Factors Influencing Audit Quality in Listed Companies: A Literature Review

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Abstract. Audit quality reflects the effectiveness of an audit in detecting material misstatements and ensuring financial reporting reliability. In recent years, with the improvement of audit standards and the increasing public attention to financial fraud, audit quality has become a research hotspot in both academia and practice worldwide. This paper systematically summarizes the factors that affect the audit quality in listed companies, including auditor-specific factors, firm-specific factors, and external factors. While most current studies focus on traditional influencing factors, there is limited research that explores the use of emerging technologies such as artificial intelligence in auditing and their impact on audit quality. This presents a promising area for future research. Besides summarizing the research methods and main findings of existing literature, this study also provides suggestions for both future researchers and regulators. Listed companies need to strengthen internal governance and enhance financial information transparency to provide a solid foundation for audit work. Regulators should build strengthen regulations to prevent low-fee competition and reduce audit fraud.

Keywords: Audit quality, influencing factors, audit independence, corporate governance.

1. Introduction

As the capital market continues to develop, the quality of listed companies' financial information is attracting growing attention. Audit, as an important monitoring mechanism to ensure the quality of financial information, directly affects investor decision-making and capital market efficiency. In recent years, frequent financial fraud cases both domestically and internationally have highlighted the importance of audit quality.

The audit quality of listed companies can reflect the quality of their financial information. High-quality audits help financial information users make informed investment decisions, avoid blind investment behavior, and achieve good investment returns [1].

By systematically reviewing the research on factors affecting audit quality worldwide, this paper summarizes the main findings of existing literature, identifies research gaps, and proposes potential future research directions and regulatory implications to improve audit quality.

2. Literature Review

2.1. Definition and Importance of Audit Quality

The concept of audit quality first emerged in the work of Zimmerman and Watts (1981), who characterized audit quality as the sum of multiple probabilities [2]. It is a joint probability composed of the level of professional competence of auditors, the professional auditors and resources invested by firms in audit services, and the independence of auditors [1]. Most scholars concur with DeAngelo's perspective that audit quality constitutes a key aspect of financial reporting reliability, and high-quality audits contribute to ensuring accountability and transparency [3].

2.2. Theoretical Framework

2.2.1 Information asymmetry theory

The theory of information asymmetry describes a phenomenon in financial markets where individuals hold varying amounts of information and exhibit differing degrees of comprehension regarding that information. Those who have more comprehensive information often occupy a more advantageous position, while those who are information-poor are in a less advantageous position. In audit relationships, there is information asymmetry between audit clients and audited entities [1]. The management of the audited firm, as the information-advantaged party, possesses more comprehensive financial and operational information than the auditors. Such information asymmetry may incentivize managers to engage in financial frauds. If the auditors fail to detect potential misstatements or frauds in a timely manner, it can lead to audit failure and negatively affect audit quality.

2.2.2 Reputation theory

It is a cutting-edge theory and an important one in the fields of economics and management, serving as an effective mechanism for ensuring audit quality. High-reputation firms, in order to maintain their own value and image, usually conduct audits more rigorously and objectively, leading to better audit quality [4].

2.3. Factors Affecting Audit Quality

2.3.1 Auditor-specific factors

(1) Size of accounting firms

In the early period, scholars put forward the view that there was no marked disparity in audit quality between the "Big Four" accounting firms and other accounting firms [5]. By taking Chinese listed companies from 2007 to 2012 as the research sample, Guo Zhaorui analyzed the audit level provided by the "Big Four" accounting firms and found that it was not outstanding, and sometimes even lower than that of non-"Big Four" accounting firms [6]. With the continuous improvement of China's audit professional regulations system, the legal mechanisms governing audit failure litigation, compensation, and penalties have gradually been refined. Recent studies support that the "Big Four" accounting firms can provide higher-quality audit services [7, 8]. For small-scale accounting firms, they face shortages in talent and technology, resulting in lower market competitiveness compared to large-scale accounting firms. Larger accounting firms have the following advantages. First, they can attract outstanding talent and invest more in training resources., allowing them to solve more complex problems. Second, according to reputation theory, large firms have higher visibility and value their brand reputation more. Hence, they are less likely to issue false reports. Third, according to the "deep pocket" theory, higher litigation risks encourage accounting firms to practice more cautiously [9]. Moreover, large firms are more financially resilient, allowing them to reject high-risk clients and thus improve audit quality.

(2) Auditor independence

Auditor independence is characterized as an auditor's actual and perceived ability to fulfill their duties without being influenced by bias or conflicts of interest [10]. It serves as the cornerstone of audit quality, given that independent auditors can conduct objective evaluations of financial statements and issue impartial audit reports [11].

(3) Non-audit services

Non-audit services (NAS) refer to other professional services provided by accounting firms to their audit clients, apart from financial statement audits and reviews. When auditors become overly dependent on the fees generated from these services, the concern of losing clients might compromise the objectivity of their audit reports. Cooper and Neu elaborated on this problem that arose in the period of financial scandals. Since then, regulators have imposed restrictions on NAS to protect the core assurance role of auditors [12].

(4) Audit fees

When audit fees are within a certain range, the higher the audit fees, the higher the audit quality [1]. However, if audit fees are too low, they can have a negative impact on audit quality. For instance, accounting firms may reduce design and procedures or neglect key steps, in order to reduce costs [13]. Abnormal audit fees can also negatively affect audit quality. Information asymmetry puts accounting firms and numerous users of accounting information at a disadvantage. If auditors perceive that they are facing greater audit risks, they may request an increase in audit fees. The management of a company may also manipulate the judgment and presentation of external auditors by increasing audit fees [14]. In some cases, when clients are eager to obtain unqualified audit opinions, they are very willing to offer audit fees higher than the average and market levels to their audit firms, which negatively affects audit quality [15].

(5) Auditor tenure

Auditor tenure is generally divided into short-term, medium-term, and long-term categories. Existing research results regarding the relationship between auditor tenure and audit quality are not consistent. For one thing, Geiger and Raghunandan discovered that the longer the tenure, the lower the rate of reporting failures [16]. On the other hand, Joseph.v.Carcello and Albertl Nagy argue that when auditor tenure is short-term and long-term, the probability of issuing misstated financial reports is greater compared to medium-term [17]. Earlier research also indicates that auditor independence declines as the length of auditor tenure increases [18, 19]. And long-term audit relationships may lead to excessive familiarity between auditors and clients, creating an "acquaintance effect" that could subsequently facilitate "audit collusion". Thus, preserving auditor independence via measures like rotation can enhance audit quality [20]. When auditors remain professionally independent from client management, they reduce potential conflicts of interest, which in turn boosts the accuracy and reliability of financial reporting [21].

2.3.2 Firm-specific factors

(1) Corporate governance

Corporate governance may be defined as "a system composed of all personnel, processes, and activities that contribute to ensuring the appropriate management of an entity's assets." A robust corporate governance framework functions to guarantee that management allocates and employs corporate resources in the best interests of shareholders, while also fairly disclosing the enterprise's financial status and operational performance [22].

Firstly, board independence is crucial for maintaining a well-functioned corporate governance system. An independent director is defined as a director who holds no other positions in a listed company aside from the directorship, has no interest association with the company and its major shareholders, and is capable of independently and objectively participating in the company's decision-making. Independent directors are primarily responsible for supervising a company's management, balancing the power held by major shareholders, and safeguarding the interests of minority shareholders. A board of directors featuring a larger proportion of independent directors is better able to question management decisions, thereby improving audit quality [21].

Secondly, equity structure refers to the composition and relative distribution of various share classes within a company's total outstanding capital. Equity refers to the rights and obligations of shareholders in proportion to their ownership stakes. An appropriate equity structure can help prevent dominant shareholders from exerting excessive influence over audits. Companies with high equity concentration may face higher risk of majority shareholders expropriating the interests of minority shareholders, which increases audit complexity and risk.

(2) Audit committee

To carry out its responsibilities more effectively, the board of directors assigns the supervision of financial statements to the Audit Committee (AC) [22]. Large enterprises may establish an Audit Committee to help enhance the quality of financial statements. Han and Liu (2009) noted that companies with a high proportion of independent directors and an effective AC typically obtain higher-quality audit services [23].

(3) Corporate financial performance

Laitinen and Laitinen, Spathis, Moalla and Abelaziz, as well as Averio, have pointed out that a company's financial condition is a crucial factor in forming audit opinions [24-27]. When a listed company faces financial constraints and cannot afford the audit fees demanded by the accounting firm, the company may choose a smaller accounting firm with lower fees, potentially leading to a decline in audit quality. Current research reveals a notable connection between financial difficulties and the chance of a company receiving a qualified audit opinion [28]. On this matter, Spathis demonstrated that audit opinions bear a significant relationship with specific financial indicators, including liquidity, solvency, and the risk of bankruptcy [1, 24]. If a company encounters certain financial problems, its executives are prone to engage in financial data manipulation. Companies with poor financial performance may have a higher risk of financial fraud, increasing audit difficulty and risk [29].

2.3.3 External factors

(1) Legal system and supervision

A sound legal environment can increase the cost of audit violations and encourage audit entities to improve audit quality. For instance, following the implementation of the SOX Act, the audit quality of U.S. listed companies has improved significantly. Regulatory policies such as the "double random" inspection implemented in China in recent years have also had a positive impact on audit quality. If legal penalties are not severe and regulatory authorities are derelict in their duties, audited companies may perceive opportunities for fraud, thereby worsening audit quality.

(2) Market competition

Market competition exerts a dual impact on audit quality. On the positive side, in order to showcase their professional capabilities, accounting firms will invest more resources to train auditors, enabling them to provide better services to clients. Only by providing rigorous and accurate audit reports can accounting firms assist enterprises in making correct decisions, thereby earning the trust of clients and achieving the win-win goal of long-term cooperation. On the negative side, some smaller accounting firms may not be able to attract high-quality talent in a highly competitive market due to their financial constraints. To stand out in the market, they may resort to unfair competition tactics, such as lowering fee standards or issuing false audit reports. Such practices threaten the healthy development of the audit industry [13].

2.4. Current Status of Audit Industry

Drawing on data from the China Securities Regulatory Commission (CSRC), the count of accounting firms penalized over audit failures varied between 2014 and 2021.As shown in Fig. 1, the number increased in the early years and then declined in the later years. This indicates that CSRC's penalties can serve as a deterrent, and stricter supervision can improve audit quality [1].

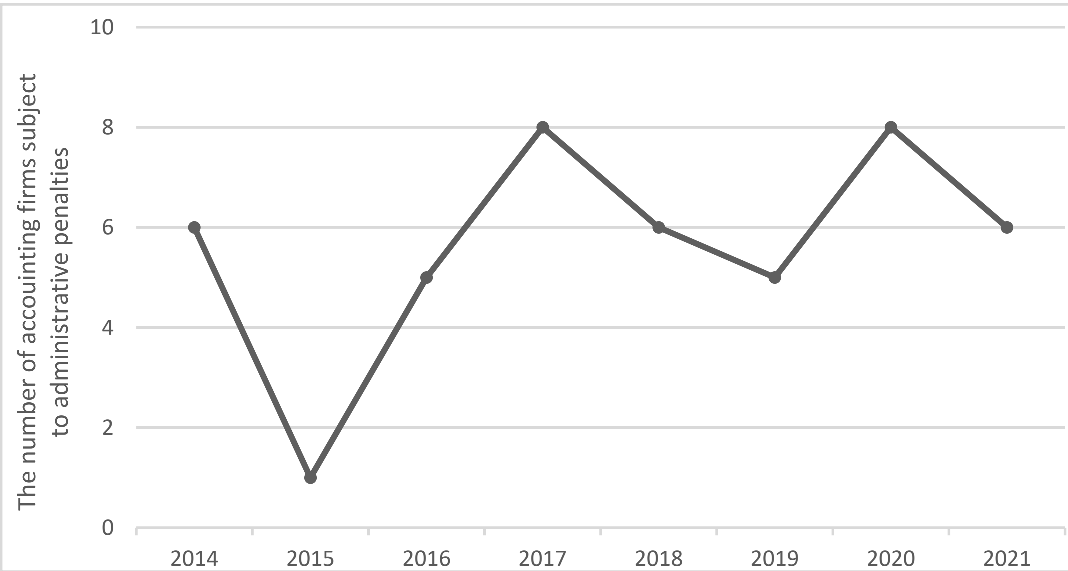

Figure 1. Number of accounting firms punished from 2014 to 2021

Compared with the accounting firms, the client firms possess significant information advantages. If the clients choose not to cooperate by providing false information or destroying evidence, the audit quality cannot be guaranteed [17]. Though large enterprises have relatively well-established internal management and control systems, their businesses are complex, involves multiple industries and regions. During audits, more attention should be paid to their related-party transactions and the effectiveness of internal controls. As for small and medium-sized enterprises, they may have issues such as imperfect internal controls and irregular financial accounting, which increase audit risks.

Besides the two parties of accounting firms and client firms, the audit environment is also crucial for the audit quality. The audit environment is defined as the aggregate of all external factors that may influence the emergence, existence, and development of auditing [17]. When a listed company has a favorable audit environment and auditors are objective and impartial, the authenticity of audit reports can be guaranteed. Currently, there is a situation in the audit market where supply is less than demand. A large number of accounting firms have emerged, but the overall demand for audits is not high. The market competition of accounting firms is not perfect. The audit market suffers from unethical practices, such as gift-giving, kickbacks, predatory pricing, and even fraudulent reporting, all of which undermines audit quality.

3. Research Gap and Future Directions

3.1. Strengths and Limitations of Existing Literature

Existing research has made significant contributions by building a relatively complete theoretical framework and developing various research methods. However, the empirical evidence of some research questions remains mixed. Besides, as the industry keep evolving, more research on new concepts and technologies are needed.

3.2. Suggestions for Future Research

More attention should be paid to emerging fields, such as ESG auditing and emerging technologies. ESG auditing denotes a process of evaluating a company's performance in environmental, social, and governance aspects. With the rise of sustainable development concepts, ESG auditing is gradually becoming a new trend, so a greater amount of resources should be allocated to this field [30]. Emerging technologies include big data auditing and AI technology. Big data auditing refers to the method in which audit institutions use the techniques, methods, and tools of audit science and big data science to conduct audit work. It is characterized by the ability to handle massive amounts of data, conduct multi-dimensional analysis, and monitor data in real time Although policy attention to auditing has increased, there are still significant room for improvements in the field of artificial intelligence auditing [31].

3.3. Practical Implication

3.3.1 Strengthen external supervision

Regulators should require accounting firms to standardize audit fee setting. Excessively low audit fees can impact audit quality, reducing it. Excessively high audit fees can affect auditor independence. Accounting firms should optimize and improve the audit fee mechanism, earning market recognition by providing high-quality professional services, and reasonably increase audit fees based on such service quality. Establishing a nationally unified fee standard and introducing third-party regulatory agencies can help avoid low-price competition. Reasonable audit fees can ensure the investment of audit resources and avoid the impact of low-price competition on audit quality. This behavior can not only safeguard their own interests but also maintain the healthy development of the audit industry [13].

Optimizing regulatory policies is crucial for the healthy development of auditing industry. Audit fraud can be constrained, and audit quality can be improved by strengthening the regulation of the market environment, formulating sound legal frameworks, and increasing penalties for violations. For instance, audit reports in European countries must include a statement that no prohibited non-audit services have been provided [32].

3.3.2 Improve internal corporate governance

Firstly, firms are suggested to increase the proportion of independent directors. They can correspondingly improve the election system for independent directors and also focus on minority shareholders, allowing them to participate in the company's decision-making process [1].

Secondly, firms should aim to optimize their equity structure by actively introducing other major shareholders to dilute the power of the largest shareholder, thus, forming a balanced structure. A relatively concentrated equity structure can also help listed companies to improve their internal governance structure [30].

4. Conclusion

This paper provides a comprehensive review of research on audit quality by analyzing relevant studies in both Chinese and international literature. It summarizes factors affecting audit quality into three main categories: auditor-specific factors, firm-specific factors and external factors. Among them, auditor-specific factors encompass aspects such as the auditor's professional competence, professional ethics, and professional judgment ability. Company-specific factors include the company's governance structure, financial status, and operational risks. External factors, on the other hand, involve elements such as the regulatory environment, legal system, and market competition. Building on existing research, this paper highlights newly emerged trends in ESG auditing and big data auditing. More future research are needed on these fields.

However, this paper still faces several limitations. First, the paper focus on the most influential determinants of audit quality for analysis. There may be other factors that interact with or moderate the examined relationships. Second, due to certain limitations, some data are not available, and these factors may have other impacts on audit quality, potentially leading to some deviations in the conclusions to a certain extent.

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