

Research on Optimization of Audit Risk Relationship Model Based on Responsibility Subject

WANG Shufeng, LI Xianglin

Quanzhou Vocational and Technical University, Quanzhou, China

Based on the objective reality that audit risk responsibility has mainly been attributed to certified public accountants in the past, and audit standards have not specifically divided the entities responsible for audit risk responsibility, combined with the understanding of the types of audit risk elements related to audit standards, the differences in the understanding of audit risk and its relationship model application caused by the different audit cultures in China and the West have led to a bias of Chinese certified public accountants to bear inspection risks, which affects their professional enthusiasm and continues to cause accounting firms to be lazy in audit quality management. Based on this, literature research, case analysis, and logical deduction methods were used to redefine the concept of audit risk from the perspective of risk responsibility subjects. The traditional audit risk elements and their relationship models were briefly introduced, and the identification of audit risk elements and optimization of audit risk relationship models were systematically demonstrated.

Keywords: responsible party, audit risk relationship model, contract risk, report risk

In the era of digital economy, the dissemination of any value information is very rapid and sensitive. For independent auditing, in the past, blindly emphasizing that Certified Public Accountants (CPAs) should strengthen the identification, assessment, and control of risks was tantamount to concentrating the responsibility for audit risks on CPAs. Thus, the risk responsibility attention of the audit organization, namely the accounting firm (hereinafter referred to as the “firm”), has been shifted. With the development of audit culture and the increasing speed of information dissemination, CPAs gradually realize that they should only bear the risk responsibility from the beginning of receiving audit tasks to the deadline for submitting audit reports, that is, the risk responsibility of the inspection process. The various risks and responsibilities arising from receiving audit cases, reviewing audit reports, and using them should be borne by the accounting firm. This indicates that the current system of audit risk elements is not very sound, and it is difficult to reflect the objective actual situation of audit risk throughout the entire audit process, which is also not conducive to the analysis of audit risk responsibility. Therefore, it is necessary to combine the audit process, reorganize the audit risk element system, and optimize the audit risk relationship model based on this.

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WANG Shufeng, Bachelor of Economics, Professor at the School of Business, Quanzhou Vocational and Technical University, academic leader in the field of Big Data and Financial Management), Business School, Quanzhou Vocational and Technical University, Quanzhou, China.

LI Xianglin, Master’s degree, Associate Professor), Business School, Quanzhou Vocational and Technical University, Quanzhou, China.

Traditional Audit Risk Elements and Their Relationship Model

Traditional Audit Risk Element System

In the audit risk management stage with CPA as the main body, CPA is required to focus on and identify the inherent risks (IR) and control risks (CR) of the audited entity's financial statements transferred to the audit process, as well as the inspection risks of failing to discover significant misstatements in the financial statements during self-inspection. Among them, inherent risk refers to the possibility of significant errors in the presentation of a certain account, transaction category, and overall financial statements due to certain inherent factors of the audited entity that are not subject to internal control constraints. For example, during a certain period, the sharp increase in revenue of a company led to a rapid growth in profit indicators, but due to product quality reasons, many returns (including in transit returns) were caused, resulting in distorted revenue and profit reports on the final reporting date; risk control refers to the possibility that a significant misstatement identified by the audited entity, which should be subject to internal control constraints, has not been promptly prevented, detected, or corrected by its internal controls. At the same time, CPAs should carefully measure the Detection Risk (DR) to prevent significant misstatements or omissions in the audited entity's financial statements that have not been discovered despite implementing audit procedures and methods. In the era of modern risk oriented auditing based on strategic business risk analysis, the International Auditing and Assurance Standards Board (IAASB) released a new audit risk element system in 2003, which reflects the expansion and extension of audit risk assessment concepts and scope. The inherent risk and control risk together constitute significant misstatement risk. In this way, the audit risk element system includes two types: significant misstatement risk and inspection risk.

Traditional Audit Risk Relationship Model

The early audit risk relationship model reflected the three elements of inherent risk, control risk, and inspection risk, namely:

$$\text{Audit risk} = \text{inherent risk} \times \text{control risk} \times \text{inspection risk}$$

The International Auditing and Assurance Standards Board (IAASB) under the International Federation of Accountants (IFAC) approved the release of four audit risk standards in October 2003, including "Objectives and General Principles for Auditing Financial Statements" (ISA200), "Understanding the Audited Entity and Its Environment and Assessing the Risk of Material Misstatement" (ISA315), "Procedures to Be Taken by Auditors for Risk Assessment Levels" (ISA330), and "Audit Evidence" (ISA500), and introduced a revised audit risk model relationship model:

$$AR = MR \times DR \tag{1}$$

As the goal of CPA is to identify and evaluate significant misstatement risks at the level of financial statements and recognition, fully estimate the acceptable level of risk for the auditing organization, and design and implement risk response measures, to this end, audit risks should be comprehensively estimated based on external factors such as the risk characteristics of the audit project, the operating conditions of the audited entity, regulatory environment, and legal risks, as well as internal factors such as the auditor's experience, ability, diligence, responsibility, and the firm's own risk tolerance. Ultimately, the evaluation of CPA's willingness or ability to withstand inspection risks is based on the following formula:

$$DR = AR / MR$$

Audit Risk Relationship Model from the Perspective of Responsible Parties

Audit Risk Element System Based on Responsible Parties

Material Risk (MR). The essence of significant misstatement risk is the possibility that the audited entity objectively exists when providing financial statements but attempts to have the audit report issue an unqualified opinion to conceal the truth. So, it becomes the fundamental element of audit risk assessment. In practice, significant misstatement risks should be identified and evaluated separately at the reporting and identification levels. In the project acceptance process, the accounting firm should organize the identification and estimation of major misstatement risks at the report level as a condition for project selection and business agreement signing; the chief accountant or project manager who undertakes audit services should conduct a major misstatement risk assessment primarily at the level of financial statement recognition after taking over the business, to ensure effective control of inspection risks. It can be seen that the risk of significant misstatement has dual responsibilities: One is the risk responsibility of the accounting firm undertaking the project, and the other is the risk responsibility of the CPA accepting the audit business.

Contract risk (CR). According to auditing standards, it is a written agreement or contract signed between the accounting firm and the audited entity to record and confirm the delegation and entrusted relationship of audit services, audit objectives and scope, responsibilities of both parties, format and content of audit reports, and other related matters. This contract subject matter is not a transactional relationship, but an entrusted relationship for economic affairs authentication, reflecting the rights, responsibilities, and obligations of both parties. As a trustee, the provision of paid services by a law firm that earns benefits inevitably carries risks. The possibility of assuming adverse consequences due to the firm's failure to establish or diligently establish a business agreement, as well as failure to strictly fulfill the subject matter of the business agreement, is known as "contract risk". In practice, some accounting firms undertake report visa projects that, due to low fees or limited or unimportant reporting purposes, ignore the principle of audit prudence as stipulated in the standards, and do not sign or hastily sign business agreements regarding key clauses such as audit objectives, scope, report types, and usage restrictions. As a result, it will affect the subsequent work of auditors and time arrangements, audit plan formulation, design and implementation of testing procedures and methods, and issuance of audit opinions. It can be seen that contract risk is caused by the failure of the business market development manager in charge of the project negotiation and signing partner or firm, and is essentially the legal person responsibility that the authorized firm should bear.

Detection Risk (DR). Inspection risk refers to the possibility of significant misstatements and omissions in accounting statements that were not detected by CPA inspection. Therefore, it is also known as risk awareness. Whether it is due to improper audit plans and procedural arrangements, limited professional skills, or work negligence and ethical interference, they all belong to subjective risks (SR) of failure to diligently fulfill their responsibilities, and should be borne by CPAs. However, if the audit time and resource strength arranged by the accounting firm are insufficient, or if the technical difficulty required for project verification exceeds the professional field of CPA and the accounting firm does not hire industry experts, or if there are objective factors such as cross-border business operations that make it difficult to obtain data information, resulting in CPA's failure to fully disclose significant misstatements in financial statements, this objective risk (OR) should be borne by the accounting firm undertaking the project.

Report risk (RR). Report risk refers to the possibility that the accounting firm may bear the consequences of audit failure due to a lack of careful review and correction of the type of audit report issued and the issuance of audit opinions. This means that CPAs should bear the responsibility for issuing audit opinions, and after the firm stamps and confirms, they should assume legal person responsibility. Generally, report risks should include three types: audit report type selection risk, writing risk, and usage risk. Choosing risk refers to the possibility of the audit opinion report type not matching the assurance results; writing risk refers to the possibility of misjudgment by report users during the process of writing an audit report due to improper wording, rhetorical, and grammatical errors in stating facts, matters, and evaluations; review risk refers to the possibility of audit failure caused by the firm's failure to review and verify the type of audit report, statement of responsibility, audit content, and opinions expressed. There is no substantial interdependence between these three elements, but rather independent sources of risk.

Optimization of the Traditional Audit Risk Relationship Model

Optimization design of audit risk relationship model. Contract risk is an essential element of audit risk that cannot be ignored. It lurks in the negotiation stage between audit organizations and clients, and is a result formed before the implementation and allocation of audit tasks and CPA. Therefore, there is no direct correlation between contract risk and CPA inspection risk, and it should be an independent element that audit risk measurement must consider; similarly, reporting risk is a written medium for explaining the audit facts and issuing independent audit opinions to the client after the completion of the audit evidence collection process. The correctness of the selected audit report type, the truthfulness of the audit facts, and the appropriateness of writing the audit opinion are all independent and unrelated to major reporting risk and inspection risk. Therefore, it is also an independent constituent factor of audit risk measurement. According to Equation (1), the audit risk relationship model can be derived as follows:

$$AR = (CR + MR) \times (DR + RR)$$

$$DR = (AR - CR - RR) / MR$$

It should be noted that contract risk and reporting risk are risk elements embedded in audit risk. Therefore, the sum of estimated contract risk and reporting risk must be lower than the estimated audit risk level, that is, $AR \geq CR + RR$. Otherwise, there may be insufficient estimation of audit risks by audit organizations, or a lack of necessary control over contract and reporting risks, which will result in CPA being unable to accurately estimate inspection risks and ultimately leading to audit failure.

The superiority of applying the newly optimized audit risk relationship model.

Clarify the risk responsibilities of CPA and audit organizations. From the perspective of risk-taking, the business agreement is signed between the principal and the legal representative of the accounting firm, and the audit report is also issued by the accounting firm in accordance with the provisions of the business agreement. Therefore, the responsible parties for contract risk and reporting risk are both the accounting firms. When estimating audit risks for audit projects, the accounting firm should have comprehensively considered various risk factors, including contract risks and reporting risks. When evaluating the inspection risks that CPAs should bear, they should be excluded separately to avoid CPAs bearing undue risk responsibilities. Of course, if the authorized personnel of the accounting firm have fully identified and evaluated the risk of material misstatement during the negotiation and agreement of audit services, and have the conditions and ability to control it at an

acceptable level, after completing the audit evidence collection, the draft audit report issued by the project team was carefully reviewed and confirmed to be without any issues.

Dual effect of releasing CPA risk pressure and tightening audit organization quality management. On the surface, the optimized audit risk relationship model only has two additional risk elements compared to the original model. But it is reflected in the relationship of audit risk responsibility, relieving the risk responsibility of the business agreement and audit report that the affiliated firm has long shirked to the CPA. Thus, it can ensure that CPAs are equipped with light equipment and enable accounting firms to face their organizational leadership responsibilities, attach importance to risk prevention and control in multiple audit processes, and effectively implement the quality management standards of accounting firms.

Key issues to consider when CPAs assess acceptable inspection risks. For CPAs, this is a risk indicator that is easy to accept and can be easily controlled and resolved, which can maximize the enthusiasm for CPA practice. The main reason for this is that it fully considers the contract risks and reporting risks that are unrelated to the CPA's inspection function, making the inspection risk assessment value more reasonable and closer to reality. CPAs are also willing to accept and actively take corresponding measures to effectively control inspection risks. Although the evaluation calculation is relatively cumbersome, its scientificity has greatly improved and its operability has also been enhanced. In practice, CPAs face organizational threat tests:

1. CPA implemented rigorous audit plans and procedures, adopted appropriate audit methods, and ensured comprehensive disclosure of material misstatements. But if the planned audit time and limited audit resources are not sufficient to complete the audit task, CPA is forced to use simple sampling methods within a narrow range and cannot fully verify significant misstatements and omissions.

2. Can the significant misstatements and omissions that have been exposed be fully disclosed? If not, who should bear the audit risk responsibility and how should the risk responsibility be allocated?

3. If a CPA chooses the appropriate type of audit report and expresses an appropriate audit opinion, but the actual audit report is subject to tampering, including deleting the content of the qualified opinion paragraph and replacing the non-audit opinion paragraph, the CPA should publicly declare that they will not assume audit risk responsibility and report the accounting firm's tampering behavior.

Conclusion

In short, the audit process is not only the process of obtaining evidence for certified public accountants, but also the process of accumulating audit risk responsibility. So, on the one hand, certified public accountants should be diligent and responsible to avoid the risk of procedural deficiencies and insufficient evidence; at the same time, attention should be paid to identifying some risk elements that should be shared with the audit organization, as well as risks that should have been solely borne by the audit organization. And it is necessary to negotiate and communicate with the organization, clarify the responsibility for audit risks, and bravely take responsibility for the risks that should be borne. Individuals will never bear the risk responsibility that belongs to the audit organization.

References

- Fang, M. Y., Wang, S. F., & Gu, A. C. (August 2012). How to write a standardized audit report. *Finance & Accounting*, 34(8), 70-71.
- Gao, Y. (2025). Audit risk identification and response based on fuzzy analytic hierarchy process: A case study of Z Accounting Firm. *Friends of Accounting*, 43(7), 133-138.

- Yao, Q. (2024). Research on audit risks and prevention of accounting firms. *Auditing and Finance*, 37(6), 39-40.
- You, X. (2025). Research on the application of periodic report inquiry letters in audit risk management. *Communication of Finance and Accounting*, 46(5), 131-138.
- Zhang, J. J. (2024). Research on the internal distribution mechanism of special general partnership accounting firms. *Friends of Accounting*, 42(2), 120-127.
- Zhao, L., & Han, J. (2024). Joint practice of three signed auditors and comparability of accounting information. *Friends of Accounting*, 42(24), 18-25.
- Zheng, Z. Y. (2011). Analysis of the background and characteristics of modern risk oriented auditing. *Communication of Finance and Accounting*, 32(21), 48-50.