Research Article

Earnings Persistence and Abnormal Audit Fees

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This study discusses the impact of earnings persistence on abnormal audit fees and explores the mechanism between earnings persistence and abnormal audit fees. The results show that the stronger the earnings persistence is, the lower the abnormal audit fees are. The earnings persistence only has a significant impact on the positive abnormal audit fees, and the impact on the negative abnormal audit fees is not obvious. Furthermore, it is found that the negative correlation between the earnings persistence and abnormal audit fees has obvious heterogeneity; that is, it is more significant in companies with low environmental uncertainty and state-owned companies. The mechanism test shows that earnings persistence reduces abnormal audit fees by improving company operating risk, which proves the "Risk Compensation View" of abnormal audit fees to a certain extent. The research provides an important reference for the management and shareholders to eliminate abnormal audit fees and for the regulatory authorities to regulate audit fees.

1. Introduction

Audit fees are the necessary reward for auditors to evaluate risks and complete audit work and are a necessary expenditure to evaluate the quality of company accounting information [1]. Normal audit fees can regulate the auditor's professional behavior and reflect the auditor's efforts and role in authentication, so as to improve the information quality of accounting reports. When audit fees cannot afford the auditor's efforts, the supervision mechanism of the audit will fail, and abnormal audit fees will be incurred. Zhu et al. [2] found that there was audit premium behavior due to company risk-taking, and the higher the level of company risk-taking, the higher the audit fees. Earnings persistence usually reflects the stable operation, good management level, and strong management ability of the company, which helps the company to reduce risks. Besides, it can predict a company's likelihood of achieving earnings in the future, which is an important indicator for auditors to assess firm risk [3]. The stronger the earnings persistence, the smaller the operating risk and financial risk of the company, and vice

versa. When clients have poor earnings persistence, auditors usually do more work to reduce audit risk, so audit fees are abnormally high. In practice, auditors may be unwilling to save clients or make compromises with them, and the fees charged will be abnormally low [4], so the fees of the abnormal audit will decrease rather than increase. Then, what is the specific impact of earnings persistence on abnormal audit fees?

Furthermore, environmental uncertainty can reflect the degree of risks faced by companies, which is given special attention by auditors in the risk assessment stage. Chu et al. [5] proposed that the higher the uncertainty of economic policy, the higher the audit fees. As an entity in the market, the company cannot effectively resist the rise of system risks under great environmental uncertainty even if it maintains high earnings persistence. In order to reduce audit risks, auditors need additional work to ensure the quality of the audit and prevent the expected losses; then, abnormal audit fees will rise. In addition, the nature of company property rights will also affect earnings persistence and abnormal audit fees. Compared with nonstate-owned companies,

state-owned companies are under the government's implicit guarantees and show better performance, higher earnings persistence, lower audit risks, and fewer audit fees. Therefore, what impact will environmental instability and the nature of property rights have on abnormal audit fees and earnings persistence?

Earnings persistence has always been one of the important issues in capital market research. Researchers have discussed the persistence of industry-wide and firm-specific earnings and researched the relationship among earnings persistence with fair value accounting, real earnings management, and market value [6–9]. The research on abnormal audit fees is mainly related to audit opinion purchase, audit quality, and goodwill impairment [10, 11]. In fact, abnormal audit fees may be affected by earnings persistence. It is important to analyze the impact of earnings persistence on abnormal audit fees. However, little attention has been paid to this study, which is necessary.

Thus, we choose A-share listed companies in Shanghai and Shenzhen from 2011 to 2019 in China in this study and analyze the impact of earnings persistence on abnormal audit fees. We further discuss the adjustment mechanism of environmental uncertainty on the relationship between the two and clarify the importance of earnings quality in audit charge specifications from the nature of equity. The research results not only enrich the theories related to the company earnings persistence and abnormal audit fees but also provide an important reference for the management and shareholders to eliminate abnormal audit fees and for the regulatory authorities to regulate audit fees.

2. Theoretical Analysis and Research Hypothesis

2.1. Earnings Persistence and Abnormal Audit Fees. Accounting earning is the core information of a company's financial report, an important symbol of company profitability, and even a specific performance of company value. As an important attribute of the quality of accounting earnings, earnings persistence can reflect the possibility that current earnings are expected to continue or realize growth in the future and is the characteristic that current earnings can maintain a stable state in a relatively long period. It can effectively determine the relationship between current earnings and future earnings across periods and can also realize the effective forecast of future accounting earnings from current earnings information. Therefore, in the contractual role of accounting earnings, the persistence of earnings is considered to be a very ideal feature. Researchers have defined earnings quality through earnings persistence, in which high-quality earnings are sustainable [12, 13]. Early studies suggested that accounting earnings of the current period could help predict future earnings information. Earnings persistence can be seen as the impact of the unexpected part of the current accounting earnings on the future accounting earnings. Richardson et al. [14] showed that earnings persistence is the extent to which the current accounting earnings continue to the next period. Earnings persistence has an important impact on the length and

stability of the company's future earnings. The smaller the volatility of earnings, the higher the continuity of earnings [12, 13], the greater the value of the company, and the smaller the transaction cost.

It is generally believed that audit fees are mainly influenced by the efforts of auditors, litigation risks, the bargaining power of auditors, and other factors [15]. Audit is an independent authentication service. Accounting firms charge audit fees within the normal range according to their audit costs and risks. In a fully competitive environment, audit fee variance mainly reflects the difference between the auditor's effort cost and the client's specific risk. Therefore, the higher the auditor's efforts, the higher the audit costs and the higher the compensation. Similarly, the greater the risk of clients, the higher the probability of audit failure, and the greater the possibility of being sued in the future, so the higher the charge is needed to compensate for the litigation loss in the future [15]. However, audit fees are also the result of bargaining between audit parties [16]. If audit fees are significantly higher than audit costs, it is likely that auditors have certain economic dependence on the auditees. Therefore, there are two viewpoints: "Risk Compensation View" and "Customer Dependency View" to explain abnormal audit fees in the academic circle.

The "Risk Compensation View" holds that audit fees are collected from the auditor's inputs. Researchers find that the market interprets abnormally high audit fees as the high earnings quality of the company. Blankley et al. [17] believed that, in the post-SOX era, based on the assurance of internal control quality, audit assessment expenses reflect more auditors' audit inputs, which makes the current abnormal audit fees negatively correlated with the company's future financial restatements. The abnormally high audit fees indicate that the auditor has put more effort and resources into the work, which should be compensated. With higher earnings persistence, the expected risk of the company is smaller, and the auditor can complete the work without extra inputs, while the abnormal audit fees are reduced. On the contrary, the decline of earnings continuity indicates that the business risks increase, the probability of the auditor's major misstatement increases, and litigation risks increase, thus charging abnormally high audit fees.

The "Customer Dependency View" holds that there is economic dependence between the auditor and the auditee. Due to audit costs and client switching costs, audit services are priced higher than the necessary cost to earn quasi-rents from specific clients. It binds the auditor and the auditee together economically, which not only reduces the auditor's independence but also increases the auditor's tolerance for the earnings management of the auditee [18]. Therefore, when the auditee expects the performance of the company to be poor, they will have an incentive to improve the expected adverse audit results. In order to make auditors yield, the auditee will input more benefits and pay too much audit fees. If a company's earnings persistence is stronger, it indicates the earnings quality of the company is better, and the company does not need to improve the audit results, and no need to purchase audit opinions. The abnormal audit fees are naturally low.

According to the above analysis, there is a negative relationship between earnings persistence and abnormal audit fees, on the whole, so Hypothesis 1 is proposed:

H1: company earnings persistence and abnormal audit fees have a significantly negative correlation

Further analysis shows that, in the capital market, there are positive and negative abnormal audit fees, and the impact of earnings persistence on abnormal audit fees of different symbols may differ. If the company's abnormal audit fee is greater than 0, it is a positive abnormal audit fee. Whether it is risk premium or economic rent, there may be positive abnormal audit fees. The stronger the continuity of earnings, the lower the audit risk and the weaker the economic relationship between auditors and clients impact on positive abnormal audit fees.

When the abnormal audit fee is less than 0, it is a negative abnormal audit fee. Choi et al. [4] believed that low audit fees may indicate three situations: in the first case, the client is unprofitable, the auditor earns meager profits from the client, the expected cost of retaining the client is much greater than the benefit, and the auditor is unwilling to compromise to the noncompliance behavior of the client who pays too low expenses. At this time, the increase in the company earnings persistence will make the company profitable in the eyes of auditors. The auditors' motivation to retain clients will be strengthened. Bilateral cooperation tends to be normal, and negative abnormal audit fees will be corrected to a certain extent. In the second case, auditors do not want to compromise their independence on behalf of their clients and want to ensure audit quality. At this point, whether the company can achieve continuous earnings in the foreseeable future does not have much impact on the negative abnormal audit fees. In the third case, auditors are pressured by clients for biased financial statements in the current period and expect to earn excess returns in the future, thus allowing the current audit fees to be abnormally low and negative abnormal audit fees to occur. By this time, strong earnings persistence will weaken the motivation of earnings management clients, and the pressure of auditors from aggressive behavior of clients will be greatly reduced. There is no need to compensate for the current reduced audit fees through expected excess returns so that the negative abnormal audit fees can be corrected. It can be seen that earnings persistence may not be able to produce a significant improvement in negative abnormal audit fees.

In conclusion, the impact of earnings persistence on positive abnormal audit fees may not be exactly the same of negative abnormal audit fees. In contrast, the negative impact of earnings persistence on positive abnormal audit fees is more obvious. Therefore, Hypothesis 2 is proposed:

H2: compared with negative abnormal audit fees, company earnings persistence has a more significant negative correlation with positive abnormal audit fees

2.2. Environmental Uncertainty, Earnings Persistence, and Abnormal Audit Fees.
A stable external environment is the basis of an enterprise sustainable operation and the premise of enterprise development strategy and operation decisions. The external environment includes various competitors, suppliers, customers, regulators, and many other market participants, and the unpredictability of the behavior of market subjects ultimately leads to the uncertainty of the business environment.

First of all, environmental uncertainty will increase the business risks of enterprises. The advantages and disadvantages of the external macroenvironment of enterprises often affect the formulation and implementation of enterprise strategies. The external macroenvironment is poorer and uncertainty is bigger; it can affect the accounting information relevance and timeliness for decision-making and increase the enterprise's internal and external information asymmetry, and the management may not get sufficient enough information to determine the external changes of profit and loss. They find it difficult to grasp the development trend for a long time, unable to accurately predict the future development prospects of the enterprise, and face a greater risk of decision failure.

Secondly, a highly uncertain external environment will strengthen the opportunistic behavior of the management. Environmental uncertainty increases the fluctuation of company earnings, affects the company's market performance, and is not conducive to the maximization of management compensation. If the management is under pressure to meet financial performance targets, it will be more inclined to recognize future earnings in advance. Ghosh and Olsen [19] pointed out that environmental uncertainty would directly affect the earnings management of companies, and the higher the uncertainty, the stronger the motivation of the management to reduce earnings volatility by using excess accounts. In response to the impact of environmental uncertainty, auditors will increase audit fees, which may increase the abnormal audit fees.

Therefore, high environmental uncertainty will reduce continuous earnings, strengthen earnings management motivation, and weaken the improvement effect of earnings persistence on abnormal audit fees. So, this study proposes Hypothesis 3:

H3: compared with companies with higher environmental uncertainty, companies with lower environmental uncertainty have a more significant negative correlation between earnings persistence and abnormal audit fees

2.3. Nature of Property Rights, Earnings Persistence, and Abnormal Audit Fees.
State-owned companies are more likely to get financial and political support from the government because of their "blood ties" with the government. No matter obtaining loans from banks, subsidies from the government, or financing from the stock market, state-owned companies can get more support compared with nonstate-owned companies. The particularity of state-owned property rights reduces the financing constraints of state-owned companies, which can raise funds at a lower cost. It provides a guarantee for expanding production and

occupying the market, so as to improve profitability and enhance risk resistance. Zhu et al. [2] showed that, compared with nonstate-owned companies, state-owned companies reduce audit risk due to their lower inherent risks, making audit premiums relatively weak. On the contrary, nonstate-owned companies have limited policy support, higher capital costs, greater financing constraints, and more uncertainties, so the higher audit fees are higher. Meanwhile, as most senior executives of state-owned companies are appointed by the government, such as officials, they have to undertake more policy works such as employment increase and social stability. Compared with leisure, in-service consumption, and other private benefits, they pay more attention to the pursuit of political interests during their term of office and are more willing to keep the company profitable for a long time. As a result, the earnings persistence of state-owned companies is higher. In addition, some studies also show that, compared to nonstate-owned companies, state-owned companies are less likely to be issued modified audit opinions, and therefore, audit fees are less abnormal.

Therefore, the earnings persistence of state-owned companies is better than that of nonstate-owned companies, which is more conducive to a better playing improvement effect of earnings persistence on abnormal audit fees. Thus, this study proposes Hypothesis 4:

> H4: compared with nonstate-owned companies, the earnings persistence of state-owned companies has a more significant negative correlation with abnormal audit fees

3. Research Design

3.1. Sample Selection and Data Sources.
In this study, A-share listed companies in Shanghai and Shenzhen from 2011 to 2019 are selected as the samples in the following ways: (1) delete financial listed companies, (2) delete ST and *ST companies, (3) delete listed companies with incomplete key data, and (4) delete listed companies whose annual reports have been disclosed continuously for less than 10 years to ensure the accuracy of the environmental uncertainty index. To reduce the interference of endogeneity among variables to the conclusions, the model in this study adopts the data of one-period lagging and losses the samples of 2011. Due to the impact of COVID-19 in 2020, auditors are faced with numerous tests such as limited audit scope, which requires auditors to make more efforts and maintain higher professional suspicion [20], which may have a great impact on audit fees. Therefore, this study tests the relationship between earnings persistence and abnormal audit fees by excluding the data of 2020. After collation, 9473 observations are finally obtained. The data used here come from the CSMAR database and the information obtained after sorting out the annual reports of listed companies. To prevent the potential influence of extreme values on the results, the *quantiles* of continuous variables at 1% and 99% are winsorized in this study. Moreover, Excel and Stata14 are used here for relevant data processing.

3.2. Variable Definition

3.2.1. Explained Variable: Abnormal Audit Fees (Abfee).
According to the research method of Simunic [1], this study constructs an audit pricing model to predict abnormal audit fees for companies:

$$
\begin{aligned}
Lnfee = {} & \alpha_0 + \alpha_1 Opinion + \alpha_2 Size + \alpha_3 Cata + \alpha_4 Roa \\
& + \alpha_5 Lev + \alpha_6 Loss + \alpha_7 Com + \alpha_8 Liq + \alpha_9 Emplay \\
& + \alpha_{10} Big4 + \sum Year + \sum Industry + \varepsilon.
\end{aligned}
\tag{1}
$$

The explained variable of the above model is audit fee (Lnfee), which is expressed as the logarithm of the audit fee disclosed in the annual reports of listed companies. Explanatory variables are audit opinion (Opinion), company size (Size), current assets/total assets (Cata), return on assets (Roa), debt leverage (Lev), size of the loss (Loss), business complexity (Com), short-term liquidity (Liq), number of employees (Employ), and accounting firm difference (Big4). By regression, the residual ε of the model is the abnormal audit fee (Abfee). The greater the index after taking the absolute value of Abfee, the higher the abnormal audit fees of the company.

3.2.2. Explanatory Variable: Earnings Persistence (Ec).
Referring to the mechanism of the Jones model, this study constructs the following models to measure the earnings persistence variable of companies:

$$
Earn_{i,t} = \alpha_0 + \alpha_1 Earn_{i,t-1} + \alpha_2 Earn_{i,t-2} + \alpha_3 Earn_{i,t-3} + \varepsilon.
\tag{2}
$$

In the above model, the explained variable is the enterprise operating net profit rate (Earn), and the explanatory variable is the value of the enterprise operating net profit rate lagging 1–3 periods. Through the regression of this model, the residual is expressed as enterprise earnings continuity (Ec). If Ec > 0, it indicates that enterprise earnings continue to grow.

3.2.3. Regulatory Variable: Environmental Uncertainty (Ddeu).
According to the Ghosh and Olsen [19] model, this study uses the industry-adjusted main business income index of listed companies to measure company environmental uncertainty. Specific methods are as follows.

First, a regression model is constructed to measure abnormal operating revenue (Abei). The operating revenue items in the income statement include revenue from sales and other operating revenues. However, according to the research practice, the operating revenue variable in this study is only measured by sales:

$$
\begin{aligned}
Ei_{i,t} = {} & \alpha_0 + \alpha_1 Ei_{i,t-1} + \alpha_2 Ei_{i,t-2} + \alpha_3 Ei_{i,t-3} + \alpha_4 Ei_{i,t-4} \\
& + \alpha_5 Ei_{i,t-5} + \varepsilon.
\end{aligned}
\tag{3}
$$

In model (3), the explained variable is the company's operating revenue (Ei), and the explanatory variable is the

TABLE 1: Names, symbols, and definitions of related variables.

Variable type	Variable name	Symbol	Variable definition
Explained variable	Abnormal audit fees	Abfee	Audit pricing model (1) estimated residuals
Explanatory variable	Earnings persistence	Ec	Earnings persistence model (2) estimated residuals
Regulatory variable	Environmental uncertainty	Ddeu	If the environmental uncertainty is greater than the median, Ddeu = 1; if not, Ddeu = 0
	Nature of property rights	Soe	If the company is a state-owned company, Soe = 1; if not, Soe = 0
	Company size	Size	The natural logarithm of the total ending assets of a company
	Return on assets	Roa	Net profit/total ending assets
	Debt leverage	Lev	Total ending liabilities/total ending assets
	Customer sale	Sale	The natural logarithm of the company's main business income (million yuan)
	Business complexity	Com	Ending accounts receivable balance + ending balance of stock/total ending assets
	Short-term liquidity	Liq	Ending current assets/ending current liabilities
	Accounting firm difference	Big4	If an accounting firm is one of the "international Big4," Big4 = 1; if not, Big4 = 0
Control variable	Tobin Q value	Tobinq	Company market value/book value
	Substantial shareholder control	Top1	The shareholding proportion of the Top1 substantial shareholder
	Separation of board of directors and general manager	Dual	If the chairman and the general manager are not the same person, Dual = 1 or Dual = 0
	Ratio of independent directors	Idr	Number of independent directors/number of directors
	Size of the loss	Loss	If annual ending loss occurs in that year, Loss = 1 or Loss = 0
	Audit opinion	Opinion	If company's financial report is issued with modified audit Opinion = 1, If not, Opinion = 0
	Current assets/total assets	Cata	Ending current assets/ending total assets
	Number of employees	Employ	The square root of the number of company employees in that year
	Equity restriction ratio		Shareholding proportion of the second to the tenth substantial shareholders

value of the company's operating revenue lagging 1–5 periods. With the regression of this model, the residual of this model is expressed as abnormal operating revenue (Abei).

Then, calculate the 5-year moving window standard deviation (Sdabei) of abnormal operating revenue and divide it by the 5-year moving window mean (Mei) of the company's operating revenue, and we get environmental uncertainty without industry adjustment: $Neu = Sdabei/Mei$.

The median of Neu (Ieu) is then calculated, and the company's environmental uncertainty by industry adjustment is measured: $Eu = Neu/Ieu$.

Finally, the company's environment uncertainty adjusted by industry is compared with the median, and the company's environment uncertainty greater than the median is regarded as large; that is, Ddeu is assigned to 1; otherwise, Ddeu is assigned to 0.

3.2.4. Control Variable. In order to better analyze the relationship between earnings persistence and abnormal audit fees, this study divides the control variables into financial characteristics, company characteristics, and management structure. Financial characteristic variables include return on assets, debt leverage, short-term liquidity, Tobin Q value, and size of the loss. Company characteristic variables include company size, business complexity, accounting firm difference, and customer sale; the variables of management structure include Substantial Shareholder Control, Separation of Board of Directors and General Manager, Ratio of Independent Directors, and Equity Restriction Ratio. Relevant variables in this study are shown in Table 1.

3.3. Model Design. In order to test the relationship between earnings persistence and abnormal audit fees, this study builds Model (10). In addition, in order to reduce the interference of endogeneity among variables to research conclusions, the explanatory variables of this model use data with a lagging period:

$$
\begin{aligned}
Abfee_{i,t} = & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Roa_{i,t-1} \\
& + \beta_4 Lev_{i,t-1} + \beta_5 Sale_{i,t-1} \\
& + \beta_6 Com_{i,t-1} + \beta_7 Liq_{i,t-1} + \beta_8 Big4_{i,t-1} + \beta_9 Tobinq_{i,t-1} \\
& + \beta_{10} Top1_{i,t-1} + \beta_{11} Shrs_{i,t-1} + \beta_{12} Dual_{i,t-1} + \beta_{13} Idr_{i,t-1} \\
& + \beta_{14} Loss_{i,t-1} + \sum Year + \sum Industry + \varepsilon.
\end{aligned}
$$

(4)

4. Empirical Results and Analysis

4.1. Descriptive Statistics. Table 2 is the descriptive statistics of the main variables. Among them, the standard deviation of the company abnormal audit fee (Abfee) index is 0.399, the minimum value is −1.049, and the maximum

TABLE 2: Summary statistics.

Variable	Mean	sd	min	max	p50
Abfee	−0.00690	0.399	−1.049	1.276	−0.013
Ec	0.000568	0.122	−0.739	0.624	−0.021
Ddeu	0.477	0.499	0	1	0.000
Size	22.58	1.331	19.53	26.66	22.411
Roa	0.0437	0.0504	−0.158	0.231	0.035
Lev	0.488	0.198	0.0708	0.927	0.496
Sale	8.121	1.464	4.361	12.41	7.997
Com	0.268	0.186	0.00429	0.815	0.236
Liq	1.843	1.616	0.215	12.97	1.398
Big4	0.0846	0.278	0	1	0.000
Tobinq	2.118	1.410	0.826	12.93	1.658
Top1	0.364	0.154	0.0845	0.788	0.345
Shrs	0.191	0.122	0.0131	0.546	0.173
Dual	0.831	0.375	0	1	1.000
Idr	0.371	0.0536	0.286	0.600	0.333
Loss	0.0645	0.246	0	1	0.000
Soe	0.601	0.490	0	1	1.000

value is 1.276, indicating that the abnormal audit fees of different listed companies vary greatly. The standard deviation of the index reflecting company earnings persistence (Ec) is 0.122, the minimum value is −0.739, and the maximum value is 0.624, indicating that the earnings persistence of different listed companies varies greatly. The mean value of the company environmental uncertainty (Ddeu) index is 0.477, indicating that 47.7% of the company samples have high environmental uncertainty on average. The mean value of the nature of property rights (Soe) index is 0.601, indicating that 60.1% of samples are state-owned companies.

4.2. Regression Analysis

4.2.1. Impact of Earnings Persistence on Abnormal Audit Fees.
It can be seen from Table 3 that, at the statistical level of 1%, company earnings persistence has a significantly negative correlation with company abnormal audit fees. This indicates that the stronger the continuity of earnings, the better the earnings status of companies, the lower the risks of companies, and the lower the abnormal audit fees. Hypothesis 1 is confirmed.

Furthermore, this study refers to the practice of Choi et al. [4], groups the samples by symbols of abnormal audit fees, and divides the samples into negative abnormal audit fees (Table 4, Model 1 and Model 2) and positive abnormal audit fees (Table 4, Model 3 and Model 4). When the abnormal audit fee is less than 0, it is the negative abnormal audit fee (Under abfee). If the abnormal audit fee is greater than 0, it is the positive abnormal audit fee (Over abfee). The results show that earnings persistence has a significant negative correlation with positive abnormal audit fees at a 1% level, but not with negative abnormal audit fees. This shows that earnings persistence can effectively restrain positive abnormal audit fees, but it is difficult to have a significant impact on negative abnormal audit fees. Hypothesis 2 is confirmed.

TABLE 3: OLS regression results of earnings persistence and abnormal audit fees.

Variable name	M1	M2	M3
Ec	−0.230***	−0.236***	−0.165***
	(−6.79)	(−4.13)	(−2.86)
Size		−0.0384***	−0.0426***
		(−4.30)	(−4.72)
Roa		−0.00296	−0.308**
		(−0.02)	(−2.03)
Lev		−0.0578	−0.0596*
		(−1.61)	(−1.68)
Sale		0.0467***	0.0591***
		(5.91)	(7.48)
Com		−0.0700**	−0.0524*
		(−2.40)	(−1.77)
Liq		0.00421	0.000821
		(1.31)	(0.25)
Big4			0.0376**
			(1.98)
Tobinq			0.0236***
			(6.53)
Top1			−0.125***
			(−3.69)
Shrs			0.286***
			(7.10)
Dual			−0.0143
			(−1.32)
Idr			0.215***
			(2.75)
Loss			0.0146
			(0.70)
Year	Control	Control	Control
Industry	Control	Control	Control
Constant	−0.0121	0.524***	0.393**
	(−0.45)	(3.50)	(2.48)
N	9,473	9,473	9,473
Adj-R^2	0.003	0.008	0.027

Note. Variable definitions are in Table 3. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

4.2.2. Environmental Uncertainty, Earnings Persistence, and Abnormal Audit Fees.
To test the heterogeneity of environmental uncertainty (to verify Hypothesis 3), this study groups the annual-industry median of company environmental uncertainty. The sample group with less than the median is the low sample group of environmental uncertainty (Table 5, Model 1), and the sample group higher than the median is the high sample group of environmental uncertainty (Table 5, Model 2). The regression results show that the coefficient of earnings persistence of the sample group with low environmental uncertainty is −0.262, which is significant at the level of 5%, indicating that the earnings persistence of companies with low environmental uncertainty has a more significant impact on abnormal audit fees. Hypothesis 3 is confirmed.

4.2.3. Nature of Property Rights, Earnings Persistence, and Abnormal Audit Fees.
In order to test the impact of differences in the nature of property rights of companies on earnings persistence and abnormal audit fees (to verify

TABLE 4: OLS regression results of positive and negative abnormal audit fees.

Variable name	M1	M2	M3	M4
	Under abfee	Under abfee	Over abfee	Over abfee
Ec	−0.0777	−0.0658	−0.165***	−0.132***
	(−1.59)	(−1.32)	(−3.34)	(−2.60)
Size	−0.0274***	−0.0304***	0.0202**	0.0146*
	(−3.81)	(−4.18)	(2.36)	(1.72)
Roa	−0.00232	−0.0380	0.113	0.0729
	(−0.02)	(−0.29)	(0.89)	(0.56)
Lev	−0.0441	−0.0475	0.0692**	0.0623*
	(−1.52)	(−1.64)	(2.14)	(1.95)
Sale	0.00141	0.00604	0.0263***	0.0282***
	(0.22)	(0.93)	(3.59)	(3.83)
Com	−0.00719	−0.00332	−0.104***	−0.0946***
	(−0.31)	(−0.14)	(−3.60)	(−3.28)
Liq	−0.00549**	−0.00604**	0.00899***	0.00787***
	(−2.19)	(−2.44)	(3.11)	(2.74)
Big4	−0.0348**	−0.0255*	0.00808	−0.00111
	(−2.31)	(−1.67)	(0.47)	(−0.06)
Tobinq	0.00433	0.00299	0.0136***	0.0122***
	(1.36)	(0.93)	(4.43)	(3.97)
Top1		−0.0977***		0.0200
		(−3.61)		(0.65)
Shrs		0.0941***		0.213***
		(2.85)		(6.04)
Dual		−0.0113		−0.0117
		(−1.31)		(−1.18)
Idr		0.162***		−0.0651
		(2.62)		(−0.89)
Loss		0.00292		0.0286
		(0.17)		(1.51)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
Constant	0.370***	0.372***	−0.440***	−0.335**
	(2.99)	(2.98)	(−2.98)	(−2.24)
N	4,866	4,866	4,607	4,607
Adj-R^2	0.038	0.046	0.067	0.076

Hypothesis 4), this study divides the samples into two groups according to the nature of property rights: nonstate-owned companies (Table 5 Model 3) and state-owned companies (Table 5, Model 4). The results show that the coefficient of earnings persistence in the sample group of state-owned companies is significant at the statistical level of 1%, indicating that, compared with nonstate-owned companies, the earnings persistence of state-owned companies has a more significant impact on the improvement of abnormal audit fees. Hypothesis 4 is confirmed.

4.3. Endogeneity Test. Although the regression results above have shown that earnings persistence can significantly improve abnormal audit fees, the regression model may have the problem of reverse causality. At the same time, the conclusion of this study will be biased if companies with higher earnings persistence have lower environmental uncertainty, which leads to a decrease of abnormal audit fees.

In this study, therefore, Heckman's two-stage regression model is used to test endogeneity.

In the first stage, the Probit model is established and the IMR is calculated. The model is as follows:

$$probit\left(Mec_{i,t}\right) = \beta_0 + \beta_1 Size_{i,t} + \beta_2 Roa_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Othec_{i,t} + \sum Year + \sum Industry + \varepsilon. \quad (5)$$

In the second stage, the IMR value estimated in the first stage is inserted into Model (10). The model is as follows:

$$\begin{aligned} Abfee_{i,t} = \beta_0 &+ \beta_1 Ec_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Roa_{i,t-1} \\ &+ \beta_4 Lev_{i,t-1} + \beta_5 Sale_{i,t-1} + \beta_6 Com_{i,t-1} \\ &+ \beta_7 Liq_{i,t-1} + \beta_8 Big4_{i,t-1} + \beta_9 Tobinq_{i,t-1} \\ &+ \beta_{10} Top1_{i,t-1} + \beta_{11} Shrs_{i,t-1} + \beta_{12} Dual_{i,t-1} \\ &+ \beta_{13} Idr_{i,t-1} + \beta_{14} Loss_{i,t-1} + \beta_{15} IMR \\ &+ \sum Year + \sum Industry + \varepsilon. \end{aligned} \quad (6)$$

In the first stage, the study constructs the explanatory variable as the earnings persistence intensity (Mec) index. When the company's earnings persistence is greater than the industry median, Mec = 1; otherwise, Mec = 0. And control the company size (Size), return on assets (Roa), debt leverage (Lev), and other variables that affect the earnings persistence of the company. In addition, the "Exclusion Constraint" variable (Othec) is controlled in Heckman's first-stage regression model; the index is defined as the earnings persistence of other companies in the same industry during the same period. This is because other companies, in the same industry during the same period, have a "peer effect" with this company [21]. The earnings persistence of other companies, in the same industry during the same period, will have an impact on the earnings persistence of this company, while it has no direct impact on the abnormal audit fees of the company.

Table 6 reports the results of Heckman's Stage 1 regression. As shown in Table 7, the larger the company size (regression coefficient is 0.0551, significant at 1% level) and the higher the return on assets (regression coefficient is 33.48, significant at 1% level), the stronger the earnings persistence of listed companies. The lower the company's debt leverage (regression coefficient is −1.684, significant at 1% level), the stronger the earnings persistence of listed companies. The "Exclusion Constraint" variable (Othec) is significant at the 1% level, indicating that the earnings persistence of other companies, in the same industry during the same period, will affect the earnings persistence of the company, which meets the conditions for the selection of the exclusion constraint variable.

Table 7 reports the results of Heckman's Stage 2 regression. After controlling the self-selection bias of earnings persistence, there is still a significant negative correlation between earnings persistence and abnormal audit fees, and the negative correlation is still more significant in companies with low environmental uncertainty and state-owned

TABLE 5: Group test of OLS regression results.

Variable name	M1	M2	M3	M4
Groups	The low sample group of environmental uncertainty	The high sample group of environmental uncertainty	Nonstate-owned companies	State-owned companies
Ec	−0.262**	−0.104	−0.0750	−0.222***
	(−2.47)	(−1.52)	(−0.94)	(−2.76)
Size	−0.0413***	−0.0482***	−0.0604***	−0.0351***
	(−2.65)	(−4.21)	(−4.37)	(−2.96)
Roa	−0.332	−0.287	−0.123	−0.645***
	(−1.37)	(−1.46)	(−0.61)	(−2.93)
Lev	−0.114**	−0.0626	0.0544	−0.0879*
	(−2.09)	(−1.33)	(0.94)	(−1.89)
Sale	0.0709***	0.0603***	0.0551***	0.0669***
	(5.05)	(6.18)	(4.80)	(6.35)
Com	−0.125***	0.00615	−0.136***	−0.0294
	(−2.70)	(0.16)	(−2.99)	(−0.75)
Liq	−0.00927*	0.00478	−2.64e−05	0.00526
	(−1.81)	(1.17)	(−0.01)	(0.95)
Big4	0.0340	0.0431	0.0706**	0.0184
	(1.36)	(1.46)	(2.00)	(0.82)
Tobinq	0.0309***	0.0188***	0.00974**	0.0348***
	(5.44)	(3.97)	(2.16)	(6.03)
Top1	−0.173***	−0.100**	−0.113**	−0.0768*
	(−3.45)	(−2.16)	(−2.25)	(−1.66)
Shrs	0.256***	0.292***	−0.0265	0.433***
	(4.18)	(5.41)	(−0.47)	(7.62)
Dual	−0.0194	−0.00669	−0.00846	0.0224
	(−1.18)	(−0.47)	(−0.63)	(1.23)
Idr	−0.0181	0.396***	0.262**	0.195*
	(−0.16)	(3.63)	(2.30)	(1.83)
Loss	−0.00136	0.0265	0.0823***	−0.0262
	(−0.04)	(1.00)	(2.61)	(−0.97)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
Constant	0.493*	0.349*	0.830***	0.101
	(1.87)	(1.70)	(3.33)	(0.49)
N	4,618	4,855	3,817	5,656
Adj-R^2	0.040	0.033	0.036	0.051

Note. Variable definitions are in Table 5. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

TABLE 6: The results of Heckman's stage 1 regression.

Variable name	Mec
Size	0.0551***
	(3.71)
Lev	−1.684***
	(−15.32)
Roa	33.48***
	(50.18)
Othec	−0.0178***
	(−4.79)
Year	CONTROL
Industry	CONTROL
Constant	−1.553***
	(−5.02)
N	11,017
Pseudo R^2	0.418

Note. Variable definitions are in Table 6. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

companies, which indicates that the research conclusion of this study is reliable. Although some studies believe that abnormal audit fees may damage the quality of accounting earnings and sever the connection between current and future accounting earnings [22]. However, in fact, earnings are the comprehensive reflection of the operating results that have occurred in the report after accounting confirmation and measurement, which is verified by the auditor before the accounting information is submitted to the external; from this, the audit fees occur. Therefore, this study argues that, under the circumstances of poor continuity caused by large fluctuation and weak stability of earnings, companies send signals of poor earnings quality and high-risk level to the outside world. In order to reduce risks, auditors may charge abnormal audit fees.

Besides, in the regression results of Heckman's Stage 2, the VIF values of Ec and IMR indexes are both less than 10, and there is no multicollinearity problem, which indicates

that the variable selection of the Heckman model is appropriate.

4.4. Mechanism Test.

Based on the above analysis, it is found that company earnings persistence has a significant negative correlation with abnormal audit fees. Is this based on compensation for the risk premium or the dependence on customers? In order to explain the mechanism of earnings persistence on abnormal audit fees, a mechanism test was carried out in this study.

4.4.1. Mechanism Test Based on "Risk Compensation View".

Earnings persistence may influence abnormal audit fees by reducing company risks. The intensity of the fluctuation of the company's main business income can often show the strength of company's business risks. Therefore, this study adopts the standard deviation of the natural logarithm of main business income in three periods of lagging to measure the business risk of companies (Risk). This study uses a three-step method to test the mechanism.

Step 1: use model (4) constructed above to test whether earnings persistence (independent variable) has a significant impact on abnormal audit fees (dependent variable):

$$
\begin{aligned}
Abfee_{i,t} = {} & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Roa_{i,t-1} \\
& + \beta_4 Lev_{i,t-1} + \beta_5 Sale_{i,t-1} + \beta_6 Com_{i,t-1} \\
& + \beta_7 Liq_{i,t-1} + \beta_8 Big4_{i,t-1} + \beta_9 Tobinq_{i,t-1} \\
& + \beta_{10} Top1_{i,t-1} + \beta_{11} Shrs_{i,t-1} + \beta_{12} Du\,al_{i,t-1} \\
& + \beta_{13} I\,dr_{i,t-1} + \beta_{14} Loss_{i,t-1} + \sum Year \\
& + \sum Industry + \varepsilon.
\end{aligned}
\tag{7}
$$

Step 2: build model (7) to test whether company earnings persistence has a significant impact on business risks (intermediary variable):

$$
\begin{aligned}
Risk_{i,t} = {} & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Roa_{i,t-1} \\
& + \beta_4 Lev_{i,t-1} + \beta_5 Sale_{i,t-1} + \beta_6 Com_{i,t-1} \\
& + \beta_7 Liq_{i,t-1} + \beta_8 Big4_{i,t-1} + \beta_9 Tobinq_{i,t-1} \\
& + \beta_{10} Top1_{i,t-1} + \beta_{11} Shrs_{i,t-1} + \beta_{12} Du\,al_{i,t-1} \\
& + \beta_{13} I\,dr_{i,t-1} + \beta_{14} Loss_{i,t-1} + \sum Year \\
& + \sum Industry + \varepsilon.
\end{aligned}
\tag{8}
$$

Step 3: build model (8), and incorporate earnings persistence and business risks into the model to test whether they have a significant impact on abnormal audit fees:

$$
\begin{aligned}
Abfee_{i,t} = {} & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Risk_{i,t-1} + \beta_3 Size_{i,t-1} \\
& + \beta_4 Roa_{i,t-1} + \beta_5 Lev_{i,t-1} + \beta_6 Sale_{i,t-1} \\
& + \beta_7 Com_{i,t-1} + \beta_8 Liq_{i,t-1} + \beta_9 Big4_{i,t-1} \\
& + \beta_{10} Tobinq_{i,t-1} + \beta_{11} Top1_{i,t-1} + \beta_{12} Shrs_{i,t-1} \\
& + \beta_{13} Du\,al_{i,t-1} + \beta_{14} I\,dr_{i,t-1} + \beta_{15} Loss_{i,t-1} \\
& + \sum Year + \sum Industry + \varepsilon.
\end{aligned}
\tag{9}
$$

Table 8 summarizes the statistical results of the three models above. It is found that, in Model 1, Model 2, and Model 3, the coefficient of earnings persistence is significant at the statistical level of 1%. The results show that earnings persistence has a significant negative correlation with abnormal audit fees. Abnormal audit fees can be restrained by reducing business risks, and since business risks plays a partial intermediary role between them. Therefore, this conclusion supports the explanation that abnormal audit fees are derived from the "Risk Compensation View" to a certain extent.

4.4.2. Mechanism Test Based on "Customer Dependency View".

Company earnings persistence may also affect the abnormal audit fees of companies by affecting the economic relationship between companies and auditors. Therefore, this study measures audit collusion by adverse audit opinion improvement (Op) of listed companies. If the audit opinion of T is better than that of $T-1$, Op = 1. Otherwise, Op = 0.

In order to verify whether the mechanism of earnings persistence on abnormal audit fees is related to the "Customer Dependency View," the following models are constructed according to the three-step method to verify the relationship among earnings persistence, audit collusion, and abnormal audit fees:

$$
\begin{aligned}
Abfee_{i,t} = {} & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Roa_{i,t-1} \\
& + \beta_4 Lev_{i,t-1} + \beta_5 Sale_{i,t-1} + \beta_6 Com_{i,t-1} + \beta_7 Liq_{i,t-1} \\
& + \beta_8 Big4_{i,t-1} + \beta_9 Tobinq_{i,t-1} + \beta_{10} Top1_{i,t-1} \\
& + \beta_{11} Shrs_{i,t-1} + \beta_{12} Du\,al_{i,t-1} + \beta_{13} I\,dr_{i,t-1} \\
& + \beta_{14} Loss_{i,t-1} + \sum Year + \sum Industry + \varepsilon,
\end{aligned}
\tag{10}
$$

$$
\begin{aligned}
probit(Op_{i,t}) = {} & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Size_{i,t-1} + \beta_3 Roa_{i,t-1} \\
& + \beta_4 Lev_{i,t-1} + \beta_5 Sale_{i,t-1} + \beta_6 Com_{i,t-1} \\
& + \beta_7 Liq_{i,t-1} + \beta_8 Big4_{i,t-1} + \beta_9 Tobinq_{i,t-1} \\
& + \beta_{10} Top1_{i,t-1} + \beta_{11} Shrs_{i,t-1} + \beta_{12} Du\,al_{i,t-1} \\
& + \beta_{13} I\,dr_{i,t-1} + \beta_{14} Loss_{i,t-1} + \sum Year \\
& + \sum Industry + \varepsilon,
\end{aligned}
\tag{11}
$$

TABLE 7: The results of Heckman's stage 2 regression.

Variable name	M1	M2	M3	M4	M5
Groups	Total samples	The low sample group of environmental uncertainty	The high sample group of environmental uncertainty	Nonstate-owned companies	State-owned companies
Ec	−0.165***	−0.263**	−0.103	−0.0771	−0.223***
	(−2.85)	(−2.49)	(−1.52)	(−0.96)	(−2.78)
Size	−0.0426***	−0.0409***	−0.0482***	−0.0602***	−0.0347***
	(−4.71)	(−2.64)	(−4.20)	(−4.36)	(−2.93)
Roa	−0.331**	−0.402	−0.308	−0.0565	−0.732***
	(−2.08)	(−1.54)	(−1.51)	(−0.27)	(−3.16)
Lev	−0.0552	−0.101*	−0.0587	0.0419	−0.0718
	(−1.52)	(−1.78)	(−1.23)	(0.71)	(−1.52)
Sale	0.0588***	0.0701***	0.0602***	0.0560***	0.0659***
	(7.43)	(5.00)	(6.16)	(4.85)	(6.26)
Com	−0.0530*	−0.127***	0.00545	−0.135***	−0.0323
	(−1.79)	(−2.74)	(0.14)	(−2.96)	(−0.83)
Liq	0.000895	−0.00896*	0.00482	−0.000153	0.00552
	(0.28)	(−1.75)	(1.18)	(−0.04)	(1.00)
Big4	0.0375**	0.0337	0.0430	0.0699**	0.0176
	(1.97)	(1.34)	(1.45)	(1.98)	(0.78)
Tobinq	0.0235***	0.0309***	0.0187***	0.00996**	0.0344***
	(6.52)	(5.45)	(3.95)	(2.20)	(5.96)
Top1	−0.126***	−0.174***	−0.101**	−0.110**	−0.0789*
	(−3.71)	(−3.48)	(−2.17)	(−2.19)	(−1.71)
Shrs	0.285***	0.253***	0.291***	−0.0249	0.430***
	(7.07)	(4.14)	(5.37)	(−0.44)	(7.54)
Dual	−0.0143	−0.0196	−0.00673	−0.00752	0.0231
	(−1.32)	(−1.19)	(−0.47)	(−0.56)	(1.26)
Idr	0.216***	−0.0137	0.396***	0.258**	0.197*
	(2.76)	(−0.12)	(3.64)	(2.26)	(1.85)
Loss	0.0141	−0.00192	0.0259	0.0837***	−0.0283
	(0.68)	(−0.06)	(0.98)	(2.65)	(−1.05)
IMR	−0.00264	−0.00804	−0.00237	0.00837	−0.00946
	(−0.53)	(−0.76)	(−0.43)	(1.32)	(−1.35)
Year	Control	Control	Control	Control	Control
Industry	Control	Control	Control	Control	Control
Constant	0.396**	0.496*	0.353*	0.811***	0.107
	(2.50)	(1.88)	(1.71)	(3.25)	(0.52)
N	9,473	4,618	4,855	3,817	5,656
Adj-R^2	0.027	0.040	0.032	0.036	0.051
Ec_VIFs	3.35	3.88	3.22	3.40	3.38
IMR_VIFs	1.51	1.78	1.41	1.42	1.60

Note. Variable definitions are in Table 7. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

$$
\begin{aligned}
Abfee_{i,t} = {} & \beta_0 + \beta_1 Ec_{i,t-1} + \beta_2 Op_{i,t-1} + \beta_3 Size_{i,t-1} \\
& + \beta_4 Roa_{i,t-1} + \beta_5 Lev_{i,t-1} + \beta_6 Sale_{i,t-1} \\
& + \beta_7 Com_{i,t-1} + \beta_8 Liq_{i,t-1} + \beta_9 Big4_{i,t-1} \\
& + \beta_{10} Tobinq_{i,t-1} + \beta_{11} Top1_{i,t-1} + \beta_{12} Shrs_{i,t-1} \\
& + \beta_{13} Du\,al_{i,t-1} + \beta_{14} I\,dr_{i,t-1} + \beta_{15} Loss_{i,t-1} \\
& + \sum Year + \sum In\,du\,stry + \varepsilon.
\end{aligned}
\tag{12}
$$

Model (10) tests the impact of earnings persistence on abnormal audit fees. Model (11) verifies the impact of earnings persistence on audit collusion, and Model (12) further verifies whether earnings persistence has an impact on abnormal audit fees under the control of audit collusion. If $\beta1$ is significantly not zero in Model (11), indicating that earnings persistence has a significant impact on audit collusion, regression is continued for Model (12); otherwise, the test is stopped.

According to Model 4 in Table 8, the coefficient of earnings persistence is not significant, indicating that earnings persistence does not have a significant impact on audit collusion and audit collusion does not play a mediating role in the relationship between earnings persistence and abnormal audit fees. Therefore, this conclusion does not support the explanation that abnormal audit fees are derived from the "Customer Dependency View."

In addition, in order to test the robustness of the mechanism test conclusion, the author replaced abnormal audit fees with the positive abnormal audit fees to conduct the mechanism test again, and the conclusion did not change substantially.

TABLE 8: The results of the mechanism test.

Variable name	M1	M2	M3	M4
	Abfee	Risk	Abfee	Op
Ec	−0.165***	−0.140***	−0.150***	−0.0355
	(−2.86)	(−3.58)	(−2.61)	(−1.18)
Risk			0.105***	
			(4.29)	
Size	−0.0426***	0.0174***	−0.0445***	−0.000604
	(−4.72)	(3.37)	(−4.92)	(−0.17)
Roa	−0.308**	0.828***	−0.395***	0.00129
	(−2.03)	(9.50)	(−2.60)	(0.02)
Lev	−0.0596*	0.176***	−0.0781**	0.0487***
	(−1.68)	(9.68)	(−2.18)	(3.98)
Sale	0.0591***	−0.0283***	0.0620***	−0.00329
	(7.48)	(−5.73)	(7.85)	(−0.89)
Com	−0.0524*	0.0120	−0.0536*	−0.0287***
	(−1.77)	(0.77)	(−1.82)	(−3.80)
Liq	0.000821	0.00736***	4.98e−05	0.00135**
	(0.25)	(4.53)	(0.02)	(2.32)
Big4	0.0376**	−0.0401***	0.0418**	0.00283
	(1.98)	(−5.91)	(2.20)	(0.86)
Tobinq	0.0236***	−0.00269	0.0239***	0.00172
	(6.53)	(−1.56)	(6.63)	(1.44)
Top1	−0.125***	0.122***	−0.138***	−0.00285
	(−3.69)	(7.65)	(−4.08)	(−0.43)
Shrs	0.286***	0.189***	0.266***	−0.0105
	(7.10)	(9.38)	(6.59)	(−1.37)
Dual	−0.0143	−0.0114**	−0.0131	0.00104
	(−1.32)	(−2.16)	(−1.21)	(0.45)
Idr	0.215***	0.0531	0.209***	−0.00319
	(2.75)	(1.61)	(2.68)	(−0.19)
Loss	0.0146	0.0471***	0.00962	0.0234***
	(0.70)	(5.61)	(0.46)	(2.97)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
Constant	0.393**	−0.202**	0.414***	0.0300
	(2.48)	(−2.42)	(2.62)	(0.52)
N	9,473	9,473	9,473	9,473
Adj-R^2/ pseudo -R^2	0.027	0.102	0.029	0.027

Note. Variable definitions are in Table 8. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

5. Conclusions and Implications

This study empirically tests the relationship between the company earnings persistence and abnormal audit fees by taking A-share listed company's in Shanghai and Shenzhen as study samples. The conclusions are as follows. (1) The stronger the earnings persistence, the lower the abnormal audit fees. (2) Earnings persistence only has a significant impact on positive abnormal audit fees. This means that earnings persistence cannot improve negative abnormal audit fees. (3) Further research shows that the negative correlation between earnings persistence and abnormal audit fees is more significant in companies with low environmental uncertainty and state-owned companies, and it has obvious heterogeneity. (4) The mechanism test shows that earnings persistence can reduce abnormal audit fees by improving business risks, which is consistent with the "Risk Compensation View."

The conclusions deeply understand the internal logic of the causes of abnormal audit fees. It will be necessary to normalize the risk-oriented audit behavior of Chinese accounting firms and be beneficial for the transformation of risk-oriented audit in China. At the same time, the conclusion makes an incremental contribution to solving the debate on the source of abnormal audits fees and provides an important reference for future research of the "Risk Compensation View," which improves the audit fee system and regulates audit fees by regulators.

The conclusions of this study have the following implications. Firstly, companies should constantly improve their profitability, ensure the quality of earnings, pay attention to the buffer effect of earnings persistence on abnormal audit fees, and reduce the adverse impact of business risks on audit fees. Nonstate-owned companies need to strengthen internal control, improve the quality of earnings, and reduce audit risk so as to reduce audit fees. And nonstate-owned companies should strengthen their core competitiveness and enhance their ability to resist risks. Secondly, management should fully consider the impact of environmental uncertainty on audit pricing and actively respond to changes in the external environment, so as to reduce business risks and improve abnormal audit fees.

6. Limitations and Future Studies

This research has been attempted and carried out by scientific procedures, but still has limitations:

(1) This study mainly considers the impact of earnings persistence on abnormal audit fees. The factors that affect abnormal audit fees in this study consist of mainly three variables: earnings persistence, the nature of property rights, and environmental uncertainty. At the same time, many other factors affect abnormal audit fees.

(2) The limitations of research using data from A-share listed companies in Shanghai and Shenzhen in China are that sometimes the sample's research results do not show the actual state.

Researchers are further advised to use other variables and develop variables in this study. This research can be used as a further reference and as a consideration for further research.

Data Availability

All data used in this study can be obtained from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Acknowledgments

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