies listed in the Egyptian Stock Exchange, according to disclosure book - 50 most active companies, over the period 2007-2015. The most active listed companies are specifically chosen due to the data availability and reliability in contrast to non-listed companies or those that are not the most active ones.

These disclosure books include financial information about the most 50 active-traded companies listed in the Egyptian Stock exchange from different industrial sectors, so financial companies are eliminated from these companies because of their special nature in terms of the differences in the regulatory tax requirements and the characteristics of the financial reports from those of the non-financial companies (Alsaed, 2006). According to Mehran et al. (2011), there is a main dissimilarity in governance of the financial and non-financial sectors. The complexity of the financial sectors, particularly the banking sector causes a difficulty of implementing formal regulations. Due to the differences in regulations between banks and non-financial firms, this study excludes the financial firms (Wilson et al., 2010). An analysis was made to choose the companies with repetitive appearance during this period, and then the highest 50 companies, after excluding financial services companies and banks, were chosen for the period from 2007 to 2015 which are shown in Appendix (1), these companies represent 13 different sectors stated in Appendix (2), resulting in 450 observations, but for statistical analysis researchers exclude 7 uncompleted observations, so only 443 observations were included in the statistical analysis and any missing data were completed from other sources such as companies' websites and/or Thomson Reuters Eikon database in order to be consistent regarding these companies that construct the sample. In addition, these observations will be tested against outliers to improve inferences that could be drawn in different analyses.

Thus, data which was used to measure accounting conservatism, audit quality and other variables collected mainly from Thomson Reuters Eikon database, which is a set of software products provided by Thomson Reuters for financial professionals to monitor and analyze financial information. It provides access to real time market data, news, fundamental data, analytics, trading and messaging tools.

3.2 Variables Identification and Measurements

There are 6 variables included in this research which are accounting conservatism, audit firm size, audit tenure, company size, company's profitability and company's leverage. In agreement with multiple regression models, these variables can be classified into dependent, independent and moderating variables, so figure (1) shows the relationship among these variables which represents the conceptual framework of the study; hence, the following part will discuss this issue.

3.2.1 Dependent variable

There are many measures for accounting conservatism, which represents the dependent variable in this study, such as asymmetric timeliness measure developed by Basu's (1997), market-to-book ratio by Be-aver and Ryan (2000), and too hidden-reserves measure by Penman and Zhang's (2002). However, these methods have many disadvantages related to the implementation and validity of them; consequently, the study will rely on cumulative negative non-operating accruals measurement developed by Givoly and Hayn (2000) as well as many authors like Lara et al.

(2009), Ahmed and Duellman (2007), Xia and Zhu (2009), Soliman (2014), and Al-Sraheen et al. (2014).

According to Givoly and Hayn (2000), conservatism leads to persistently negative accruals. More conservative accounting is reflected by more

negative average accruals. Averaging over a number of years will mitigate the effects of any temporary large accruals since accruals will likely reverse within one to two years (Richardson et al., 2005; and Ahmed and Duellman, 2007).

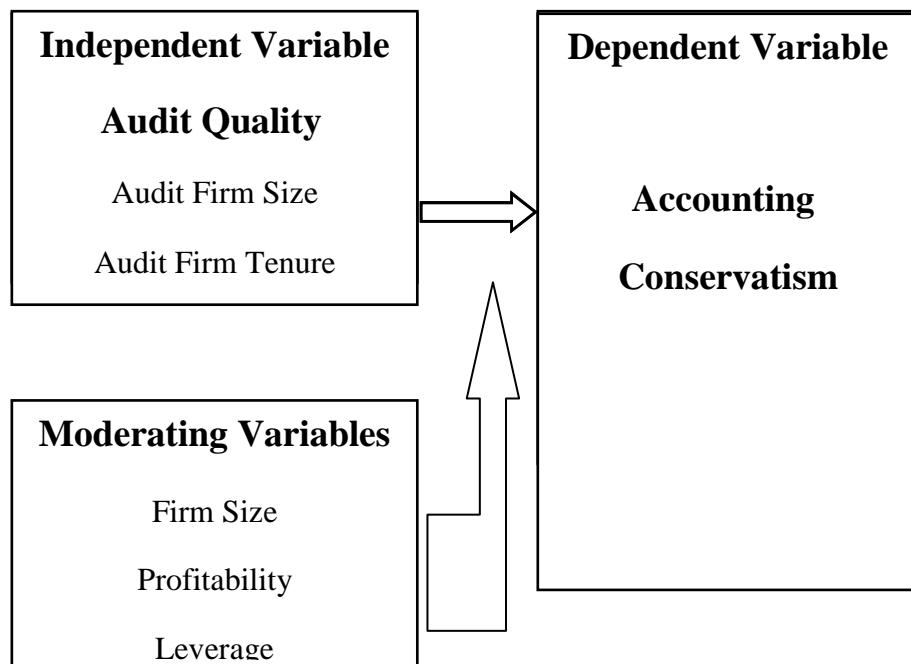


Figure (1)

Conceptual Framework

Conservatism is expressed as the choice of accounting principles that leads to a minimization of reported earnings as it leads to consistently lower cumulative earnings relative to operating cash flows, and higher accounting conservatism results in more negative total accruals; it is suggested that the sign and magnitude of accumulated accruals over time are measures of conservatism. Conservative accounting leads to negative accruals, and the more

negative are accruals, the more conservative are financial reports (Givoly and Hayn, 2000, p.292).

According to Givoly and Hayn (2000), accounting conservatism can be calculated as:

$$\text{CONSV}_i = -1 \times (1/n) \times \sum_{j=1}^n (\text{NOACC}_{ij}/\text{TA}_{ij}) \quad (1)$$

Where:

- i is the firm identifier; j is the selected accumulation period.

- CONSV_{ij} : is the accruals-based conservatism proxy for firm i.
- NOACC_{ij} : is the non-operating accruals.
- **Non-operating accruals** = total accruals before depreciation - operating accruals, Where:
 - **Total accruals before depreciation (TACC)** = Net income before depreciation - cash flow from operations (CFO)
 - **Operating accruals** = Δ accounts receivables + Δ inventory + Δ pre-paid expenses - Δ accounts payable - Δ taxes payable - Δ accrued expenses

- TA_{ij} : is total assets for firm i in a time period j.

As a result of the complexity of the above equation, many authors tried to simplify it, for instance Givoly and Hayn (2000), Ahmed and Duellman (2007), and Qiang (2007), so respectively conservatism is computed as an operational profit or income before extraordinary items and discontinued operations plus depreciation expenses minus operating cash flows and divided by the total asset at the beginning of the period, then multiplying the whole equation by -1. Thus, the larger is the value of this measure, the larger is accounting conservatism, so the simple form is shown as follows:

Accounting conservatism (ACCON) =

$$\frac{\text{Cash flow of the operation} - (\text{Depreciation cost} + \text{Operational profit})}{\text{Total assets at the beginning of the period}} \times -1 \quad (2)$$

Based on that, the study will use the simple form of Givoly and Hayn's measurement which is in line with Soliman (2014) and many other authors.

3.2.2 Independent variable

The quality of an audit is an important but still a controversial issue in both practice and theory. Thus, research on audit area has recently focused heavily on audit quality (Knechel et al., 2012; Laitinen and Laitinen, 2015).

According to figure (1) which explained the conceptual framework, audit quality represents the independent variable in this study, audit quality usually measured by two measures, namely, audit firm size and auditor tenure.

3.2.2.1 Audit Firm Size

Many authors, for instance DeAngelo (1981), DeFond and Subramanyam (1998), Francis et al. (1999), Sori et al. (2006), Fargher et al. (2008), Choi et al. (2010), and Lennox et al. (2012), used audit firm's size as a measure for audit quality because of their belief that if the audit firm's size is greater, the audit quality will be enhanced more greatly as big audit firms have the ability to perform their job more efficiently and effectively than small audit firms, as a result of having capability to hire more talented employees, use superior technology, and own the best financial resources to undertake audit process than smaller audit firms. Therefore, the like-

lihood to discover errors and manipulation in client's financial statements increases.

Hussein and MohdHanefah (2013) summarized the link between audit firm's size and audit quality "*There is no doubt that the big audit firms have the ability, potential qualification, qualified auditors, competent elements, use of technical information, and use of sophisticated and effective methods, so the result is high-quality audits and developed audit profession*".

Based on that, the study will use audit firm's size as a measure of audit quality, so if the company's audit is performed by one of the big firms (Pricewaterhouse Coopers, Deloitte Touche Tohmatsu, KPMG and Ernst and Young), the (ASIZ) variable assumes value 1, otherwise 0, whereas a dummy variable is the most common measure for the firm's audit quality as a value of 1 is given to the firm if its audited by one of the big 4 firms while it's given 0 if otherwise. (Chen et al., 2005, Soliman and Ragab, 2014; Soliman, 2013; Klein, 2002; Piot and Janin, 2007; Peasnell et al., 2005 and Metawee, 2013).

3.2.2.2 Auditor Tenure

Auditor Tenure represents the length of the relationship between auditors and their clients; generally there is a debate among authors about the reliability of auditor tenure as audit quality measures. For example, (Arelet et al., 2005; Jackson et al., 2008; Chi et al., 2009; George, 2004; Ghosh and Moon's, 2005; Knechel and Vanstraelen, 2007 and Jackson et al., 2008) who asserted that there is a strong relationship between audit quality and auditor tenure so that

long auditor rotation has a positive impact on audit quality. That can be explained by a new engagement that involves a higher risk as auditors lack the customer-specific knowledge essential to effectively conduct auditing, and this knowledge of the customer and the business environment is something obtained by experience with the client over time.

Furthermore, other authors, e.g., Geiger and Raghunandan (2002) who asserted that long auditor rotation has a negative impact on audit quality, and they demonstrated that by Enron scandal which was unraveled and filed for Chapter 11 bankruptcy on Dec. 2, 2001.

Consistent with the work of Jenkins and Velury (2008), Li (2010) and Chin et al. (2012), this study used, as a proxy for the time of service to the client (ATEN), the number of consecutive years in which the audit is performed by the same firm.

3.2.3 Moderating variables

A moderating variable is one that has a supposedly strong contingent effect on the independent variable-de-pendent variable relationship. Thus, three moderating variables were chosen in this study which are firm size, firm financial leverage and firm profitability.

3.2.3.1 Firm Size

According to many authors, for instance Klien (2002), Hillman et al. (2007), Piot and Janin (2007), Meek et al. (2007), Johari et al. (2008), Khan and Watts (2009), Rusmin (2010), Al shubiri et al. (2012) and Soliman (2013), firm size is generally measured as the natural log of total assets. Based on

that, this study will depend on the natural logarithm of total assets as a proxy for firm size.

3.2.3.2 Firm's Financial Leverage

There are several different specific ratios that can be used as measures of firm's financial leverage, for example Watts and Zimmerman (1986) used debt to equity ratio which is total debt divided by total equity; also, Al shubiri et al. (2012), Waweru and Riro (2013) and Habbash (2010) used a long term portion only of the debt in calculating debt to equity ratio. Other authors, such as Peasnell et al. (2005), Weber (2006), Rusmin (2010), Warrad et al. (2012), Abed et al. (2012), and Soliman (2013) and Uwuigbe et al. (2015) used total debt ratio which is calculated by dividing total debt by total assets of the firm, so total debt ratio will be used in this study as a measure of firm's financial leverage.

3.2.3.3 Firm's Profitability

Firm profitability is about firm's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time, so there are many financial metrics that used to measure firm's ability to achieve that, for example, profit margin, return on assets (ROA), return on capital employed and return on equity (ROE), residual income and Tobin's Q. Each ratio assesses a different aspect of profitability, for instance, return on as-

sets is an indicator of how profitable a company is relative to its total assets.

By reviewing literature by, such as Dittmar et al. (2003), Ferreira and Vilela (2004), Kusnadi et al. (2015), Sadoud (2006), Harford et al. (2012) and Flipse (2012) that studied factors affecting accounting conservatism, they generally depended on Tobin's Q as a measure of firm profitability, so this study will use Tobin's Q as a metric of firm profitability which calculates by dividing total market value over total book value.

The Tobin's Q ratio is a ratio devised by James Tobin of Yale University, Nobel laureate in economics, who hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs. The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets (Brainard and Tobin, 1968). For example, a low Q (between 0 and 1) means that the cost to replace a firm's assets is greater than the value of its stock. This implies that the stock is undervalued. Conversely, a high Q (greater than 1) implies that a firm's stock is more expensive than the replacement cost of its assets, which implies that the stock is overvalued. This measure of stock valuation is the driving factor behind investment decisions in Tobin's model (Tobin, 1969). Correspondingly, the following table (1) summarizes the variables applied in this study and the methods used to measure each of them.

Table (1)
Study Variables and its Measurements

Variable	Code	Measurement
Independent Variables		
Audit Firm Size	ASIZ	Dummy value (1 = if the audit firm among the big four auditing firms; 0 = otherwise).
Auditor Tenure	ATEN	Continuous variable: length of years the auditor audit their client.
Dependent Variable		
Accounting Conservatism	ACCON	Givoly and Hayn (2000)
Moderating Variables		
Firm Size	FSIZ	Natural logarithm of total assets
Firm Financial Leverage	LEV	Total debt ratio (Total debt/ Total Assets)
Firm Profitability	Q	Tobin's Q Ratio (Total market value/ Total book value)

3.3 Research Model

To test the causal relationship between audit quality, audit firm size and auditor tenure which represent independent variables and accounting conservatism which represents dependent variable, a multiple regression model is used, so the following regression model tests this causal relationship.

$$ACCON = \beta_0 + \beta_1 ASIZ + \beta_2 ATEN + \beta_3 FSIZ + \beta_4 LEV + \beta_5 Q + \varepsilon$$

Where:

ACCON = Accounting conservatism index

ASIZ = The audit firm's size

ATEN	Auditor tenure
FSIZ	Firm's size
LEV	Firm's financial leverage
Q	Firm's profitability
ε	The error term

4. Research Analysis and Findings

4.1 Descriptive Statistics

This section provides simple summaries about the sample (50 most active companies, over the period 2007-2015) and about the observations that have been made (443 observations), so analysis of the results of the sample will be discussed in terms of mean, maximum, minimum and standard deviation

which used to quantify the amount of variation or dispersion of a set of data values. Table (2) provides summary of descriptive analysis of study variables (accounting conservatism, audit firm

size, auditor tenure, firm profitability, firm size and firm leverage).

Table (2)

Descriptive analysis of study variables

variables	Min. – Max.	Mean	$\pm SD$
Accounting conservatism	-0.35 - 2.41	0.03	0.16
Audit firm size	0.0 – 1.0	0.45	0.50
Auditor Tenure	1.0 – 9.0	4.12	2.46
Firm Size	7.14 - 10.98	9.13	0.72
Firm Leverage	0.02 - 3.18	0.48	0.32
Firm Profitability	-0.70 – 3.65	0.33	0.44

According to table (2), accounting conservatism mean is 0.03, a maximum is 2.41, a minimum is -0.35 and a standard deviation is 0.16, which is the lowest standard deviation among study variables. So that indicates that the data points for accounting conservatism tend to be close to the mean.

The second variable is audit firm size mean is 0.45, a maximum is 1, a minimum is 0 and a standard deviation is 0.50.

Descriptive analysis for the third variable which is auditor tenure (measured by the number of consecutive

years in which the audit is performed by the same firm) shows that minimum number of consecutive years in which the audit is performed by the same firm is one year and maximum consecutive years are 9 years, with mean 4.12 and 2.46 standard deviation which is the

largest standard deviation among study variables. So the data points are spread out over a wider range of values.

The fourth variable is the firm's size that is represented by logarithm of total assets. The mean for this variable is 9.13 with a standard deviation 0.72. Logarithms of total assets for the sample are ranged from 7.14 to 10.98. Also, table (2) showed that firm financial leverage which is calculated as total debts divided by total assets, mean is 0.48, a maximum is 3.18, minimum is 0.02, and a standard deviation is 0.32. Finally, firm profitability mean is 0.33, a maximum is 3.65, a minimum is -0.70 and a standard deviation is 0.44.

4.2 Removing Outliers

Data were checked against outliers as the outlier is a value that is very different from the other data in data set that causes a kind of noise that might

affect the analysis and the study results because it can skew results. Therefore, researchers used and utilizes box plot diagram to identify outliers for the dependent and independent variables to exclude them from the study data set to fined the effect on regression results.

Box plot diagram was used on four phases to identify the outliers' observations so they can be removed. This resulted in removing 37 observations from the 443 study observations so that study data set will contain 406 observations.

4.3 Correlation Analysis after Removing Outliers

To show the strength and direction between variables, this section provides the correlation results using the Pearson's correlation coefficients among all study variables in table (3). Table(4) provides a summary of the results of Pearson's correlation coefficients between the dependent variable (accounting conservatism) and independent and moderating variables (audit firm size, firm leverage, firm profitability, firm size and auditor tenure) which is the main focus of this study.

The correlation matrix in table (3) and the summary in table (4) show firm leverage, firm profitability, and audit firm size have strong significant relationship with accounting conservatism. For instance, firm profitability has negative significant relationship with accounting conservatism; also audit firm size and firm leverage have significant positive relationship with accounting conservatism, further after removing outliers from study data set, auditor tenure has insignificant relationship with account-

ing conservatism, instated of having negative significant relationship before removing outliers, on the other hand, firm size has a positive significant relationship with accounting conservatism, instead of having insignificant relationship before removing outliers, based on that the following part will show the effect of removing outliers on the result of regression analysis.

4.4 Regression Analysis after Removing Outliers

After finding that there is correlation between accounting conservatism with other independent and moderating variables except firm size in the previous part, the next step is to determine the causal effect between accounting conservatism and other variables (audit firm size, auditor tenure, firm leverage and firm profitability) and determined which of study hypotheses will be supported and which will be rejected, so researchers will utilize ordinary least squared method (OLS).

Table (5), table (6) and table (7) show the results of regression analysis after removing outliers, for instance R square of the model as shown in table (5) amount is (.120) which means that 12% variation of the dependent variable (accounting conservatism) is explained by the independent and moderating variables (audit firm size, auditor tenure, firm leverage, firm size and firm profitability), and comparing R square value before (is .069) and after (is .120) removing outliers, it is found that R square value almost double, which means that the regression model after removing outliers explains more the behavior of accounting conservatism, also the value of the multiple correlation coeffi-

cient (R) of this model is (.347) as shown in table (5), is closer to the value of 0.5 than its value before removing outliers (0.262), and the higher this value the better, therefore the sample of this study represents the population.

Moreover, in table (6), the significance level of the model is shown which is equal to (0.000) and that's an indication that this model is highly significant as the criteria for the significance level is 0.05, and F value is 10. 947. The Durbin Watson statistics is 1.712 which is still near to 2, which means that error terms are uncorrelated, and thus there is no autocorrelation problem.

Table (7) shows that audit firm size has a positive significant relationship with accounting conservatism with standardized coefficients 0.216, so H₁ is accepted: It is expected that the conservatism level of the companies audited by a larger audit companies will be

greater. On the contrary to the result of regression analysis before removing outliers, table (7) shows that auditor tenure has a negative insignificant relationship with accounting conservatism, based on that H₂ is rejected: It is expected that conservatism level of the companies having a longer relationship between the auditor and the client will be lower. On the other hand, firm size has a positive insignificant relationship with accounting conservatism and therefore, H₃ is rejected. Additionally, firm leverage has a positive significant relationship with accounting conservatism so H₄ is also accepted. And finally, firm profitability has a negative significant relationship with accounting conservatism which is consistent with the assumption made that there is a significant relationship between accounting conservatism and firm profitability, therefore, H₅ is accepted as well. Table (8) summarizes hypotheses test results.

Table (3)
Correlations after removing outliers

	Firm Size	Leverage	Tobin's Q	Conservatism index	Audit Firm Size	Auditor Tenure
Firm Size	Pearson Correlation	1	.376 **	.095	.145 **	.353 **
	Sig. (2-tailed)		.000	.056	.003	.000
	N	406	406	406	406	406
Firm Leverage	Pearson Correlation	.376 **	1	.066	.173 **	.247 **
	Sig. (2-tailed)	.000		.183	.000	.000
	N	406	406	406	406	406
Firm Profitability	Pearson Correlation	.095	.066	1	-.186 **	.124 *
	Sig. (2-tailed)	.056	.183		.000	.012
	N	406	406	406	406	406
Conservatism index	Pearson Correlation	.145 **	.173 **	-.186 **	1	.235 **
	Sig. (2-tailed)	.003	.000	.000		.590
	N	406	406	406	406	406
Audit Firm Size	Pearson Correlation	.353 **	.247 **	.124 *	.235 **	1
						-.011

	Sig. (2-tailed)	.000	.000	.012	.000	.825	
	N	406	406	406	406	406	406
Auditor Tenure	Pearson Correlation	.207**	.063	.090	-.027	-.011	1
	Sig. (2-tailed)	.000	.209	.069	.590	.825	
	N	406	406	406	406	406	406

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

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

Table (4)

Correlation between accounting conservatism with other independent variables after removing outliers

Variables	Accounting conservatism	
	r	p
Audit Firm Size	0.235*	0.000*
Auditor Tenure	-0.027	0.590
Firm Size	0.145*	0.003*
Firm Leverage	0.173*	0.000*
Firm Profitability	-0.186*	0.000*

r: Pearson coefficient

*: Statistically significant at $p \leq 0.05$

Table (5)

Model Summary^b (after removing outliers)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.347 ^a	.120	.109	.06992	1.712

a. Predictors: (Constant), auditor tenure, audit firm size, firm profitability, firm leverage, firm size

b. Dependent Variable: Conservatism index

Table (6)

ANOVA^a (after removing outliers)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.268	5	.054	10.947	.000 ^b
Residual	1.956	400	.005		
Total	2.223	405			

a. Dependent Variable: Conservatism index

b. Predictors: (Constant), auditor tenure, audit firm size, firm profitability, firm leverage, firm size

Table (7)
Coefficients^a (after removing outliers)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.043	.050		-.870	.385
Firm Size	.005	.006	.051	.939	.348
Firm Leverage	.037	.016	.116	2.281	.023
Firm Profitability	-.045	.010	-.223	-4.698	.000
Audit Firm Size	.032	.008	.216	4.230	.000
Auditor Tenure	-.001	.001	-.022	-.458	.647

a. Dependent Variable: Conservatism index

Table (8)
Hypotheses Test Results after removing Outliers

Hypothesis	Support-ed/Rejected
H1: It is expected that the conservatism level of the companies audited by a larger audit companies will be greater.	Supported
H2: It is expected that conservatism level of the companies having a longer relationship between the auditor and the client will be lower.	Rejected
H3: It is expected that there is a significant relationship between conservatism level and the company's size.	Rejected
H4: It is expected that there is a significant relationship between conservatism level and the company's financial leverage.	Supported
H5: It is expected that there is a significant relationship between conservatism level and the company's profitability.	Supported

5. Research Conclusion and Recommendations

Audit quality and accounting conservatism implementation is considered from the relatively newly established areas of special interest for academia and practitioners in developed and developing countries. Although the audit quality has been in the center of this attention, of course, knowing current approaches towards the application of audit quality could be useful to regulatory authorities and professional associations as they develop their own policies, standards and educational programs regarding this matter.

Even though many studies have been conducted on audit quality recently, an obvious lack of research in the field is evident in Egypt. This study aims to fill the gap in Egypt by analyzing the effect of audit quality on accounting conservatism for the most active firms listed on the Egyptian stock market. Also, this study investigates how an effective audit quality system is able to provide sound and well-performing accounting conservatism within Egyptian firms by studying audit firm size, auditor tenure, firm size, firm leverage, and firm probability.

The primary objective of this study is to explore the effect of audit quality on accounting conservatism of firms listed on the Egyptian stock market. This objective has been achieved through detailed literature review and empirical analysis. Additionally, the empirical examination of the hypotheses developed from the conceptual framework presented in this study is used to explore the effects of audit quality on accounting conservatism.

Consistent with prior research the study uses audit firm size and auditor tenure as measurements of audit quality (Hamdan et al., 2012; Choi et al., 2010; Lennox et al., 2012; Jackson et al., 2008, and Chi et al., 2009). The study computes accounting conservatism in terms of Givoly and Hayn (2000) measure of conservatism as previously computed in various studies (Ho, 2009; Beirghani and Pajoohi, 2013).

This study selected the Egyptian companies of the top 50 most active companies listed in the Egyptian Stock Exchange over the period 2007-2015. The financial sectors were not included in this study as the characteristics of these firms are different from the firms in other industrial sectors in terms of financial statement, profitability measures and liquidity assessment. Also, they were specialized in nature and were subject to different regulations, tax and accounting rules (Wilson et al., 2010). Five hypotheses are derived to consider whether audit quality affect firms' accounting conservatism.

The research results, findings and detailed analyses of the empirical study were presented in the following manner: The descriptive statistics were used to describe the data and then correlation analysis was conducted to show the direction and strength between audit quality and accounting conservatism. Afterwards, regression analysis was carried out using ordinary least square (OLS) regression and results after excluding outliers from the study data set the regression analysis show that audit firm size, firm leverage and firm profitability play a major role in effect on accounting conservatism in Egyptian firms

whereas audit firm size has a positive significant relationship with accounting conservatism, firm leverage has a positive significant relationship with accounting conservatism, and firm profitability has a negative significant relationship with accounting conservatism, while firm size and auditor tenure have a weak role whereas firm size has a positive insignificant relationship with accounting conservatism, and auditor tenure has a negative insignificant relationship with accounting conservatism.

To sum up, this paper fills the gap in research on audit quality in Egypt and highlights the importance of audit quality and each of its components on accounting conservatism. The following section presents recommendations for future research on audit quality in light of the results above.

This study examined whether the characteristics (or attributes) of audit quality which are characterized by audit firm size and auditor tenure have effect on the quality of financial reporting, specifically accounting conservatism of the most active 50 non-financial companies listed at Egyptian stock exchange across nine years of period from 2007 to 2015. Therefore, the following points could be summarized:

One of the research hypotheses is about the size of the audit firm and the level of conservatism. Based on the evidence presented, this study can confirm that the level of accounting conservatism is greater in the numbers reported by companies audited by major independent big auditing firms than smaller ones. Thus, the largest independent accounting firms, now called Big Four, have higher audit quality, which

positively affects the level of conservatism. The evidence presented in this paper indicates that auditor tenure did not influence the conservatism of accounting numbers.

Based on these results, the study recommends that the professional associations in Egypt and the government work to improve the auditing quality in Egypt, as the characteristics of auditing quality have impact on the enhancement the level of conservatism, through enhancing law and regulations that enforce companies to adopt accounting conservatism principle in their financial system, also encourage audit firms to increase audit quality and focus on auditing companies accounting conservatism practices. On the other hand, academics need to investigate other factors that affect financial information quality in general, also the determinations and motivations of accounting conservatism practices, as well as audit quality in Egyptians business environment, especially in the light of this study results which indicate that not all audit quality attributes affecting the level of accounting conservatism in Egypt.

6. Research Limitations

In this study, several of limitations and obstacles were encountered; due to Egypt as a developing country, the electronic databases are unavailable. This leads to limitations in the data availability, which made this research more important and vital to shed light on country-related deficiencies that should not exist in order for Egypt to be able to become a developed country.

- Generalizing the results for all firms (other than the sampled firms) becomes limited due to the nature of

empirical model used and study sample.

- The quality of the study depends entirely upon the accuracy, consistency, reliability and quality of secondary data. However, collecting financial data in Egypt was a challenge, due to its unavailability, for instance there are many measures of audit quality other than audit firm size, auditor tenure, but according to data unavailability we used these two measures.
- According to statistical analysis results R square of the study model is (.120), which means that only 12% variation in the dependent variable (accounting conservatism) is explained by the independent variables (Audit firm size, Auditor Tenure, Leverage, Firm Size and Profitability) so there are many other variables affecting accounting conservatism didn't include in this study.
- The research is based on the period from 2007 until 2015; this period includes financial crisis and Egyptian revolution which may have negative effect on financial statements, resulting in misleading findings.

7. Suggestions for Future Research

The results of this study show a diversity of results in audit quality and therefore, create a strong trend between audit quality and accounting conservatism, which increases the research gap further and proves that audit quality is applied efficiently in Egypt.

Another path for further research is to test additional audit quality characteristics that may influence firm per-

formance. Examples for such additional characteristics are; specialization of the audit firm, also provision of non-auditing services to the client, type of client, importance of the client, delay in issuing the audit report and may be other attributes.

However, there is a need for further research to consider more factors that might affect conservatism as environmental and cultural factors and industry type. Such investigation can be carried out using data of a large sample of listed firms to test the relationship between auditing quality and accounting conservatism on wide spectrum of variables as earning's quality, stock prices, firm valuation, cost of capital, and corporate governance mechanisms and most importantly earning management.

Finally, further research can be conducted as comparative studies between Egypt and a developed country for the same period of time in order to be able to compare the results and conclude broader conclusions. Also future study should increase the length of the research period of the study to ensure that there is no biasness in drawing conclusions. Perhaps by covering a longer time period, it will be more meaningful in explaining dependent variable.

Hope this study will contribute to a better understanding of the various factors that affect accounting conservatism in the financial statements, and the relationship of these with the presence of audit quality. In addition, hope this work will encourage the development of new studies on the characteristics of the financial information and quality of auditing in Egypt.

Appendix (1)

Study Sample

1	Asec Co For Mining (ASCM.CA)
2	Al Ezz Dekheila Steel Company Alexandria (IRAX.CA)
3	Egyptian Iron And Steel Co (IRON.CA)
4	Ezz Steel Co (ESRS.CA)
5	Abu Qir Fertilizers And Chamical Industries (ABUK.CA)
6	Egyptian Financial And Industrial (EFIC.CA)
7	Misr Chemical Industries (MICH.CA)
8	Sidi Kerir Petrochemicals (SKPC.CA)
9	Giza General Contracting And Real Estate Investment (GGCC.CA)
10	Lecico Egypt (LCSW.CA)
11	Misr Refrigeration And Air Conditioning Manufacturing (MRCO.CA)
12	Orascom Construction Industrees (OCIC.CA)
13	South Valley Cement (SVCE.CA)
14	Egyptian Company For Condrtuction Development (EDBM.CA)
15	El Saeed Contracting And Real Estate Invesment Co (UEGC.CA)
16	Delta Sugar (SUGR.CA)
17	Extracted Oil And Derivatives (ZEOT.CA)
18	International Co For Agricultural Corps (IFAP.CA)
19	National Co For Maize Products (NCMP.CA)
20	North Cairo Flour Mills (MILS.CA)
21	Sharkia National Company For Food Security (SNFC.CA)
22	Upper Egypt Flour Mills (UEFM.CA)
23	Electro Cable Egypt (ELEC.CA)
24	Egyptian Transport And Commercial Services (ETRS.CA)
25	El Sewedy Electric Co (SWDY.CA)
26	Industrial Engineering Co For Construction And Development (ENGC.CO)
27	United Arab Stevedoring Co (UASG.CA)
28	Egyptian Media Production City Co (MPRC.CA)
29	Alexandria Mineral Oils Co (AMOC.CA)
30	Alexandria Spinning & Weaving Co (SPIN.CA)
31	Arabia Cotton Ginning Co (ACGC.CA)
32	Unirab Polvara Spinning And Weaving Co (APSW.CA)

33	Eastern Co (EAST.CA)
34	El Nasr Clothing And Textiles Co (KABO.CA)
35	Nile Cotton Ginning (NCGC.CA)
36	Egyptian For Tourism Resorts (EGTS.CA)
37	Oriental Weavers Carpet Co (ORWE.CA)
38	Egyptians For Housing Development And Reconstruction Co (EHDR.CA)
39	Cairo For Housing And Development Co (ELKA.CA)
40	El Shams Housing And Urbanization Co (ELSH.CA)
41	Medinet Nasr For Housing And Development (MNHD.CA)
42	United Company For Housing And Development (UNIT.CA)
43	Raya Holding Company For Technology And Telecommunication (RAYA.CA)
44	Orange Egypt For Telecommunications (OREG.CA)
45	Telecom Egypt Co (ETEL.CA)
46	Egypt Gas (EGAS.CA)
47	Gb Auto (AUTO.CA)
48	Heliopolis Co For Housing And Development (HELI.CA)
49	Palm Hills Development Company (PHDC.CA)
50	Sixth Of October Development And Investment (OCDI.CA)

Appendix (2)

Sample Sector Classification

No.	Sector	No. of Companies in the Sector	%
1	Basic Resources	4	8%
2	Chemicals	4	8%
3	Construction and Materials	7	14%
4	Food and Beverage	7	14 %
5	Industrial Goods, Services and Automobiles	6	12%
6	Media	1	2%
7	Oil and Gas	1	2%
8	Personal and Household Products	7	14%
9	Real Estate	8	16%
10	Technology	1	2%
11	Telecommunication	2	4%
12	Utilities	1	2%
13	Travel and Leisure	1	2%
Total		50	100%

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115. راشد، محمد إبراهيم محمد . ٢٠١٠ . دراسة وتحليل نماذج قياس التحفظ المحاسبي بالقوائم المالية في إطار الإلتزام بالمعايير المحاسبية لتقييم أثره على تكفة التمويل بالملكية والإقتراض (دراسة تطبيقية على جمهورية مصر العربية). رسالة دكتوراه غير منشورة، كلية التجارة - جامعة الإسكندرية.
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Modifications Report

The following paragraphs and references have been reported to be the reason of the relatively high similarity percentage and therefore they were removed and consequently the similarity percentage has dropped to be 15%:

Paragraph and References Removed	Page Number
The need for conservatism is suggested with agency theory, through which problems between managers and stakeholders about the separation of management and ownerships can be solved. This issue was discussed by Watts (2003) with the assumption that the financial reports published by managers were conservative, and shareholders may reduce salary of managers to compensate the difference by their attention to their personal interests. To prevent this situation, managers may provide more conservative volume as a sign of their lack of attention to their own personal interests (Pashaki and Kheradyar, 2015)	P.3
Many of the accounting scandals and breakdowns in financial markets have emerged in recent years, but the most important results, which were not expected for these events, increased awareness of the importance of the role of auditing, and many of the parties realized the crucial role played by the audit in the performance of financial markets (Abu-Ijela and Hamdan, 2010). On the other hand, the number of audit failures declared, as evidenced by the lawsuits and penalties imposed by the Stock and Exchange Commission (SEC) are very small, having an annual failure rate close to zero (DeFond and Francis, 2005).	
However, there is no agreement on the concept of the auditing quality. Both of the International Federation of Accountants (IFAC) and American Institute of Certified Public Accountants (AICPA) failed to introduce an explicit concept of the auditing quality. However, there are several attempts (iefpedia.com) to define the quality of the auditing, including the concept of auditing quality being defined as the external auditor which detects an anomaly in financial statements and then reveals it to the users of these statements (DeAngelo, 1981).	P.3 and P.4
Issa (2008) defined audit quality as (iefpedia.com) the ability of (iefpedia.com) audit process to detect and report important falsification of financial statements as well as to reduce asymmetry of information between managers and stakeholders that are relevant to the level of quality of information (www.scipress.com) in financial statements. Also, Deis and Giroux (1992) argued that the auditing quality is the auditor's ability to detect weaknesses and gaps in the accounting system for the client and the reporting. However, Copley and Doucet (1993) went in another direction by defining the auditing quality as the application of professional standards related to field work and reporting standards. The audit quality is a set of methods and techniques that work to reduce errors and fraud, and it	

<p>is supported through access to sufficient and convincing evidence in order to protect the interests of relevant parties (Abu Ijela and Hamdan, 2010). The probability of detection is a matter of competence, whereas the probability of revelation depends on the independence of the auditor, i.e. his/her willingness to face the pressure exerted by the producers of financial statements (Piot and Janin, 2005)</p>	
<p>Audits can be considered a type of assurance service. However, audits are only designed to test the validity of the financial statements, and are subject to regulation under International Standards on Auditing. Assurance engagements designed to test historical financial information are referred to as assurance reviews (these are regulated by International Standard on Review Engagements (ISRE 2400), but assurance reports can be obtained over many other subject matters and will then be subject to ISAE 3000 or other individual Standards on Assurance Engagements (en.wikipedia.org) (Copley et al., 2009)</p>	P.4
<p>The financial information reported by a firm is of great importance to the stakeholders as based on the provided information, stakeholders take several decisions including investing decisions by investors and institutions and providing loans decisions by banks and other lenders, and many other decisions are based on the information provided by firms. Therefore, in order to avoid the risk of losing the financial information credibility and the trust of the financial information users and in order not to face problems with the auditing firms, firms must have an accounting conservatism to provide credible and reliable information.</p>	P.23
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