

The perception of audit quality among financial statements users, preparers and auditors, in Tunisia

Mouna Hamza ^{1,a} and Salma Damak-Ayadi ^b

^a *IHEC, University of Sousse, LIGUE, University of Manouba, Tunisia*

^b *IHEC, University of Carthage, LIGUE, University of Manouba, Tunisia*

Abstract

Research Question: The principal purpose of this research is to determine the audit quality attributes as perceived by the different stakeholders: financial statements users, preparers and auditors in Tunisia.

Motivation: Audit markets have been weakened by recent financial scandals. This led to debates about the concept of audit quality and its evaluation. As the evaluation of audit quality through auditor quality is today unable to allow a real evaluation of the adequacy of the realized audit tasks, we believe that the evaluation of audit quality must henceforth include new components such as characteristics related to audit firms, external factors and legislation.

Data: We used a 5-point Likert scale questionnaire; a measurement scale of the audit quality attributes. Our sample contained the three groups of stakeholders in order to compare their perceptions of audit quality. We distributed 380 questionnaires. Our return rate was 38%. Each questionnaire contained 40 attributes organized in five factors (characteristics related to auditor, characteristics related to audit firm, control of the profession, legislation, external factors).

Tools: Factor Analysis method was used to reduce the number of items to a smaller set of factors and to summarize information

Findings: This study shows that characteristics related to auditor and characteristics related to audit firm were generally perceived to be the most important. Moreover, this study underlines the importance of the control of the profession. The legislation factor is only significant for the users of the financial statements and the preparers.

¹ *Corresponding author:* Mouna Hamza, Department of Accounting, University of Sousse, Tunisia, email addresses: mouna.hamza@ihec.u-carthage.tn.

Contribution: While numerous studies have examined audit quality, many have focused on eliciting the attributes of audit quality from auditors. However, as the competitive environment increases, understanding the perceptions of financial statements users, preparers, and auditors regarding audit quality becomes increasingly important. Differences in perceptions may provide insight for audit firms to enhance satisfaction for both groups and improve overall audit quality. Our study is a comprehensive attempt to compare the perceptions of different stakeholder with regard to audit quality.

Keywords: audit quality, stakeholder theory, agency theory, signal theory, Factors Analysis, Tunisian context.

JEL codes: M42

1. Introduction

Companies have to prepare and report their activity by financial statements elaboration. These documents are produced by the manager and destined to different users, mainly external partners: shareholders, bankers, institutional and individual investors, creditors, financial analysts, etc. The purpose of these statements is to provide information about the company's financial performance and position. To ensure their reliability, the obligation of control deemed to be necessary. This control is typically provided by auditors, who are responsible for reviewing the financial statements to ensure that they are accurate, complete, and in compliance with accounting standards. The intervention of an auditor to control the regularity, sincerity and fidelity of accounting information elaborated by the manager is a solution to information asymmetry problem which occurs when the manager has more information about the company's financial performance than external partners. Despite the importance of audit reports, many researchers have shown that financial statements users do not rely on audit report when taking (Estes & Reimer, 1977; Soltani, 2000) Indeed, users do not consider them to be a primary source of information.

This lack of trust in audit reports is a significant challenge faced by the audit market today, and one of the main reasons for this is the involvement of auditors in various financial scandals, which have undermined the reputation of the audit market. The Enron scandal, which implicated one of the biggest audit firms in the worlds, Arthur Andersen, was a highly noteworthy scandal that shook the business world. In the Enron scandal, Arthur Andersen was the auditor for Enron, which was an energy company that had engaged in fraudulent accounting practices to hide losses and inflate profits. Arthur Andersen was accused of not adequately auditing Enron's financial statements, leading to the company's collapse and resulting in significant

financial losses for investors and employees. The Enron scandal had far-reaching consequences, not just for Arthur Andersen, but for the entire audit market. It raised questions about the independence and objectivity of auditors (Cooper & Neu, 2006; Aouina, 2019).

Since then, there have been several other high-profile financial scandals involving auditors, such as the WorldCom scandal, the Lehman Brothers scandal and recently, Wirecard scandal, Luckin Coffee scandal and Carillion Scandal. These scandals have further eroded public trust in the audit market and highlighted the need for a more comprehensive evaluation of audit quality, beyond just assessing the quality of individual auditors (Roszkowska, 2021).

Consequently, there is a need to evaluate the concept of audit quality and determine the factors that contribute to it (Carcello *et al.*, 1992; Albitar *et al.*, 2021). The evaluation of audit quality through auditor quality is no longer sufficient to assess the adequacy of the audit tasks. Therefore, it is necessary to include new components such as characteristics related to audit firms, external factors, and legislation in the evaluation process. This will provide a more comprehensive assessment of audit quality and help to rebuild trust in the audit market and ensure that financial information is reliable and accurate, benefiting both companies and their stakeholders (Saidu & Aifuw, 2020)

It is essential to consider the perspectives of the different stakeholders involved in the audit process when investigating factors for evaluating audit quality because each stakeholder has unique information needs and expectations regarding the audit report (Cohen *et al.*, 2008). Financial statements users, such as investors and creditors, rely on the audit report to make informed investment decisions. preparers of financial statements, such as company managers, may view the audit process as a necessary compliance requirement but also want to ensure that the audit does not disrupt their operations. Auditors have a professional responsibility to ensure that the audit is conducted in accordance with the relevant auditing standards. Therefore, by considering the perspectives of all the stakeholders, a more comprehensive understanding of the factors that contribute to audit quality can be obtained. This information can help auditors to tailor their audit procedures to better meet the needs and expectations of different stakeholders, and ultimately, increase the reliability and usefulness of the audit report.

The principal purpose of this research is to determine the factors for evaluating audit quality as perceived by the different stakeholders: financial statements users, preparers and auditors in Tunisia. This study investigates how audit quality is perceived in Tunisia. We rely on previous literature on the determinants of audit quality, specifically competence and independence, as a basis to identify relevant items within the Tunisian context. Using these items, we have identified five key factors that contribute to audit quality: the individual characteristics related to

auditors, the characteristics related to audit firms, external factors, the control of the profession by the Tunisian Order of Chartered Accountants' control commission, and the Tunisian legislative framework.

To measure the perception of audit quality, we designed a questionnaire that was distributed to three groups of stakeholders: financial statements users, controllers of the audit report, and preparers. The questionnaire included the identified items and aimed to evaluate the stakeholders' perception of the quality of the audit through audit quality attributes. After collecting the responses, we conducted a factor analysis of the results and compared the differences in perception between the three groups of respondents based on these factors.

The findings reveal that the quality of audit is strongly associated with individual characteristics of the auditor, characteristics of the audit firm, and the control of the profession by the control commission. This suggests that these factors are of utmost importance to financial statements users, preparers, and controllers when assessing the quality of audit reports. The result highlights the significance of auditors and audit firms in building trust and confidence in the audit market. Additionally, control is viewed as a necessary aspect, providing an added level of assurance. In contrast, the factor of legislation in Tunisia was found to be significant only for financial statements users and preparers, while the controllers of the audit report did not consider it to be a significant one. The measures implemented were deemed insufficient and did not improve their perception of the audit quality.

This study makes several contributions to the literature. First, based on agency theory, signal theory and stakeholder theory, it extends previous literature while providing insights into how different stakeholders perceive the role and effectiveness of auditors. Second, understanding these perceptions can help improve communication and collaboration between these groups. By understanding how each group views the auditing process, auditors can tailor their communication and reporting to better meet the needs of financial statements users and preparers. This can help to improve the overall effectiveness of audits and promote greater trust and transparency in financial reporting.

The remainder of the paper is organized as follows. In Section 2, we provide the basic theoretical background and hypothesis development. In Section 3, we describe the methodology used in this study. In Section 4, we present the main empirical results. Section 5 discusses the findings and their implications and concludes the paper.

2. Literature review and hypotheses development

Early research on audit quality focused on addressing information asymmetry between investors and companies (Francis, 2004; Watkins *et al.*, 2004; Sitanggang *et al.*, 2020). In many cases, investors lacked access to the information needed to make informed decisions about the financial situation of a company, which could lead to market inefficiencies and incorrect valuations. Audits were seen as a way to address this problem by providing independent opinion that financial statements were accurate and reliable.

However, there were also divergent interests among the recipients of audit reports. For example, while investors may have wanted auditors to provide a clear and accurate picture of a company's financial health, the company's management may have had an interest in presenting a more favorable representation of the company's financial performance. These divergent interests are explained by agency theory, which suggests that conflicts of interest arise when one party (the principal) hires another person (the agent) to perform a task on their behalf. The agent may have their own interests that differ from those of the principal, leading to agency costs. In the context of auditing, agency theory suggests that there may be conflicts of interest between financial statements users (the principals) and financial statements preparers and auditors (the agents). Financial statements preparers may have an interest in presenting a more favorable picture of a company's financial performance, while auditors may have an interest in maintaining a good relationship with their clients. These conflicts can potentially lead to reduced audit quality or even fraudulent practices.

Early research on audit quality therefore focused on understanding how these conflicts of interest could be managed and how audits could be designed to provide the greatest possible assurance that financial statements were accurate and reliable. This research helped to lay the foundation for modern auditing standards and practices, and continues to be an important area of study in the field of accounting and finance today.

Used as a signal of quality, audit efficiency is crucial in establishing trust in the accuracy of financial statements, making it a fundamental factor in the application of signal theory. Essentially, signal theory suggests that the efficiency of audit serves as a signal of the overall quality of control, and by extension, the reliability of financial statements. It is worth noting that the efficiency of audit is often equated to the concept of "audit quality," which has been the subject of extensive research. Several frameworks and standards exist to help evaluate and ensure the quality of audits. For example, the International Auditing and Assurance Standards Board (IAASB) has developed the International Standards on Auditing (ISA), which set out principles and procedures for conducting high-quality audits. In addition,

professional organizations, such as the American Institute of Certified Public Accountants (AICPA), have developed guidelines and best practices to help auditors ensure the quality of their work. Overall, the concept of audit quality is a critical component in ensuring the accuracy and reliability of financial statements. Auditors must possess the necessary knowledge, skills, and independence to carry out their work effectively and provide stakeholders with the assurance they need to make informed decisions.

The majority of these research who suggest that audit quality is highly dependent on the quality of auditors themselves, specifically their competence and independence. Therefore, the competence and independence of auditors are considered critical components of audit quality. Audit quality enables restoring confidence between different groups, since it is defined as the probability that an auditor will both find and report material errors or intentional misstatements in financial statements. In other words, audit quality refers to the ability of the auditor to detect and report material misstatements in financial statements with a high degree of accuracy and reliability (DeAngelo, 1981).

DeAngelo's (1981) definition of audit quality highlights two critical components that contribute in determining the effectiveness of an audit: detection and reporting. On one hand, detection refers to the ability of the audit team to identify material misstatements in the financial statements. This component is heavily influenced by the quality of the audit team's work, including their competence, experience, and ability to design and execute effective audit procedures. The better the audit team's performance, the higher the likelihood of detecting material misstatements. Reporting, on the other hand, is the process of communicating any detected material misstatements to the appropriate parties, such as management or the board of directors. According to DeAngelo's definition (1981), the ability to report material misstatements properly is heavily dependent upon auditor independence. Independence refers to the auditor's ability to remain impartial and objective in their assessment of the financial statements. Without independence, there is a risk that the auditor's judgment may be compromised, leading to incomplete or inaccurate reporting of material misstatements.

Overall, DeAngelo's definition of audit quality emphasizes the critical importance of both detection and reporting components in ensuring the accuracy and reliability of financial statements. A high level of performance in these two areas is crucial for auditors to provide assurance that financial statements are free from material misstatements and that stakeholders can rely on them for decision-making purposes.

2.1 Auditor competence and factors related to detection

Auditors must possess specific competences which result from education and training (Sutton & Lampe, 1991; Bédard, 1993; Scheid, 2000; Wooten, 2003),

experience (Abdolmohammadi & Shanteau, 1992; Ismail & Trotman, 1995; Lee & Stone, 1995), and the use of information and communication technology (Vézina, 1996; Ktat, 2004). Their specialization (Ferguson & Stokes, 2002; Francis, 2004; Van Caneghem, 2004), contribution in a large CPA firm (Krishnan & Schauer, 2000; Blokdijk *et al.*, 2006; Sori *et al.*, 2006), important team structure (Jensen & Meckling, 1992; Tuntiwongpiboon & Dugan, 1994; Manita & Chemangui, 2007), tenure, and rotation in different missions affect their competence (Carcello & Nagy, 2004; Chemingui & Pigé, 2004; Iyer & Rama, 2004; Carey & Simnett, 2006). Elliott and Jacobson (1997) argue that auditors ability to effectively use technology is critical in the current business environment. Therefore, it is important for auditors to constantly update their knowledge and skills to keep up with the changing business landscape and emerging technologies.

In addition, a good understanding of the business environment and the industry in which the client operates is crucial for auditors to identify and assess risks, evaluate the reliability of financial information, and provide valuable insights to clients (Bell, 1999; Gramling *et al.*, 2004; Libby & Frederick, 2005). Auditors must also possess strong analytical and critical thinking skills to identify and interpret complex financial transactions and transactions that may indicate potential fraud (Hooks *et al.*, 2002; Dang *et al.* 2020). Overall, the competence of auditors is a critical component of audit quality, and it depends on a combination of factors including education and training, experience, technology usage, specialization, teamwork, industry knowledge, analytical skills, and critical thinking abilities.

2.2 Auditor independence and factors related to reporting

The concept of independence in auditing is defined by the European Commission as a requirement for statutory auditors to be independent from their audit clients, both in mind and in appearance. This means that a statutory auditor should not carry out a statutory audit if there are any financial, business, employment or other relationships between the statutory auditor and his client that could compromise the auditor's independence (European Commission, 2014).

The importance of independence lies in the potential for conflict of interests between the auditor and the client, which has been studied extensively in literature. Citron and Taffler (1992), Demski (2003), and Cerruti and Richard (2008) found that the auditor-client relationship could be a source of conflict of interests. Non-audit fees (Firth, 1997; DeFond *et al.*, 2002; Francis & Ke, 2006), disclosure fees (McNair, 1991; Prat Dit Hauret, 2003), CPA firm size (Pigé, 2000; Prat DitHauret, 2003), and audit market competition (Snyder & McKnight, 2004; Manita & Chemangui, 2007) have also been identified as factors that could potentially affect auditor independence.

To mitigate these risks, auditors must strive to maintain a good reputation (Bennecib, 2002; Prat DitHauret, 2003; Ramirez, 2005), practice strong ethics (Chaney & Philipich, 2002; Sori *et al.*, 2006), and adhere to rotation and tenure requirements (Deis Jr & Giroux, 1992; Carey & Simnett, 2006). In addition, clients financial situation has also been found to affect auditor independence (Reynolds & Francis, 2000; Shafer *et al.*, 2000). However, auditors' legal responsibility (Shockley & Holt, 1983; Deis & Giroux, 1996) and the control of the auditing profession (Moizer, 1997; Reynolds & Francis, 2000; Shafer *et al.*, 2000) are considered key factors that can help consolidate independence.

In summary, the concept of independence in auditing is crucial in ensuring that the auditor can perform their duties objectively and without any bias. To achieve this, auditors must be aware of potential conflicts of interests and strive to maintain their independence through good reputation, ethics, adherence to rotation and tenure requirements, and legal responsibility. The control of the profession is also important in maintaining auditor independence.

2.3 Hypotheses development

This study examines the issue of audit quality from a behavioral perspective and identifies attributes that are perceived by audit report preparers, auditors, and users as being related to audit quality. Building on previous literature, the first phase of the present study focused on developing a specific list of the attributes of audit quality, associated with ensuring high-audit outcomes. This involved a comprehensive review of the literature on the subject, as well as a thorough analysis of Tunisian legislation and audit professional reference materials. Based on this extensive review, we compiled a list of 40 items. These items were then assigned to five research hypotheses, each of which sought to explore different aspects of audit quality.

Our research involved a comprehensive effort to group and classify various elements related to audit quality. This involved defining specific items that could be used to measure the various aspects of audit quality, and organizing them in a logical and meaningful way. Through this process, we were able to establish a set of variables that could be further analyzed and tested empirically. Before beginning this phase, it was necessary to convert these variables into hypotheses, as a crucial methodological step to ensure their robustness.

Auditor characteristics are important determinants of audit quality. The present study includes eight items related to the auditor characteristics that could potentially impact audit quality. One important item is the qualifications of the auditor, including their education and professional certifications, which can impact their ability to conduct an effective audit. Additionally, the auditor training, experience,

and use of ICT tools can impact their ability to identify and address audit risks. The auditor relationship with the client, ethical standards, and knowledge of accounting and auditing standards also contribute to audit quality. Having a thorough understanding of accounting principles and standards is essential for an auditor to effectively evaluate financial statements and identify any errors. This includes knowledge of GAAP, IFRS, and any relevant local or industry-specific accounting standards. Moreover, auditors ensure compliance with auditing standards such as ISA to provide high-quality audits.

Auditors have a significant role in ensuring financial statements accuracy and maintaining investor confidence. Therefore, it is essential to have well-qualified, competent, and ethical auditors who can conduct an effective audit. The characteristics of auditors considered in this study can potentially impact audit quality and influence stakeholders' perceptions of the quality of the audit report. Thus, we formulate the following hypothesis:

H1. characteristics related to auditor improve perception of audit quality

The current research emphasizes the crucial role of audit firm characteristics in determining the quality of audits. To this end, our study examines 14 key items that are closely associated with audit firm characteristics, and have the potential to influence audit quality, for instance: the experience of the audit firm, the structure of the audit team, and the reputation of the audit firm. A firm with a long history of conducting audits and effective systems and procedures can enhance audit quality. A well-organized team with clear roles and responsibilities can help ensure that all necessary tasks are completed thoroughly and accurately. The reputation of the audit firm is also important, as a firm with a strong reputation for conducting high-quality audits is more likely to be trusted by clients and stakeholders.

Other items that can impact audit quality include the financial condition of the audit firm, the percentage of the audit fee paid by the client, and the ethical standards of the audit firm. A firm that is struggling financially may compromise on quality by reducing the time assigned to the engagement in order to save costs. If the fee is too low, the audit firm may not be able to allocate sufficient resources to conduct a high-quality audit. Firms that prioritize ethics and integrity are more likely to conduct thorough and accurate engagements.

Finally, items such as the audit firm's experience in a specific industry, partner review, and the method of communication with the client can also impact audit quality. A specialized audit firm with knowledge of the unique accounting and auditing practices of a specific industry may have a better understanding of the risks and challenges faced by the audited company, as well as the appropriate accounting treatments and disclosures required. Partner review can help identify potential issues and ensure that the audit is conducted in accordance with relevant standards and regulations. Effective communication between the audit firm and the client can help

ensure that all necessary information is shared and that potential issues are identified and addressed in a timely manner. Thus, the second hypothesis is formulated as follow:

H2. *Characteristics related to the audit firm improve perception of audit quality.*

The present study identified four external factors that could potentially impact audit quality. The level of competition in the audit market, as higher competition may lead to lower fees and a potential decrease in audit effort. Additionally, a client financial condition can impact audit quality, as financial stress may lead to pressure on auditors to overlook certain issues or engage in unethical behavior. The existence and effectiveness of internal audit functions can also have an impact on audit quality, as they may identify and address issues before external auditors get involved. Finally, the risk associated with a client's financial statements, such as the complexity of accounting policies and the extent of judgment required in financial reporting, can affect audit quality, with high-risk financial statements requiring a more rigorous audit approach. Hence, the third hypothesis is formulated as follows:

H3. *External factors improve perception of audit quality.*

The control of the auditing profession is an important aspect that could impact the perception of audit quality. To measure the contribution brought by the oversight board to this perception, five items were developed. The first item focuses on the self-regulation aspect of the profession. The extent to which the profession is capable of regulating itself can impact the perception of the quality of the audit. The second item relates to the scope of control and whether it is satisfactory in terms of ensuring that audit quality standards are being upheld. The third item addresses the competence of the control commission and whether they have the necessary skills and expertise to effectively regulate the profession. The fourth item pertains to the composition of the control commission and whether it is made up of chartered accountants, who have a deeper understanding of the auditing profession. Finally, the fifth item relates to the transparency of the control commission operations and decision-making processes, which can impact the perceived effectiveness of their oversight. Thus, we formulate the following hypothesis:

H4. *Control of the profession improve perception of audit quality*

The present study also considers the legislative framework of the Tunisian audit profession, as it is an important factor influencing the perception of audit quality. Nine items related to legislation in Tunisia were identified and included in the study. These items cover various aspects of the legal framework, such as the appointment and dismissal of auditors, the audit fees charged as predetermined by a scale, the requirement for an audit committee in certain companies, the regulation of auditor mandates, the rotation of auditors on files, the use of joint audit, the prohibition of certain services by legal auditors, and the adequacy of provided sanctions for auditors who fail to meet professional standards. By including these items, the study

aims to measure the contribution of the Tunisian legislative framework to the perception of audit quality. These items led us to formulate this hypothesis:

H5. Legislation in Tunisia improve perception of audit quality

3. Research methodology

A 5-point Likert scale questionnaire listing attributes that may influence audit quality was sent to a random sample of each of the three groups: auditors, preparers, and users of financial statements. They were asked to provide their perception to evaluate audit quality. The confidentiality of the responses was guaranteed to ensure anonymity.

To achieve this objective, a questionnaire was designed with 40 different attributes. The factors identified in the study by Carcello *et al.* (1992) were included in the questionnaire, as well as additional attributes to provide a more comprehensive examination of audit quality. Using a 5-point Likert scale, the survey respondents were asked to evaluate the level of contribution of each attribute to the quality of the audit. The appendix contains detailed information about the attributes included in the questionnaire and the response format for the scale.

3.1 Participants

The purpose of the audit report is to safeguard the interests of not just the shareholders, but also other stakeholders such as creditors, bankers, financial analysts, mutual fund investment managers, and pension fund investment managers. Given the diverse range of users who rely on the information contained in audit reports, the stakeholder theory use is grounded. However, since the interests of these stakeholders may diverge and potentially conflict with those of the company being audited, agency theory is also used to explain these dynamics.

In Tunisia, the population of auditors consists of accountants and certified public accountants. To ensure the highest quality of data, we specifically targeted certified public accountants as our sample population to represent the wider population of auditors. By selecting certified public accountants, who are recognized as the most qualified and experienced professionals in the field of auditing, we are better positioned to obtain reliable and high-quality data. This, in turn, will enable us to draw more accurate conclusions and make more informed recommendations based on our findings.

Due to the limited number of audit committees in Tunisia, the sample selection for companies preparing audit statements will not only include members of audit committees but also members of board directors from Tunisian companies. By expanding the sample in this way, we were able to obtain a more comprehensive understanding of the factors that influence audit quality from the perspectives of this third population.

3.2 Response rate

To enable comparison of results obtained from different populations, we administered the same questionnaire to all three groups: auditors, preparers, and users of financial statements. A total of 380 questionnaires were distributed, and we received 143 responses, resulting in an 38% response rate.

For the users sample, we randomly selected 60 participants and collected 53 responses via direct contact, achieving an 88% response rate. To collect data from the auditors population, we employed a field survey method and randomly selected 60 participants. We were able to collect all 60 questionnaires, resulting in a 100% response rate. For the preparers sample, we initially sent out more than 200 emails to various companies with the questionnaire attached but received only 2 responses. With the assistance of UTICA, the Tunisian industry union, we were able to collect 28 responses from a sample of 60 preparers belonging to different firms, resulting in a 53% response rate. The varying response rates highlight the importance of tailoring survey methods to specific populations to achieve the best possible response rate.

Tableau 1. Comparison between different response rates

	Sample	Responses received	Response rate
Users	60	53	88%
Auditors	60	60	100%
Preparers	260	30	11%
Total	380	143	38%

4. Results

To test the different research hypotheses developed, we used Factor analysis, a statistical method used to reduce a large set of attributes to a smaller set of factors or components that capture the majority of the variance in the original data. It summarizes the information in the original attributes and makes informed interpretation more manageable (Hair *et al.*, 2000, p. 235).

4.1 Analysis of pooled responses

To begin our analysis, we examined descriptive statistics to determine the importance of each audit quality attribute. Mean values were calculated for this purpose. Then, Factor Analysis were used to reduce the number of attributes and to summarize information. Factors with eigenvalues greater than 1 were retained, and internal consistency was measured using Cronbach's Alpha coefficient to ensure the reliability of the retained factors. Items regrouped measured the same factors. According to Thiéart *et al.* (1999), a value of 0,70 is considered acceptable for

confirmatory research. If the internal coherence improves after removing certain items, it indicates that those items do not accurately reflect the studied phenomenon. Consequently, they are eliminated. Results will be interpreted compared to Cronbach's Alpha Reliability coefficient. In our research we have determined factors linked to each population.

Hypothesis 1. characteristics related to auditor improve perception of audit quality

Table 2. Test of hypothesis 1

Population	Cronbach's Alpha Value	Factors	Explanatory power
Users	0.791	-Material and immaterial investment (items 2, 4 and 6) -Knowledge of accounting and auditing standards (items 7 and 8) - Auditor expertise (items 1 and 3)	73%
Preparers	0.886	-Knowledge of accounting and auditing standards (items 7 and 8)	56%
Auditors	0.775	-Unidentifiable factors (items 1, 4, 8 and 6) and (items 2, 7 and 3)	60%

A confirmation of Hypothesis 1 has been observed among all three groups, indicating their emphasis on auditor quality. The factors that carry the most significance for them are ethical behavior and knowledge of accounting and auditing standards. Interestingly, the weight of this hypothesis varies across the three populations, with preparers showing a significantly higher degree of agreement as evidence by the calculated Cronbach's Alpha.

Hypothesis 2. Characteristics related to the audit firm improve perception of audit quality

Table 3. Test of hypothesis 2

Population	Cronbach's Alpha Value	Factors	Explanatory power
Users	0.892	- Policy and methods of organization (items 12, 13, 15, 16, 17 and 19). - CPA firm size (items 10, 11, 14 and 9) - Deontology (items 21, 22 and 20) - Specialization (item 18)	73%

**The perception of audit quality among financial statements users,
preparers and auditors, in Tunisia**

Population	Cronbach's Alpha Value	Factors	Explanatory power
Preparers	0.719	<ul style="list-style-type: none"> - CPA firm size (items 10, 11 and 9) - Deontology (items 15, 21 and 22) - Percentage of audit fee in total revenue (item 16) 	53%
Auditors	0.799	<ul style="list-style-type: none"> - CPA firm size (items 11, 10 and 12) - Percentage of audit fee in total revenue (items 14, 20, 15 and 16) 	60%

Hypothesis 2 has been confirmed, but the explanatory power differs across the three groups. Specifically, preparers indicate a moderate level of importance between audit firm characteristics and audit quality, while auditors assign more significance to this factor. On the other hand, users view the characteristics of the CPA firm as fundamental in their perception of audit quality. This finding is in line with the principles of signal theory, which suggest that users of audit services assign significant value to the attributes of the audit firm. Companies, in turn, attempt to signal their quality to users by selecting top-tier audit firms. As a result, CPA firms have a vested interest in aligning their characteristics with market demands.

Hypothesis 3. External factors improve perception of audit quality

Table 4. Test of hypothesis 3

Population	Cronbach's Alpha Value
Users	0.669
Preparers	0.641
Auditors	0.634

As the value of Cronbach's Alpha is below 0,7 for all three populations, the hypothesis related to external factors is rejected. Therefore, external factors do not have an impact on the perception of audit quality. Consequently, the four items, including a highly competitive audit market, a client's good financial condition, a satisfactory internal audit process, and high-risk financial statements, are not considered to be factors that influence the perception of audit quality for any of the three populations.

Hypothesis 4. Control of the profession improve perception of audit quality

Table 5. Test of hypothesis 4

Population	Cronbach's Alpha Value	Factors	Explanatory power
Users	0.845	Board characteristics (items 27,28, 29 and 30)	59%
Preparers	0.843	- Control of the profession (items 27,28, 29, 30 and 31)	62%
Auditors	0.887	- Board characteristics (items 27,28, 29 and 30)	66%

Hypothesis 4 is confirmed for the three groups, with a moderate variation in explanatory power. This confirms that a strong regulatory framework and oversight of the audit profession enhances security and ultimately leads to improved audit quality.

Hypothesis 5. Legislation in Tunisia improve perception of audit quality

Table 6. Test of hypothesis 5

Population	Cronbach's Alpha Value	Factors	Explanatory power
Users	0.858	- Auditor tenure (items 32, 33 and 36) - Regulating audit engagements (items 36, 38 and 39)	62%
Preparers	0.7	- Restrictions and sanctions (items 39 and 40) - Control (items 35 and 36) - Join audit (item 38)	70%
Auditors	0.696		

In Tunisia, the significance of legislation in relation to audit quality perception is limited to audit report users and preparers, while auditors do not view it as a contributing factor. Therefore, the hypothesis regarding the influence of legislation on audit quality perception is only confirmed for two out of the three populations studied, users and preparers.

4.2 Comparative analysis of group perceptions

When comparing stakeholder perceptions, the following observations have been made: In regards to the Auditor-Client relationship, the three targets have varying perspectives. While users perceive it as harmful, auditors view it as irrelevant to the quality of the audit, preparers acknowledge its importance and value respect in the interaction. A cooperative and transparent relationship between the company and the auditor, where necessary information and documents are provided, is seen as essential to enhance the auditor's effectiveness and improve the quality of the work. Also, a thorough understanding of standards is deemed crucial by all three groups, especially preparers, to ensure that the audit engagement is carried out efficiently. However, technical expertise alone is deemed insufficient by the participants to this study. They all agree on the importance of ethical behavior as a fundamental aspect of the auditor's role. Regardless of his technical knowledge, the credibility of the audit process can be compromised when the auditor lacks moral integrity.

Although the importance of firm size in improving audit quality is recognized across all three groups, the characteristics of the audit firm are also taken into consideration by these populations when assessing the significance of this factor. Indeed, its definition and significance vary depending on the perspective of the stakeholders. Users tend to associate the size of the audit firm with the number and the level of importance of its clients, while preparers focus on the firm's experience and reputation as indicators. For controllers, however, the size of the firm is linked to the number of employees, which corresponds to a better availability and meeting the deadline for the audit report. In addition to firm size, all three stakeholder groups place great emphasis on ethical practices as a crucial factor in audit quality. This includes a range of behaviors by the firm, which significantly enhances the perception of audit quality.

Users and controllers share a similar perspective on the contribution of the control commission towards ensuring audit quality, whereas preparers hold a distinct viewpoint. On one hand both users and controllers are disappointed with the level and the frequency of control. In fact, the frequency is less than three years despite the regulatory provisions. Although the control commission adheres to the fundamental principle of transparency, the users of audit reports are convinced that the commission fails to meet this principle. They claim that Professional secrecy is the reason behind the non-disclosure of control results. On the other hand, auditors perceive the current level of control to be sufficient, particularly given that it is carried out by their peers.

The findings related to the "legislation in Tunisia" variable are unexpected as they reveal divergent opinions among the three stakeholder groups. While users and preparers consider this factor important, it appears to be not significant for auditors.

Users emphasize the need for enhanced security measures, greater regulatory oversight of the profession, and strict enforcement of the law. However, preparers hold the opinion that the legal penalties are disproportionate and unwarranted.

5 Conclusion

This study investigates the perceptions of audit quality attributes among the three key stakeholder in the financial reporting process in Tunisia - auditors, preparers, and users. The study reveals that the characteristics of auditors and audit firms were considered the most important attributes. Additionally, the control of the profession emerged as a critical factor, while the legislation factor was only deemed significant by financial statements' users and preparers. Furthermore, the study shows that external factors do not significantly impact audit quality as perceived by the three stakeholder groups.

The study also compares stakeholder perceptions through the five attributes determined through factor analysis. One of the key findings was that knowledge of audit and accounting standards was considered fundamental by all three groups. The size of CPA firms was also found to be an important factor for all groups, but with different definitions and levels of importance. Regarding the control of the profession, users and controllers estimate that the level of control provided by the board was insufficient and lacked transparency. The significance of legislation in Tunisia varied among stakeholders, with only users and preparers considering it important.

Our research adds to the limited body of literature on audit perception studies. By analyzing the differences in perceptions among various stakeholders, our study provides valuable insights into the factors that are most important to each group, and how their expectations can be met to improve overall audit quality. Moreover, the findings of our research can inform policymakers and standard setters on areas that require attention and further regulation. For instance, financial statements users emphasize the need for enhanced security and strict enforcement of the law. This can prompt policymakers to revise or update the regulation to better meet the needs and expectations of the stakeholders. Besides, this study allows CPA firms to identify areas for improvement and increase satisfaction among all stakeholders. Specifically, understanding the differences in perceptions can lead to enhancements in audit quality and better meet the needs of users and preparers.

While our study provides valuable insights into the perception of audit quality among different stakeholder groups, it has some limitations. One potential limitation is the exclusive use of survey measures to gather data, which may not capture the full range of attitudes and opinions held by participants. To address this limitation, future research could incorporate other methods, such as interviews or focus groups, to provide a more nuanced understanding of stakeholder perspectives on audit quality. These additional methods could also allow for the exploration of factors that may not have been captured by our survey measures.

References

- Abdolmohammadi, M.J. & Shanteau, J. (1992) "Personal attributes of expert auditors", *Organizational Behavior and Human Decision Processes*, vol. 53, no. 2, pp. 158-72.
- Albitar, K., Gerged, A. M., Kikhia, H., & Hussainey, K. (2020) "Auditing in times of social distancing: the effect of COVID-19 on auditing quality", *International Journal of Accounting & Information Management*, vol. 29, no.1, pp. 169-178.
- Aouina, M. (2019) "Le rôle de l'audit externe dans la transparence de la communication financière. Une revue de littérature", *Revue du contrôle, de la comptabilité et de l'audit*, vol. 3, no.1, p.514.
- Bédard, J. (1993) *Vérification financière: principes et application*, Éditions du Comptenté.
- Bell, T. B., Knechel, W. R., & Payne, J. L. (1999) "Audit risk attributes in computerized environments", *Review of Business Information Systems*, vol. 3, no. 2, pp. 27-40.
- Benneçib, J. (2002) "Proposition d'un modèle de l'efficacité du co-commissariat aux comptes dans les sociétés anonymes cotées françaises", *Technologie et management de l'information: enjeux et impacts dans la comptabilité, le contrôle et l'audit*, pp. CD-Rom.
- Blokdiik, H., Driehhuizen, F., Simunic, D.A. & Stein, M.T. (2006) "An analysis of cross-sectional differences in big and non-big public accounting firms' audit programs", *Auditing: A Journal of Practice & Theory*, vol. 25, no. 1, pp. 27-48.
- Carcello, J.V., Hermanson, R.H. & McGrath, N.T. (1992) "Audit quality attributes: The perceptions of audit partners, preparers, and financial statement users", *Auditing*, vol. 11, no. 1, p. 1.
- Carcello, J.V. & Nagy, A.L. (2004) "Client size, auditor specialization and fraudulent financial reporting", *Managerial Auditing Journal*, vol. 19, no. 5, pp. 651-68.
- Carey, P. & Simnett, R. (2006) "Audit partner tenure and audit quality", *The Accounting Review*, vol. 81, no. 3, pp. 653-76.
- Cerruti, F. & Richard, C. (2008) "Qualité de l'audit et Satisfaction de l'audit: Chronique d'une Innovation Ordinaire", *La comptabilite, le contrôle et l'audit entre changement et stabilite*, Annales Congrès AFC.
- Chaney, P.K. & Philipich, K.L. (2002) "Shredded reputation: The cost of audit failure", *Journal of Accounting Research*, vol. 40, no. 4, pp. 1221-45.
- Chemingui, M. & Pigé, B. (2004), "La qualité de l'audit: analyse critique et proposition d'une approche d'évaluation axée sur la nature des travaux d'audit réalisés", *Normes et Mondialisation*, pp. CD- CUREGE - Centre universitaire de recherche en gestion.

- Citron, D.B. & Taffler, R.J. (1992) "The audit report under going concern uncertainties: an empirical analysis", *Accounting and Business Research*, vol. 22, no. 88, pp. 337-45.
- Cohen, J. R., Krishnamoorthy, G., & Wright, A. M. (2008) "Form versus substance: The implications for auditing practice and research of alternative perspectives on corporate governance", *Auditing: A Journal of Practice & Theory*, vol. 27, no. 2, pp. 181-198.
- Cooper, D. J., & Neu, D. (2006) "Auditor and audit independence in an age of financial scandals", *Independent Accounts*, vol. 12, pp. 1-15.
- Dang, T., Nguyen, T., Le, K., & Pham, T. (2020) "The information gap in corporate annual reports: Evidence from Vietnam", *Accounting*, vol. 6, no. 5, pp. 899-912.
- DeAngelo, L.E. (1981) "Auditor size and audit quality", *Journal of Accounting and Economics*, vol. 3, no. 3, pp. 183-99.
- DeFond, M.L., Raghunandan, K. & Subramanyam, K.R. (2002) "Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions", *Journal of Accounting Research*, vol. 40, no. 4, pp. 1247-74.
- Deis Jr, D.R. & Giroux, G. (1996) "The effect of auditor changes on audit fees, audit hours, and audit quality", *Journal of Accounting and Public Policy*, vol. 15, no. 1, pp. 55-76.
- Deis Jr, D.R. & Giroux, G.A. (1992) "Determinants of audit quality in the public sector", *Accounting Review*, pp. 462-79.
- Demski, J.S. (2003) "Corporate conflicts of interest", *Journal of Economic Perspectives*, vol. 17, no. 2, pp. 51-72.
- Elliott, R.K. & Jacobson, P.D. (1997) "Auditing standards: Adding value to audits", *CA Magazine-Chartered Accountant*, vol. 130, no. 9, pp. 35-42.
- Estes, R. & Reimer, M. (1977) "A Study of the effect of qualified auditors' opinions on bankers' lending decisions", *Accounting and Business Research*, vol. 7, no. 28, pp. 250-9.
- Ferguson, A. & Stokes, D. (2002) "Brand name audit pricing, industry specialization, and leadership premiums post-Big 8 and Big 6 mergers", *Contemporary Accounting Research*, vol. 19, no. 1, pp. 77-110.
- Firth, M. (1997) "The provision of nonaudit services by accounting firms to their audit clients", *Contemporary Accounting Research*, vol. 14, no. 2, pp. 1-21.
- Francis, J.R. (2004) "What do we know about audit quality?", *The British Accounting Review*, vol. 36, no. 4, pp. 345-68.
- Francis, J.R. & Ke, B. (2006) "Disclosure of fees paid to auditors and the market valuation of earnings surprises", *Review of Accounting Studies*, vol. 11, pp. 495-523.
- Gramling, A. A., Maletta, M. J., Schneider, A., & Church, B. K. (2004) "The role of the internal audit function in corporate governance: A synthesis of the extant internal auditing literature and directions for future research". *Journal of Accounting literature*, vol. 23, p. 194.

- Hair, J. F., Jr., & Black, W. C. (2000) Cluster analysis. In L. G. Grimm & P. R. Yarnold (Eds.) *Reading and understanding MORE multivariate statistics* (pp. 147–205) Reprinted from J. F. Hair, Jr., R. E. Anderson, R. L. Tatham, and W. C. Black, *Multivariate data analysis*, Upper Saddle River, NJ, US: Prentice-Hall Inc., pp. 469-518.
- Hooks, J., Coy, D., & Davey, H. (2002) “The information gap in annual reports”. *Accounting, Auditing & Accountability Journal*, vol. 15, no. 4, pp. 501-522.
- Ismail, Z. & Trotman, K.T. (1995) “The impact of the review process in hypothesis generation tasks”, *Accounting, Organizations and Society*, vol. 20, no. 5, pp. 345-57.
- Iyer, V.M. & Rama, D.V. (2004) “Clients' expectations on audit judgments: A note”, *Behavioral Research in Accounting*, vol. 16, no. 1, pp. 63-74.
- Jensen, W. & Meckling, W.H. (1992) “Special and General Knowledge and Organize Structure”, *Blackwell. Contract Economics*, pp. 251-74.
- Krishnan, J. & Schauer, P.C. (2000) “The differentiation of quality among auditors: Evidence from the not-for-profit sector”, *Auditing: A Journal of Practice & Theory*, vol. 19, no. 2, pp. 9-25.
- Ktat, S. (2004) “L’impact des nouvelles technologies de l’information sur la performance des auditeurs: validations empiriques dans le contexte tunisien”, *Doctoriales du GDR TIC & Societe*, pp. 28-2.
- Lee, T. & Stone, M. (1995) “Competence and independence: the congenial twins of auditing?”, *Journal of Business Finance & Accounting*, vol. 22, no. 8, pp. 1169-77.
- Libby, R., & Frederick, D. M. (1990) “Experience and the ability to explain audit findings”, *Journal of accounting research*, vol. 28, no. 2, pp. 348-367.
- Manita, R. & Chemangui, M. (2007) “Les approches d'évaluation et les indicateurs de mesure de la qualite d'audit: Une revue critique”, CD-Rom., 28ème Congrès de l’Association Francophone de Comptabilité, 1-24
- McNair, C. (1991) “Proper compromises: The management control dilemma in public accounting and its impact on auditor behavior”, *Accounting, Organizations and Society*, vol. 16, no. 7, pp. 635-53.
- Moizer, P. (1997) “Auditor reputation: The international empirical evidence”, *International Journal of Auditing*, vol. 1, no. 1, pp. 61-74.
- Pigé, B. (2000) “Qualité de l’audit et gouvernement d’entreprise: le rôle et les limites de la concurrence sur le marché de l’audit”, *Comptabilité-Contrôle-Audit*, vol. 6, no. 2, pp. 133-51.
- Prat Dit Hauret, C. (2003) “L’indépendance du commissaire aux comptes: une analyse empirique fondée sur trois composantes psychologiques du comportement”, *Comptabilité-contrôle-audit*, vol. 9, no. 2, pp. 31-58.
- Ramirez, C. (2005) “Making things visible: audit quality control in the UK and the definition of the professional order”, *Cahier de recherche n° 812*, Groupe HEC.
- Reynolds, J.K. & Francis, J.R. (2000) “Does size matter? The influence of large clients on office-level auditor reporting decisions”, *Journal of Accounting and Economics*, vol. 30, no. 3, pp. 375-400.

- Roszkowska, P. (2021) "Fintech in financial reporting and audit for fraud prevention and safeguarding equity investments", *Journal of Accounting & Organizational Change*, vol. 17, no. 2, pp. 164-196.
- Saidu, M., & Aifuwa, H. O. (2020) "Board characteristics and audit quality: The moderating role of gender diversity", *International Journal of Business & Law Research*, vol. 8, no.1, pp. 144-155.
- Scheid, J. (2000) "Professions comptables en France", *Encyclopédie de comptabilité, contrôle de gestion et audit, Economica*, pp. 1005-22.
- Shafer, W.E., Morris, R.E. & Ketchand, A.A. (2000) "The effects of formal sanctions on auditor independence", *Auditing*, vol. 18, pp. 85-116.
- Shockley, R.A. & Holt, R.N. (1983) "A behavioral investigation of supplier differentiation in the market for audit services", *Journal of Accounting Research*, pp. 545-64.
- Sitanggang, R. P., Karbhari, Y. & M, Bolaji, T. (2020) "Audit quality and real earnings management: evidence from the UK manufacturing sector", *International Journal of Managerial Finance*, vol. 16, no 2, pp. 165-181.
- Snyder, H. & McKnight, R. (2004) "Client confidentiality and fraud: Does Sarbanes-Oxley deal with the issue?", *Business & Professional Ethics Journal*, vol. 23, no. 1/2, pp. 245-57.
- Soltani, B. (2000) "Some empirical evidence to support the relationship between audit reports and stock prices—the French case", *International journal of Auditing*, vol. 4, no. 3, pp. 269-91.
- Sori, Z.M., Mohamad, S. & Karbhari, Y. (2006) "Auditor reputation and auditor independence: Evidence from an emerging market", SSRN.
- Sutton, S.G. & Lampe, J.C. (1991) "A framework for evaluating process quality for audit engagements", *Accounting and Business Research*, vol. 21, no. 83, pp. 275-88.
- Thiétart, R-A. et all. (1999) *Méthodes de recherche en management*, Dunod, Paris, p. 535.
- Tunti Wongpiboon, N. & Dugan, M.T. (1994) "An empirical investigation of the relationship between audit structure and client attributes", *Journal of Accounting, Auditing & Finance*, vol. 9, no. 2, pp. 225-47.
- Van Caneghem, T. (2004) "The impact of audit quality on earnings rounding-up behaviour: some UK evidence", *European Accounting Review*, vol. 13, no. 4, pp. 771-86.
- Vézina, M. (1996) "L'impact de l'utilisation des technologies de l'information sur la performance: Résultats d'une enquête menée auprès des professionnels de la comptabilité", *Systèmes d'information et management*, vol. 1, no. 3, p. 3.
- Watkins, A. L., Hillison, W., & Morecroft, S. E. (2004) "Audit quality: A synthesis of theory and empirical evidence", *Journal of accounting literature*, vol. 23, p. 153.
- Wooten, T.C. (2003) "Research about audit quality", *The CPA journal*, vol. 73, no. 1, p. 48.

Appendix : Audit quality attributes

Instructions

The following are items that may influence the quality of audits performed by CPA firms. Using the below scale, please evaluate the impact of the following ATTRIBUTES on audit quality.

Scale response format

1. Not at all important
2. Slightly important
3. Moderately important
4. Important
5. Very important

Audit quality attributes

1-Auditor characteristics

Themes	Items
Auditor characteristics	<ol style="list-style-type: none">1. Auditor have passed the CPA exam2. Auditor takes often a training3. Auditor has extensive experience in the field4. Auditor makes use of information communications technology when conducting an audit engagement5. Auditor has a good relationship with their clients6. Auditor respects ethical standards (professionalism, skepticism, etc.)7. The assigned auditor is knowledgeable about the applicable accounting standards8. The assigned auditor is knowledgeable about the applicable auditing standards
Number of items	8 items

2-Audit firm characteristics

Themes	Items
	<ol style="list-style-type: none">9. The CPA firm has been on the audit market for many years10. The CPA firm is a subsidiary company of a larger parent company11. The CPA firm is one of the big four accounting firms12. There is a high degree of structure within the audit teams13. The CPA firm uses a rigorous process for recruiting auditors14. The CPA firm has a significant client base15. The audit team performance is frequently supervised by the audit firm

Accounting and Management Information Systems

Themes	Items
Audit firm characteristics	16. The audit fee as a percentage of the CPA firm's total revenue is very high 17. The CPA firm has a good financial condition 18. The audit is being conducted by a CPA firm with experience working with other clients in the industry 19. The audit fees paid by a specific client are important in the total audit fees earned by the CPA firm 20. The reputation of the CPA firm is positive 21. Ethics are a top priority for a CPA firm 22. The CPA firm is subject to a peer review process
Number of items	14 items

3- External factors

Themes	Items
External factors	23. The audit market is highly competitive 24. The CPA firm's client has a good financial condition 25. The internal audit process is meeting expectations 26. The client financial statements present a high level of risk
Number of items	4 items

4-Control of the profession

Themes	Items
Control of the profession	27. The profession is self-regulated 28. The commission's scope of control is satisfactory 29. The oversight board is qualified 30. The oversight board is composed by CPA 31. The oversight board is transparent
Number of items	5 items

5- Legislation in Tunisia

Themes	Items
Legislation in Tunisia	32. The auditor is appointed in the AGM (annual general meeting) 33. The revocation of the auditor must be justified 34. Audit fees are approved following a table 35. Some companies are required to establish an audit committee 36. The duration of the audit tenure is monitored 37. The CPA firm is required to implement mandatory auditor rotation policy 38. Some companies are required to appoint joint auditors 39. Some benefits are prohibited for the statutory auditor of the company 40. The predicted sanctions are appropriate
Number of items	9 items