



Accounting Firm Size, Abnormal Audit Fees and Audit Quality

Jingning Li^(✉)

Beijing Jiaotong University, Beijing, China
Lijingning1998@163.com

Abstract. As the price of CPA's audit service, audit fee has great influence on audit quality. Audit fees higher than normal value can easily lead to the purchase of audit opinions, while audit fees lower than normal value may make certified public accountants pay less attention to audit, which is also not conducive to the improvement of audit quality. This paper selects the financial data of A-share listed companies in Shanghai and Shenzhen Main Board from 2015 to 2020 as research samples, and empirically tests the relationship between accounting firm size, abnormal audit fees and audit quality. The results show that there is a significant positive correlation between accounting firm size and audit quality; The existence of abnormal audit fees will significantly weaken the audit quality; Compared with small-scale accounting firms, large-scale accounting firms have no obvious weakening effect on audit quality.

Keywords: Audit Expenses · Audit Quality · Scale Of Accounting Firm

1 Introduction

Audit reports directly to the quality of the relationship of investors, the most critical factors in determining the quality of audit reports from the judgment of the certified public accountants, but along with the increase in number of accounting firms and certified public accountants, the competition between different accounting firms and certified public accountants increasingly fierce, the interests of the certified public accountants face temptation also gradually increasing. On the one hand, CPA reduces audit cost by simplifying audit process; On the other hand, in order to maintain or win customers, some accounting firms acquiesce in the management of enterprises to conceal or tamper with important events. Above two kinds of behavior, will cause an impact to audit charge. Whether the existence of too high or too low audit fees affects audit quality has become a new topic of audit fees research.

At present, there are two main explanations about the relationship between abnormal audit cost and audit quality at home and abroad: First, abnormal audit cost is the compensation for accounting firms to pay more audit resources, which reflects that accounting firms are more diligent and responsible, which is conducive to the improvement of audit quality; Second, abnormal audit fees imply the economic relationship between accounting firms and listed companies, reflecting the economic dependence of accounting firms

on listed companies, which will damage the audit quality. As for the empirical study on the economic correlation of abnormal audit fees, Hoitash et al. took the listed companies in the US securities market from 2000 to 2003 as the research object and found that abnormal audit fees were significantly positively correlated with earnings management, and believed that abnormal audit fees reflected the economic dependence of accounting firms on listed companies. Therefore, scholars at home and abroad have drawn different conclusions about the relationship between abnormal audit costs and audit quality based on different research backgrounds and research objects.

2 Literature Review and Hypothesis Formulation

The scale of accounting firm refers to the comprehensive reflection of the total business income, the number of employees, the number of partners, the number of CPA, the number of branch offices, the number of net assets and other aspects of the firm. Generally speaking, compared with small accounting firms, the larger the accounting firm is, the more attention will be paid to maintaining its professional reputation, and the internal division of labor will be more meticulous, which can enable auditors to quickly gain more professional experience, so as to improve audit quality. Using relevant data, Francis found that the larger the accounting firm, the lower its overall exposure to audit litigation risk, and the higher its audit quality. Wen Guo-shan [1] found that the larger the scale of accounting firm, the higher the quality of audit service. Based on this, hypothesis H1 is proposed.

H1: There is a significant positive correlation between the size of accounting firm and audit quality.

Audit fee refers to a certain amount of fee charged by an audit firm to an audit client for the audit services it provides to cover the costs incurred in the audit process, including normal audit fee and abnormal audit fee. Among them, normal audit fees are based on audit fee determining factors related to customer risk and can be observed, while abnormal audit fees are other fees that cannot be explained by observable determining factors when audit fees are disclosed. It may reduce audit independence. Kinney and Libby believe that audit fees make certified public accountants economically dependent on the auditees, and when the audit fees paid are higher than normal, audit independence will be affected. Fang Junxiong [2] investigated the relationship between the improvement of audit opinions and abnormal audit fees of listed companies in China and found that the higher the abnormal audit fees are, the more inclined listed companies are to revise unfavorable audit opinions. Based on this, hypothesis H2 is proposed.

H2: Abnormal audit costs are significantly negatively correlated with audit quality.

From the perspective of rational economic man hypothesis and the principle of diminishing marginal utility, with the expansion of the scale of accounting firms, the more wealth they have and the less utility they will lose when losing the same wealth, the accounting firms will be more able to adhere to their professional ethics and will

not take risks for short-term economic interests and touch laws and regulations. Smaller firms tend to devote most of their energy to getting more clients, and may compromise their ethics to satisfy them. Based on this, hypothesis H3 is proposed.

H3: Compared with small accounting firms, the abnormal audit fees of large accounting firms do not have an obvious weakening effect on audit quality.

3 Hypothesis Testing

3.1 The Data Source

This paper selects the data publicly disclosed by listed companies on Shanghai and Shenzhen stock exchanges from 2015 to 2020 as the initial sample data. The financial data, audit fees and audit opinions were obtained from The CSMAR database, and the comprehensive evaluation ranking data of accounting firms were obtained from the website of the Chinese Institute of Certified Public Accountants.

3.2 Measurement of Variables

Discretionary accruals is the most commonly used audit quality measure in the academic world. It represents that in audited financial reports, certified public accountants can tolerate the most aggressive accounting treatment and use continuous variables to reflect the extent of auditors' efforts to reduce misstatement in financial statements. Especially for audit reports that issue standard opinions, discretionary accruals can represent the level of audit quality. Therefore, manipulative accruals are selected as the proxy variable of audit quality. This paper uses the basic Jones model [3] (Jones 1991) and the modified Jones model [4] (Dechow et al. 1995) to estimate discretionary accruals. Specific calculation is carried out by industry and year regression through the following amodel:

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_0 + \beta_1 \frac{1}{A_{i,t-1}} + \beta_2 \frac{\Delta REV_{i,t}}{A_{i,t-1}} + \beta_3 \frac{PPE_{i,t}}{A_{i,t-1}} + \xi_{i,t} \quad (1)$$

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_0 + \beta_1 \frac{1}{A_{i,t-1}} + \beta_2 \frac{(\Delta REV_{i,t} - \Delta REC_{i,t})}{A_{i,t-1}} + \beta_3 \frac{PPE_{i,t}}{A_{i,t-1}} + \xi_{i,t} \quad (2)$$

Audit fees include normal audit fees and abnormal audit fees. Normal audit fees are affected by audit risks, client scale, and business complexity. Many theoretical studies have taken the natural logarithm of audit fees as a dependent variable. In this paper, based on the research results [5] (Choi et al. 2010), model (3) is constructed to measure normal audit fees. The difference between the actual audit cost and the normal cost (the absolute value of the residual) is the abnormal audit fee ABFEE.

$$\ln Fee = \partial_0 + \partial_1 Size + \partial_2 Lev + \partial_3 Liq + \partial_4 Roa + \partial_5 Loss + \partial_6 Big4 + \partial_7 Opinion + \xi \quad (3)$$

In this paper, the business income of accounting firm is taken as the evaluation standard of the size of accounting firm, and the natural logarithm of the business income of accounting firm is taken as the substitute variable of the size of accounting firm.

Table 1. variables definition.

type	code	name	definition
Explained variable	IEM1	Audit quality1	The absolute value of discretionary accruals as estimated by the Jones(1991) method
	IEM2	Audit quality2	Absolute value of discretionary accruals estimated by the Dechow(1995) method
Explanatory variables	AUDITFEE	Scale of accounting firm	Natural logarithm of business income of accounting firm
	ABFEE	Abnormal audit fees	Estimated from Model (4), the absolute value of residual represents abnormal audit cost
Control variables	LEV	leverage	Liabilities/Assets
	SIZE	size	ln(total assets)
	ROE	Return on equity	Net profit/equity
	OCF	Operating cash flow	Operating cash flow/total assets

3.3 Model Establishment

Based on the research results, this paper added industry dummy variables and annual dummy variables to construct the model (5) to test the hypothesis (Table 1):

$$\begin{aligned}
 |EM| = & \delta_0 + \delta_1 AUDITFEE + \delta_2 ABFEE \\
 & + \delta_3 AUDITFEE \times ABFEE + \delta_4 \sum controls \\
 & + \delta_5 \sum industry + \delta_6 \sum year + \varepsilon
 \end{aligned}
 \tag{4}$$

4 Empirical Results and Analysis

Table 2 reports the regression results of model (4), from which it can be seen that the regression coefficients between AUDITFEE and audit quality in columns (1)–(2) are all negative, and the signs are consistent with expectations, and are significant at the 5% level, indicating that larger accounting firms provide higher quality audit services. The above conclusions verify hypothesis H1, indicating that the size of accounting firm is significantly positively correlated with audit quality. The regression coefficients between ABFEE and audit quality in columns (1)–(2) are all positive, and the signs are consistent with expectations, and both are significant at 1% level, indicating that firms will provide

Table 2. regression results.

	(1)	(2)
VARIABLES	LEM11	LEM21
AUDITFEE	-0.548**	-0.509**
	(0.421)	(0.459)
ABFEE	0.467***	0.501***
	(0.138)	(0.145)
AUDITFEE*ABFEE	-0.19*	-0.18*
	(0.262)	(0.275)
Constant	0.243***	0.341***
	(0.868)	(0.909)
Year	control	control
IND	control	control
Observations	6,352	6,352
R-squared	0.081	0.076

low-quality audit services when they charge abnormal audit fees. The above conclusions verify hypothesis H2 and indicate that abnormal audit costs are significantly negatively correlated with audit quality. (1)–(2) the sign of the abnormal AUDITFEE*ABFEE of large-scale accounting firms is negative, the sign is consistent with the expected, and both are significant at the level of 10%, which indicates that when large accounting firms charge abnormal audit fees, their impact on audit quality is smaller than that of small accounting firms. The above conclusions verify hypothesis H3, indicating that, compared with smaller accounting firms, abnormal audit fees of large accounting firms have less impact on audit quality.

5 Conclusion

Abnormal audit costs will have a negative impact on audit quality. Specifically, the greater the value of abnormal audit costs, the greater the damage to audit quality. On the one hand, the low-price competition strategy in the securities audit market not only leads to the existence of negative abnormal audit costs, in order to achieve the goal of utility maximization, certified public accountants not only reduce the necessary audit input, but also lose their due independence and provide low-quality audit services. On the other hand, in order to obtain “clean” audit opinions or improve the tolerance of certified public accountants to earnings manipulation, listed companies will also increase audit fees to achieve mutual collusion.

At the same time, the empirical results show that abnormal audit costs have an impact on audit quality under the moderating variable of accounting firm size. This shows that the path and effect of abnormal audit cost on audit quality will change with the change

of external constraints. In particular, it is found that the reputation of accounting firm, that is, the size of accounting firm, has a significant moderating effect on the relationship between the two. This shows that accounting firms with high quality reputation in order to maintain its reputation and brand of the market competitive advantage and the premium cost of audit, when provide audit services to the customers, there will be more practice with constraint of caution opportunism behavior, strive to maintain and improve audit quality, can weaken the abnormal audit fees for the negative impact of audit quality.

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