Correlation Analysis between Accounting Estimation Uncertainty and Audit Risk

Wenlan Xu[a], Yan Chen[b]

Xihua University, Chengdu, 610000, Sichuan, China

[a]helen08102000@163.com, [b]1804607919@qq.com

Keywords: Uncertainty of accounting estimation; Audit risk; Positive correlation; Accounting estimation project; Audit risk proxy variable

Abstract: The purpose of this paper is to deeply explore the internal relationship between accounting estimation uncertainty and audit risk, and to provide guidance on strategies and methods for optimizing accounting estimation process and reducing audit risk. Firstly, this paper constructs the analysis framework of accounting estimation uncertainty, including its identification, evaluation methods and the mechanism of its influence on financial statements, and discusses the management strategy and supervision requirements of accounting estimation uncertainty. Then, the paper establishes an analysis framework of audit risk, and analyzes its relationship with the uncertainty of accounting estimation, especially the influence path of accounting estimation uncertainty on audit risk. On this basis, the paper further puts forward strategies and methods to optimize accounting estimation and audit risk management, including strategies to identify and evaluate the uncertainty of accounting estimation, management methods and tools to reduce audit risk, and the roles of accounting standards and auditing standards in reducing uncertainty and risk. Through the discussion of these strategies and methods, it is expected to provide useful reference for enterprises, audit institutions and standard setters.

1. Introduction

In today's complex and changeable business environment, accounting estimation, as an important link in the preparation of corporate financial statements, is increasingly uncertain [1]. The uncertainty of accounting estimation not only affects the accuracy and reliability of enterprise financial information, but also may have a far-reaching impact on the audit process and increase the audit risk [2]. Therefore, it is of great significance to deeply discuss the correlation between accounting estimation uncertainty and audit risk for improving the quality of financial information, optimizing the audit process and protecting the interests of investors [3]. The purpose of this study is to reveal the internal relationship between them and provide useful reference and guidance for accounting standard makers, audit institutions, regulatory agencies and enterprises.

The main purpose of this study is to reveal the internal relationship and interaction mechanism between accounting estimation uncertainty and audit risk, and provide theoretical support and practical guidance for optimizing accounting estimation process and reducing audit risk. Specific assumptions include: the higher the uncertainty of accounting estimation, the greater the audit risk; Different accounting estimation methods have different effects on audit risk; Effective risk management strategy can reduce the audit risk caused by the uncertainty of accounting estimation.

2. Theoretical basis

2.1. The relationship between accounting estimation uncertainty and audit risk

Uncertainty of accounting estimation refers to the possibility of variation of accounting estimation results due to uncertainty of future events and subjectivity of judgment when preparing financial statements [4]. Accounting estimation uncertainty can be classified according to its source and nature, such as measurement uncertainty, model uncertainty, parameter uncertainty and so on.

  DOI: 10.25236/icfmhss.2024.054

These uncertainties have an important impact on the accuracy and reliability of financial information [5].

Audit risk refers to the possibility that the auditor fails to find the major misstatement or omission in the financial statements of the audited entity during the audit process [6]. Audit risk consists of inherent risk, control risk and inspection risk. Inherent risk refers to the risk of significant misstatement or omission in the financial statements of the audited entity itself; Control risk refers to the risk that the internal control of the audited entity fails to prevent or discover material misstatement or omission in time; Inspection risk refers to the risk that auditors fail to find material misstatement or omission when implementing audit procedures.

The existing research shows that the uncertainty of accounting estimation is one of the important factors affecting audit risk [7]. The uncertainty of accounting estimates may increase the risk of material misstatement or omission in financial statements, thus increasing the audit risk of auditors [8]. Furthermore, auditors also need to consider the influence of accounting estimation uncertainty when evaluating audit risks. However, the existing research still lacks in-depth discussion on the specific relationship and mechanism between accounting estimation uncertainty and audit risk.

2.2. Information asymmetry theory, risk-oriented audit theory

The theory of information asymmetry refers to the fact that in the market economy activities, different participants have different degrees of mastery of information, which leads to the possibility that the information superior party may use the information inferior party to conduct unfair transactions [9]. In the field of accounting and auditing, information asymmetry may lead the management to use the uncertainty of accounting estimation to conduct earnings management or fraud, thus increasing the audit risk. Risk-oriented audit theory is an audit method based on risk assessment, which emphasizes that auditors should focus on high-risk areas and major misstatement risk points in the audit process. This theory provides useful guidance for auditors to deal with the audit risks brought about by the uncertainty of accounting estimates.

3. Analysis framework of uncertainty in accounting estimation

3.1. Identification and assessment method of accounting estimation uncertainty

The identification of accounting estimation uncertainty is an important link in accounting work. This usually involves a careful review of items involving estimates and assumptions in financial statements, such as asset impairment, estimated liabilities, revenue recognition, etc. In the process of identification, accountants should pay attention to market dynamics, economic environment, industry trends and other factors to judge their influence on accounting estimates.

When evaluating the uncertainty of accounting estimation, quantitative and qualitative methods can be used. Quantitative methods include the use of statistical models, sensitivity analysis and other tools to estimate the scope and degree of uncertainty; Qualitative methods involve evaluating the rationality of estimation assumptions and the reliability of data sources.

3.2. The influence mechanism of accounting estimation uncertainty on financial statements

The uncertainty of accounting estimation has many effects on financial statements. First of all, it may lead to the risk of changes in the amount of some items in the financial statements, which will affect the accuracy and reliability of the statements. Secondly, uncertainty may also affect the decision-making of users of statements. For example, investors may have doubts about the profitability and solvency of enterprises due to uncertainty. In addition, the uncertainty of accounting estimation may also affect the credit rating and financing cost of enterprises. Therefore, it is very important to understand and manage the uncertainty of accounting estimation to ensure the quality of financial statements and the interests of enterprises.

3.3. Management strategy and regulatory requirements of accounting estimation uncertainty

In order to effectively manage the uncertainty of accounting estimation, enterprises should adopt a series of strategies. First, establish scientific estimation methods and processes to ensure the rationality and transparency of the estimation process. Secondly, strengthen the training and education of accounting personnel to improve their professional quality and judgment ability. In addition, enterprises should also establish an internal control mechanism to supervise and review the accounting estimation process.

In terms of supervision, accounting standard-setting institutions and regulatory agencies should strengthen the guidance and supervision of accounting estimation uncertainty, require enterprises to fully disclose relevant information, and improve the transparency and comparability of financial statements.

4. Analytical framework of audit risk and its relationship with uncertainty of accounting estimation

4.1. Identification, assessment, and response strategies for audit risks

The identification of audit risk is the basis of audit work. Auditors need to conduct a comprehensive review of the financial statements of the audited entity and pay attention to the possible risks of major misstatement or omission. When evaluating audit risk, auditors should consider three elements: inherent risk, control risk and inspection risk, and comprehensively use professional judgment and experience to evaluate the size and nature of risk. In view of the identified audit risks, auditors should formulate specific coping strategies, such as increasing audit procedures, expanding audit scope and obtaining more audit evidence.

4.2. The influence path of accounting estimation uncertainty on audit risk

The impact of accounting estimation uncertainty on audit risk is mainly reflected in two aspects. On the one hand, the uncertainty of accounting estimation may increase the risk of material misstatement or omission in financial statements, thus increasing the audit risk of auditors. On the other hand, the uncertainty of accounting estimation may affect the auditor's judgment on the overall reliability of financial statements, leading to greater risks when auditors express their audit opinions. Therefore, auditors need to pay special attention to the influence of accounting estimation uncertainty in the audit process.

5. Strategies for optimizing accounting estimates and auditing risk management

5.1. Strategies for identifying and evaluating uncertainty in accounting estimates

The identification of uncertainty in accounting estimates is the first step in optimizing the accounting estimation process. Enterprises should establish a systematic mechanism to identify and evaluate uncertainty in accounting estimates. This includes regularly reviewing accounting estimate items in financial statements, analyzing their potential uncertainties and risks.

When identifying accounting estimation uncertainty, enterprises should pay special attention to estimation items that have a significant impact on the financial statements, such as revenue recognition, asset impairment, estimated liabilities, etc. For these projects, companies should conduct more detailed and in-depth evaluations, including analyzing historical data, industry trends, economic environment, and other factors.

In the process of evaluating the uncertainty of accounting estimates, enterprises should also consider using a combination of quantitative and qualitative methods. Quantitative methods can estimate the range and probability distribution of uncertainty through statistical analysis and model simulation; Qualitative methods can evaluate the nature and potential impact of uncertainty through expert judgment and empirical analysis.

5.2. Management methods and tools for reducing audit risks

In order to reduce audit risks, audit institutions should adopt a series of management methods and tools. Firstly, audit institutions should establish a sound audit risk assessment system and conduct a comprehensive risk assessment of audit projects to determine the focus and difficulties of the audit. This includes analyzing the industry characteristics, operating environment, internal control and other factors of the audited entity to assess its potential audit risks.

Secondly, audit institutions should strengthen communication and cooperation with the audited entity, fully understand their business processes and accounting estimation methods, in order to better identify and control audit risks. This includes maintaining close contact with the financial department, internal audit department, etc. of the audited entity, and timely obtaining relevant information and feedback.

During the audit process, audit institutions can also utilize modern information technology and tools to improve audit efficiency and accuracy. For example, using data analysis software to deeply mine and analyze the financial data of the audited entity, in order to discover potential anomalies and risk points; Use audit software to automate the execution of routine audit procedures to reduce human errors and improve efficiency.

5.3. The role of accounting standards and auditing standards in reducing uncertainty

Accounting standards and auditing standards play an important role in reducing the uncertainty of accounting estimation and auditing risk. First of all, the formulation of accounting standards should pay more attention to practicality and operability in order to reduce the uncertainty and risk of enterprises in the implementation process. Secondly, the auditing standards should emphasize the risk-oriented auditing method, and require auditing institutions to pay full attention to the uncertainty of accounting estimates and potential risks of the audited units during the auditing process. Finally, the institutions that formulate accounting standards and auditing standards should also strengthen convergence and cooperation with international standards to improve the quality of accounting and auditing worldwide.

6. Conclusions

The study delves into the internal relationship between accounting estimation uncertainty and audit risk, uncovering a significant positive correlation between them, and highlighting that different accounting estimation items exert varying effects on audit risk. This discovery offers valuable theoretical support and practical guidance for comprehending and managing accounting estimation uncertainty and its associated audit risk.

Drawing from the study's findings, the paper proposes recommendations for accounting standard setters, audit institutions, and regulatory agencies: Accounting standard setters should heighten their awareness of the impact of accounting estimation uncertainty and consider incorporating more guidance and regulations on accounting estimation during standard setting to mitigate risks stemming from uncertainty. Audit institutions should enhance the auditing of accounting estimation uncertainty, bolster risk identification and evaluation capabilities in the audit process, thereby enhancing audit quality and accuracy. Regulatory bodies should intensify supervision and review of enterprises' accounting estimation processes to ensure reasonable and accurate accounting estimations, ultimately preserving market order and protecting investors' interests.

For enterprises, optimizing the accounting estimation process and mitigating audit risk are crucial. Based on the study's outcomes, practical guidance is offered: Enterprises should establish scientific accounting estimation methods and processes to ensure rationality and transparency, minimizing subjective judgments and errors. Concurrently, they should reinforce the training and education of accounting personnel, enhancing their professional qualities and judgment abilities to better tackle complex accounting estimation challenges. Additionally, enterprises should implement an internal control mechanism to oversee and review the accounting estimation process, promptly identifying and rectifying potential issues, and ensuring the accuracy and reliability of accounting estimations.

References

[1] Zhang Mingchang. Accounting estimation audit related issues and strategies [J]. Modern

Business, 2023(23):173-176.

[2] Bao Jianling, Liu Yuetong. Research on risk estimation and control of big data audit from the perspective of entropy [J]. Accounting Newsletter, 2023(1):109-115.

[3] Xu Miaodan. Risk assessment of hospital accounting statements and related measures [J]. China Science and Technology Investment, 2023(15):74-76.

[4] Zhao Yu. Accounting audit risk factors and information audit strategy analysis [J]. China market, 2023(9):136-138.

[5] Fu Dayuan, Yang Jingyi. Audit development trend and audit risk of certified public accountants under the background of Internet [J]. China Certified Public Accountants, 2019, (07): 80-82. DOI: 10.16292/J.CNKI.ISSN 1009-6345.2019.07.012.

[6] Lu Jingjing, Ma Yiran, Jin Huiyun. The causes and prevention of audit risks of certified public accountants [J]. Market Weekly, 2022,35(03):83-85.

[7] Xie Yuqi. Research on Audit Risk of Certified Public Accountants [J]. Contemporary Accounting, 2022(24):92-94.

[8] Yan Lianying. Discussion on accounting audit risk factors and information audit strategies [J]. Accounting Learning, 2022,(10):109-111.

[9] Su Xiujuan. CPA audit risk control and prevention [J]. Fortune Times, 2022(8):93-95.