

How Do Auditors Respond to Corporate Innovation Activities

—Evidence from Chinese Listed Companies

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Abstract

Innovation is the first driving force and often coexists with risks. As an important tool of risk control, audit plays an important role in preventing and managing such risks. Based on the relevant data of Chinese A-share non-financial listed companies from 2007 to 2018, this paper explores how auditors respond to the risks caused by enterprise innovation. The results show that when dealing with audit risk, in the study of the relationship between enterprise innovation activities and audit fees, the higher the investment in innovation activities and the expenditure on capitalized research and development, the auditors will significantly increase their fees. Only when dealing with capitalized R&D expenditure are auditors more likely to give non-qualified audit opinions. In the study of auditor's risk response attitude, it is found that auditors do not improve the degree of audit effort and audit quality, that is, the pricing strategy of audit response to enterprise innovation activities is only a way of charging risk premium, which leads to the conclusion that auditors do not adopt a positive attitude on the whole. This paper also further analyzes various environments to provide relevant suggestions for the formulation of system and audit supervision of relevant departments, and indirectly verifies the necessity and correctness of the formulation of regulations of CICPA requiring certified public accountants to audit innovative information.

Keywords

Corporate Innovation, Audit Risk, Audit Fee, Audit Opinion

1. Introduction

Innovation has advantage of improving production efficiency (Zhu Youwei, 2006

[1], Wu Yanbing, 2006 [2]), cultivating core competitiveness, and achieving the long development (Liang Laijun, 2010) [3]. Micro-enterprise innovation activities have already become new development strategies and popular trends, and while these innovation activities promote economic development, new challenges, new problems and new risks will follow. In this regard, President Xi Jinping has been calling for audit institutions to eliminate the blind areas of audit supervision and implement comprehensive audit coverage to achieve audit and economic integration development.

The literatures at home and abroad believe that innovation activities will aggravate the business risks of enterprises. On the one hand, innovation activities are the core business process of enterprises, requiring long-term and large capital investment, but there is a huge asymmetry between input and output. And the difficult prediction will increase the uncertainty of the future operation (Xu Jingchang, 2017) [4]). On the other hand, management is often reluctant to disclose information about the core competitiveness, and the risk of stock collapse has risen (Kim, 2016 [5], Aboody, 2000 [6]) with corporate innovation increasing significantly. The systemic risk of the stock market is mainly attributable to the higher operational risks of innovation activities (Yew Kee Ho, 2004) [7].

In addition to increasing operational risks, these literatures also show that innovation activities can also increase the risk of fraud. First, the unpredictability of innovation activities and strengthen the information asymmetry between management and other stakeholders leave enough space for management to use innovative resources for personal gain (Lu, Rui, 2014) [8]. Second, the country's unique market regulatory policy should be taken into account, for example, ST system and refinancing system and so on lead to stronger earnings management motivation (Perry, 1994) [9]. What's more, the new accounting standards allowing the research and development expenditures formed during the development phase to be conditionally capitalized with no clear and unified regulation on the capitalization standards, and there is a certain maneuvering space. Wang Yan (2011) [10] also showed that research and development expenditures capitalization is more conducive to carry out profit manipulation to meet regulatory requirements, and leads to increase the risk of fraud.

According to the audit risk model, when the company faces higher operational risks and fraud risks, the audit risk increases. Yang Deming (2017) [11] and Yu Haizong (2018) [12] pointed out that auditors should respond to new business models and new risks brought about by external regulations by increasing audit fees. Wang Baiqiang (2017) [13] research showed that When a company adopts a differentiated development strategy, the auditor's opinions are more stringent. When auditors face higher legal risks, they would actively use experience accumulation to improve audit quality (Zhang Jian, 2016) [14]. The main ways in which auditors can respond to audit risks are more audit fees, higher audit quality, and more rigorous audit opinions. For the decision-making path of risk response, Krishnan (2013) [15] pointed out that the most basic response

of auditors to risk-based enterprises is to increase their efforts and set more audit procedures to control audit risk within an acceptable level. However, due to the trade-off between audit input cost and effectiveness and potential losses caused by future audit failures, auditors may not increase audit investment, but compensate for potential losses by collecting more risk premiums in advance (Liu Xiaoxia, 2017) [16].

Innovative activities are common phenomena in the current social background, and will directly improve audit risk by affecting business risks and fraud risks. What kind of risk response behaviors and attitudes do auditors take? Are there differences in response to different types of R&D expenditures? Whether it will take into account different environments? These are the concerns of this article. In view of this, this paper attempts to study how auditors deal with the risks brought by innovation activities based on behavior and attitude. In order to study this problem, by using the observation data of China's A-share non-financial listed companies in 2007-2018, the research finds that the more the enterprise's innovation activities are invested, about the risk response behavior, the higher the auditor's fees. And compared to the expenses, the R&D expenditure has led to higher significantly audit fees. And the higher the capitalized R&D expenditure, the more auditors tend to publish non-standard audit opinions. About the risk response attitude, the auditors do not improve his own efforts to improve the quality of the audit. That is, the auditors take the attitude of passive preservation. Further research found that for state-owned enterprises, the relation between investment in innovation activities/capitalization of R&D expenditures and audit fees are stronger significantly. At the same time, compared with the non-Big four, the Big Four are more inclined to publish non-standard audit opinions when dealing with the risks brought by innovation activities.

There are two articles related to this article. First, Xu Jingchang (2017) [4] pointed that auditors responded to the audit risk by improving audit quality, but has not empirically verified the audit input. Second, Krishnan (2014) [17] studied that R&D expenditure capitalization was a positive signal for R&D to be successful, resulting in less audit risk and lower audit fees by using US data. This paper considers China special regulatory policies, etc., and draws the opposite conclusions from Krishnan *et al.* (2014) [17], which verifies the difference between China and the US market.

There are possible marginal contributions of this paper. First, we study how auditors deal with the risks of innovation and dig out auditors to take a negative attitude for self-preservation from both the behavior and attitudes of behavior, and analyze the point with combining with a lot of background, enriching the literatures in related fields. Second, this paper provides an empirical basis for the formulation of relevant departmental systems and audit supervision.

2. Literature Review and Hypothesis

2.1. Enterprise Innovation Activities and Audit Risks

According to the audit risk theory, audit risk consists of misstatement risk and

inspection risk. The misstatement risk mainly comes from the business risk and fraud risk. Any increase in the risk of material misstatement and inspection risk will lead to an increase in audit risk.

The impact of innovation activities on audit risk mainly comes from the following three aspects. First, innovation requires a lot of long-term financial and intelligence support, but ultimately whether it will achieve the desired outcome has great uncertainty. In the process of investment, once the amount of additional investment required exceeding the range that the enterprise can afford, or the failure of innovation will greatly increase the business risk (Xu Jingchang, 2017) [4]. At the same time, considering that innovation activities are the core of the enterprise and the competitiveness of the enterprise, the managements are generally reluctant to disclose relevant information too much. The stronger the information asymmetry is, the higher the risk of stock price collapsing (Aboody, 2000 [6], Pan Yue, 2011 [18], Kim, 2016 [5]), stock price collapsing also indicates that the business risk is high (Konchitchki, 2016 [19]). Second, according to information asymmetry and principal-agent theory, managements are likely to use information asymmetry to abuse innovative investment resources for private benefits (Lu Rui, 2014 [8]). The more immediate resources that enterprise innovation occupies, the stronger the motivation for corporate earnings management in order to achieve short-term performance goals (Perry, 1994 [9]). Third, innovation activities are often unique with poor predictability, and there is no uniform standard for measuring evaluation in the market. What's more, enterprises to adopt new technologies may make more subtle means of financial fraud and sophisticated, even auditors with full experience may not play a strong role, which has brought more challenges to the whole audit work (Yang Deming, 2017 [11]), and affected the auditor's judgment on risk. In short, corporate innovation should significantly increase the risk of material misstatement and check risks, thereby increasing audit risk.

2.2. Enterprise Innovation Activities, Audit Risks and Auditor's Risk Response Behavior

With the change of auditing environment, the concept of auditing method evolution gradually focuses on risk orientation (Xie Zhihua, 2006 [20]). Modern risk-oriented auditing theory not only needs to analyze the risks of enterprises as a whole, but also the risks of core business operations. Based on the above analysis, innovation activities not only improve the overall risk, but also are the core business operations. Therefore, under the modern risk-oriented auditing theory, auditors are bound to notice the audit risks brought by innovation.

The auditor faces the audit risk brought by enterprise innovation, meaning facing potential losses. As the market environment changing, the demand for auditing is higher and higher. The audit of the firm is expected to be information risk reducers and insurance. Auditors is transferred the risk while charging audit fees (Dye, 1993 [21]). According to the theory of The Deep Pockets, once having

losses, users will attempt all or part attributable to the fault of the audit firm has wealth regardless of who is at fault (Mc Gee, 1958 [22], Telser, 1966 [23]). Under unreasonable responsibility sharing, auditors are more likely to face potential losses. The theory of Loss Avoidance states that the risk estimation of loss can significantly affect behavioral choices. Therefore, risk-averse auditors will adjust the related fees and other strategies in the face of potential losses caused by corporate innovation.

Facing potential losses caused by enterprise innovation, auditors may, on the one hand, obtain more audit evidence, expand the audit scope and strengthen the audit intensity, which will inevitably involve more time and manpower, and improve the audit cost, on the other hand, auditors may not increase the level of audit effort directly, but charging a higher risk premium to compensate for potential losses; or increasing both the effort and the risk premium. The audit fee consists of three parts: audit cost, risk premium and required profit (Wu Lina, 2003 [24]). Regardless of which strategy is adopted by auditors, the total amount of audit fees will increase. So this paper proposes Hypothesis 1:

H1: Under the same conditions, the higher the investment in corporate innovation activities, the higher the audit fees.

The audit opinion is the result of the audit process, reflecting the audit division of independence and caution. Auditors issue an audit opinion in the general would consider the needs of business risks and losses lie ahead (Simunic, 1980) [25]. Fang Xiongjun. (2004) [26] showed that auditors are very concerned about the risk situation of enterprises when issuing audit opinions. The higher the risk of the company, the more auditors tend to issue non-standard audit opinions (Lennox, 2000) [27]. Zhang Junrui (2015) [28] have shown that due to the high uncertainty of pending litigation, the future operation is affected by unpredictable factors, and the audit risk is rising. To mitigate the risk of legal liability, audit failure should be avoided as much as possible. Increase the possibility of issuing non-standard audit opinions and increase the possibility of auditors issuing inappropriate audit opinions. At the same time, as the society's expectations for independent auditing continue to expand, users who have reported reports often equate the failure of the business with audit failure. When the auditor is worried about potential litigation risks afterwards, the auditor issues a non-standard audit. The possibility of comments increased, and warnings were issued in advance when conducting financial report audits (Feng Yanchao, 2010) [29], in order to convey their own doubts about the quality of corporate financial accounting information (Lennox, 2012) [30]. Tan Hongtao (2011) [31] also showed that non-standard audit opinions can reduce the probability of auditors being punished and reduce the litigation risk of auditors. In addition to the use of audit opinions for self-preservation, the Lv Kangmin (2015) [32] pointed out that in the face of an external audit of the higher requirements, the auditor for audit failure higher sensitivity, lower tolerable risk, so that by putting more effort and cost into the implementation of more rigorous audit procedures to increase the possibility of

finding more misstatements or underreports, thereby increasing the possibility of issuing non-standard audit opinions. Therefore, in the face of business risks, fraud risks and risk checking caused by innovation activities, if the auditors adopt a proactive coping strategy and implement more rigorous audit procedures, they will find that the possibility of misstatement or underreporting is greater, thus leading to the possibility of non-standard audit opinion issued higher; if the auditors just using negative attitude preservation, the face of innovation risk attributes to the future business activities of the impact, the auditors will be more inclined to leave Non-standard audit opinions to reduce litigation risks. Regardless of the attitude of the auditor and the risks posed by the innovation activities, the auditors will increase the probability of issuing non-standard audit opinions. Based on this, this paper proposes Hypothesis 2:

H2: Under the same conditions, the investment in corporate innovation activities are higher, the auditors tend to publish more non-standard audit opinions.

2.3. Accounting Treatment of Enterprise Innovation Activities, Audit Risks and Auditors' Risk Response Behavior

From the perspective of accounting treatment, the risks of innovation activities in accounting treatment are mainly determined by the uncertainties of category classification and confirmation of the amount. The impact on audit risk is also derived from this. In terms of classification, Chinese relevant accounting standards currently divide R&D activities into research and development phases, allowing capitalization of the parts that meet the capitalization conditions during the development phase, and all R&D expenditures during research phase are expensed. Compared with the expense treatment of R&D expenditure, capitalization of R&D expenditure, on the one hand, can improve profits and also pass positive information which is helpful to reduce the uncertainty of corporate innovation activities and show upcoming success of R&D activities (Krishnan, 2014) [17]. However, Chinese accountant standards do not clearly define the R&D phase and the development phase, as well as the conditions for the confirmation of capitalization. They are relatively abstract and strongly subjective, giving management a huge space for profit manipulation. Landry (2003) [33] showed that capitalization of R&D expenditure is a good way to manipulate earnings management. Wang Yan (2011) [10] research found that in order to meet Chinese special regulatory requirements, such as maintaining listing qualification and refinancing standards, companies could choose to multiple the accounting treatment of R&D expenditure to turn losses to profits. Therefore, the risks brought by capitalized R&D expenditure are significantly higher than the expensed R&D expenditure. In addition, in terms of amount confirmation, if the enterprise is involved in multiple innovation activities at the same time, the amount of capitalized R&D expenditures needs to be distributed among multiple innovation activities in accordance with reasonable standards. If input penetrates each other, the difficulty of distribution and uncertainty of amount will be improved.

In general, whether the division of innovation activities between capitalization and expense, or the allocation and confirmation of the capitalization of different innovation activities are both increase the complexity of audit tasks and exacerbate audit risks. Based on this, this article proposes Hypothesis 3 and Hypothesis 4:

H3: Under the same conditions, the higher the capitalized R&D expenditure, the higher the auditor's fee compared to the expensed R&D expenditure.

H4: Under the same conditions, the higher the capitalized R&D expenditure, the more likely auditors are to express non-standard audit opinions.

2.4. Enterprise Innovation Activities, Audit Risks, and Auditors' Attitudes to Risk Responses

Existing literatures show that auditors' attitudes to risk are divided into two types: one is the positive. Krishnan (2013) [15] pointed out that the most basic response of auditors to risky companies is to increase their efforts, set up more audit procedures to improve audit quality, and control audit risks to acceptable levels. Cai Li (2015) [34] research shows that auditors will put extra effort to deal with the audit risks brought about by the earnings management, which will increase audit costs. Liu Hui (2018) [35] pointed out that facing litigation risks, auditors also invest more time and energy to achieve the purpose of reducing audit risks. The second is negative. The Chairman of the International Auditing and Assurance Standards Board John Kellas (2010) pointed out that, auditors face huge challenges when audit tasks are involved in accounting estimates for complex valuation models or significant invisible factors. To reduce this auditing risks, the auditors of the Big Four would only choose to charge higher risk premiums, which did not bring an improvement in audit quality (Yang Shuhuai, 2013) [36]. Liu Xiaoxia (2017) [16] researched that due to the trade-off between the potential loss of future audit failures and the current increase in audit costs, auditors will not increase their efforts and only charge higher audit fees in response to the risks brought by negative media reports.

Considering that innovation activities themselves are highly complex and uncertain, and the standards do not have clear boundaries for the confirmation of capitalization and expense of R&D expenditures, leaving a certain "discretion" in accounting information related to innovation activities. In addition, innovation activities are an important link for enterprises to cultivate their core competitiveness, and due to privacy, the market has not formed a unified and clear standard, all of which directly lead to unverifiable information on innovation activities (Tan Hongtao, 2011) [31], and the function of audit assurance is based on the logical basis of the verifiability of accounting information. When facing the dilemma brought by innovative activities, is the auditor's original intention to maintain the instinctive response of enhancing his own effort and improving the quality of auditing (Krishnan, 2013) [15], or a passive response, by charging a risk premium and publishing non-standard The preservation of audit opinions remains to be verified. Based on this, this article proposes competitive Hypo-

theses 5 and 6:

H5: Under the same conditions, auditors will actively respond to the audit risks brought by innovative activities.

H6: Under the same conditions, auditors will respond negatively to the audit risks brought by innovative activities.

3. Research Design

3.1. Sample Selection

Since the implementation of the new accounting standards in 2007, this article selects all A-share listed companies from 2007 to 2018 as the initial research sample. The calculation of the lagging term resulted in missing data for 2007, and the audit fee for the next year was used to perform a robustness test, which resulted in the missing data for 2018. After excluding financial companies and companies with missing data, a total of 14,958 observations were obtained during 2008-2017.

3.2. Data Source

The data in this article comes from the CSMAR database and Dibo database. This paper adopts data of the financial statement restatement from the Dibo database. And others are from CSMAR database. Multivariate regression was performed with White Heteroscedasticity test, robust standard deviation correction, and clustering at the company level.

3.3. Model and Variable Design

In order to test the above hypotheses, this paper uses the audit pricing model (Simunic, 1980) [25] as the basis, and constructs the following models to test the research hypotheses with reference to the existing literatures:

$$\begin{aligned} \text{Audit_Fee} = & \beta_0 + \beta_1 \times \text{R\&D} + \beta_2 \times \text{Size} + \beta_3 \times \text{Lev} + \beta_4 \times \text{OtherRec} \\ & + \beta_5 \times \text{Turnover} + \beta_6 \times \text{CFO} + \beta_7 \times \text{Growth} + \beta_8 \times \text{ROA} \\ & + \beta_9 \times \text{Loss} + \beta_{10} \times \text{IIR} + \beta_{11} \times \text{Ret} + \beta_{12} \times \text{Sd_Ret} \\ & + \beta_{13} \times \text{Big4} + \lambda_i + \tau_t + \varepsilon_{it} \end{aligned} \quad \text{Model (1)}$$

$$\begin{aligned} \text{Audit_Fee} = & \beta_0 + \beta_1 \times \text{R\&D_Z} + \beta_2 \times \text{R\&D_F} + \beta_3 \times \text{Size} + \beta_4 \times \text{Lev} \\ & + \beta_5 \times \text{OtherRec} + \beta_6 \times \text{Turnover} + \beta_7 \times \text{CFO} + \beta_8 \times \text{Growth} \\ & + \beta_9 \times \text{ROA} + \beta_{10} \times \text{Loss} + \beta_{11} \times \text{IIR} + \beta_{12} \times \text{Ret} \\ & + \beta_{13} \times \text{Sd_Ret} + \beta_{14} \times \text{Big4} + \lambda_i + \tau_t + \varepsilon_{it} \end{aligned} \quad \text{Model (2)}$$

$$\begin{aligned} \text{Opinion} = & \beta_0 + \beta_1 \times \text{R\&D} + \beta_2 \times \text{Size} + \beta_3 \times \text{Lev} + \beta_4 \times \text{OtherRec} \\ & + \beta_5 \times \text{Turnover} + \beta_6 \times \text{CFO} + \beta_7 \times \text{Growth} + \beta_8 \times \text{ROA} \\ & + \beta_9 \times \text{Loss} + \beta_{10} \times \text{IIR} + \beta_{11} \times \text{Ret} + \beta_{12} \times \text{Sd_Ret} + \lambda_i + \tau_t + \varepsilon_{it} \end{aligned} \quad \text{Model (3)}$$

$$\begin{aligned} & \text{Audit_Lag (or Restatement)} \\ = & \beta_0 + \beta_1 \times \text{R\&D} + \beta_2 \times \text{Size} + \beta_3 \times \text{Lev} + \beta_4 \times \text{OtherRec} + \beta_5 \times \text{Turnover} \\ & + \beta_6 \times \text{CFO} + \beta_7 \times \text{Growth} + \beta_8 \times \text{ROA} + \beta_9 \times \text{Loss} + \beta_{10} \times \text{IIR} \\ & + \beta_{11} \times \text{Ret} + \beta_{12} \times \text{Sd_Ret} + \beta_{13} \times \text{Big4} + \lambda_i + \tau_t + \varepsilon_{it} \end{aligned} \quad \text{Model (4)}$$

1) Dependent variables

The dependent variables in Model 1 and Model 2 are both audit fees. With reference to Simunic (1980) [25], the natural logarithm of annual financial report audit costs is taken to represent audit costs.

In Model 3, the dependent variable is the type of audit opinion, and the value method of variable is consistent with that of all other relevant literatures.

In Model 4, the dependent variables are lag of audit report, and restatement of financial statement. This paper explores the auditor's overall attitude towards innovation activities by using the lag of audit report. Liu Hui (2018) [35] pointed out that the length of lag of audit reports can clearly reflect the auditor's audit input time, and better explain the auditor's efforts than audit fees (Liu Xiaoxia, 2017) [16]. At the same time, this paper also selects another data, financial statement restatement, as an indicator of earnings management by referring to the treatment method of Chen Guohui (2018) [37] to judge whether auditors are actively responding to audit risks brought by innovation activities.

2) Independent variables

For the indicator of the innovation activity, this paper uses the natural logarithm of number and amount of enterprise innovation activities to measure it (Xu Jingchang, 2017). For capitalized R&D expenditure, this paper uses the natural logarithm of capitalized R&D expenditure to measure. In the robustness test, whether there is innovation input and whether there is capitalized R&D expenditure are used as substitution variables.

3) Control variables

According to audit fee model of Simunic (1980) [25], a lot of factors effect on audit fee, such as size, business complexity, risk, firm characteristics and others. And Xia Ning (2018) [38] concluded that independent institutional investors can effectively play the role of corporate governance, thus improving the governance environment of independent audit, reducing the actual audit risks faced by auditors, and reducing audit fees. Zheng Dengjin (2017) [39] also showed that both cumulative rate of return and stock return volatility had an impact on auditor behavior. Therefore, this paper selected relevant variables by referring to the treatment methods in existing literatures, and the specific definitions are shown in **Table 1**.

4. Empirical Analysis

4.1. Descriptive Statistics

From **Table 2**, the mean value of R&D1 is 0.3683, the maximum value is 3.4965 and the minimum value is 0, the standard deviation is 0.8040. the R&D 2 mean value is 3.6028, the maximum value is 19.9476, the minimum value is 0, the standard deviation is 6.9799, the average R&D_Z is 2.9067, the maximum value is 19.0462, the minimum value is 0, the standard deviation is 6.2508, the average R&D_F is 2.2822, the maximum value is 19.5164, the minimum value is 0, the standard deviation of 5.7708. This shows that the innovation activities of differ-

ent enterprises vary greatly. The mean value of audit fees is 13.6784, the maximum value is 16.3571, the minimum value is 12.3014, and the standard deviation is 0.7397. The mean value of audit opinions is 0.9691, the minimum value is 0, the maximum value is 1, and the standard deviation is 0.1730. The mean value of audit report lag is 4.5081, the minimum value is 3.4965, the maximum value is 4.7791, and the standard deviation is 0.24397. The mean value of financial statement restatement is 0.0965, the minimum value is 0, the maximum value is 1, and the standard deviation is 0.2953.

Table 1. Variables table.

Type	Indicator	Content
Dependent Variables	Audit_Fee	The natural logarithm of audit fees
	Opinion	1 when issued standard audit opinion, Otherwise 0.
	Audit_Lag	The logarithm of the interval days between the audit report date and the balance sheet date
	Restatement	1 when financial report restatement occurs, otherwise 0.
Independent Variables	R&D1	Natural logarithm of number of innovation activities
	R&D2	Natural logarithm of amount of innovation activities
	R&D_Z	Natural logarithm of amount of capitalized R&D expenditure
	R&D_F	Natural logarithm of expensed R&D expenditure
Control Variables	Size	Natural logarithm of asset
	Lev	Leverage/Asset
	OtherRec	Other receivables/Asset
	Turnover	Revenue/Asset
	CFO	Cash flow from operating activities/Asset
	Growth	Revenue growth rate
	ROA	Net profit/Assets
	Loss	1 when net profit is negative, otherwise 0
	IIR	Institutional shareholding ratio
	Ret	Monthly cumulative stock returns from May to April of the following year
Sd_Ret	Standard deviation of stock return per month of the year	
Big4	1 when auditors are the Big Four, Otherwise 0	

Table 2. Descriptive statistic.

Variables	N	Mean	Min	P50	Max	Sd
Audit_Fee	14,958	13.6784	12.3014	13.5924	16.3571	0.7393
Opinion	14,958	0.9691	0	1	1	0.1730
Audit_Lag	14,958	4.5081	3.4965	4.5109	4.7791	0.24397
Restatement	14,958	0.0965	0	0	1	0.2953
R&D1	14,958	0.3683	0	0	3.4965	0.8040
R&D2	14,958	3.6028	0	0	19.9476	6.9799
R&D_Z	14,958	2.9067	0	0	19.0462	6.2508
R&D_F	14,958	2.2822	0	0	19.5164	5.7708
Size	14,958	22.1869	19.5190	22.0267	25.9794	1.2871
Lev	14,958	0.4649	0.0517	0.4665	0.9450	0.2106
OtherRev	14,958	0.0169	0.0002	0.0084	0.1509	0.0245
Turnover	14,958	0.1018	0	0.0749	0.4392	0.0973
CashFlow	14,958	0.0450	-0.1880	0.0442	0.2512	0.0742
Growth	14,958	0.1972	-0.56736	0.1124	3.3835	0.4928
Roa	14,958	0.0377	-0.1804	0.0334	0.1962	0.0525
Loss	14,958	0.0887	0	0	1	0.2843
IIR	14,958	0.4145	0.0032	0.4237	0.8832	0.2298
Ret	14,958	0.1491	-0.5378	-0.0288	2.3142	0.5677
Sd_Ret	14,958	0.1290	0.0465	0.1191	0.3633	0.0541
Big4	14,958	0.0671	0	0	1	0.2501
Owner	14,958	0.0670	0	0	1	0.4985
LnCoverage	14,958	1.4091	0	1.3863	3.7377	1.2158
Impor	14,958	0.3306	0	0	1	0.4704
Misup	14,311	0.0043	0	0	1	0.0651
Misdown	14,311	0.4341	0	0	1	0.4957

4.2. Multiple Regression Results

As **Table 3** shows the regression results of enterprise innovation activities to audit fees and audit opinions. The results of Column 1 and Column 2 show the coefficients of R&D1 and R&D2 are 0.0156 and 0.0019, respectively, which are both significant at the level of 5%. This indicates that innovation input is significantly positively correlated with audit fees. These results support Hypothesis 1. The coefficient of R&D_Z in Column 3 is 0.0021, which is significant at level of 5%, while the coefficient of R&D_F isn't significant, showing that the higher the capitalized R&D expenditure is, the higher the audit fee is. Hypothesis 3 is valid. The results of R&D1 and R&D2 in Columns 4 and 5 are not significant and do

Table 3. The regression result of enterprise innovation activities to audit fees and audit opinions.

	Audit_Fee			Opinion		
	(1)	(2)	(3)	(4)	(5)	(6)
R&D1	0.0156** (2.10)			0.0543 (0.65)		
R&D2		0.0019** (2.42)			0.0028 (0.29)	
R&D_Z			0.0021** (2.47)			-0.0217* (-1.81)
R&D_F			0.0010 (1.43)			0.0309** (2.12)
Size	0.3450*** (27.04)	0.3449*** (27.08)	0.3438*** (27.02)	0.8017*** (12.37)	0.8041*** (12.31)	0.8099*** (12.38)
Lev	-0.0110 (-0.29)	-0.0110 (-0.29)	-0.0111 (-0.29)	-4.3425*** (-13.56)	-4.3425*** (-13.55)	-4.3763*** (-13.59)
OtherRev	0.5156*** (3.55)	0.5175*** (3.56)	0.5156*** (3.54)	-5.3883*** (-3.31)	-5.3827*** (-3.31)	-5.4453*** (-3.35)
Turnover	0.2513*** (3.07)	0.2493*** (3.05)	0.2478*** (3.04)	2.2980*** (3.18)	2.3215*** (3.22)	2.3694*** (3.29)
CashFlow	0.0474 (1.34)	0.0466 (1.31)	0.0459 (1.29)	0.5273 (0.71)	0.5248 (0.71)	0.5017 (0.67)
Growth	-0.0022 (-0.40)	-0.0023 (-0.41)	-0.0021 (-0.39)	-0.0902 (-0.78)	-0.0903 (-0.78)	-0.0869 (-0.74)
Roa	0.0997 (1.08)	0.1010 (1.10)	0.1033 (1.12)	6.3091*** (4.26)	6.3084*** (4.26)	6.2886*** (4.23)
Loss	0.0347*** (3.44)	0.0344*** (3.43)	0.0346*** (3.44)	-0.7292*** (-3.81)	-0.7300*** (-3.82)	-0.7394*** (-3.86)
IIR	-0.0054 (-1.29)	-0.0265 (-1.30)	-0.0250 (-1.22)	0.5982** (2.12)	0.5966** (2.11)	0.5456* (1.92)
Ret	-0.0053 (-0.94)	-0.0054 (-0.95)	-0.0055 (-0.96)	0.6320*** (3.71)	0.6313*** (3.70)	0.6411*** (3.75)
Sd_Ret	0.0469 (0.85)	0.0458 (0.83)	0.0465 (0.84)	-3.4006*** (-2.93)	-3.3905*** (-2.92)	-3.3238*** (-2.85)
Big4	0.2523*** (4.57)	0.2522*** (4.57)	0.2519*** (4.58)			
_cons	5.7143*** (20.73)	5.7169*** (20.78)	5.7397*** (20.89)	-10.5310*** (-7.43)	-10.5782*** (-7.42)	-10.6568*** (-7.47)
year	Control	Control	Control	Control	Control	Control
Industry	Control	Control	Control	Control	Control	Control
N	14958	14958	14958	14958	14958	14958
adj. R-sq (Pseudo R ²)	0.6544	0.6546	0.6543	0.2990	0.2989	0.3002

***, **, * represent significance levels of 1%, 5%, 10% respectively. And the T value is in parentheses (the same as below).

not support Hypothesis 2, indicating that innovation activities does not significantly increase the probability of auditors issuing non-standard audit opinions. However, the coefficient of R&D_Z in Column 6, -0.0217 , is significantly negative at the 10% level, and Hypothesis 4 is supported. This indicates that auditors are more concerned about accounting treatment of corporate innovation activities and are more inclined to issue non-standard audit opinions for accounting treatment of more complex capitalized R&D expenditures. In addition, through the regression of audit opinions, the alternative interpretation of the purchase of audit opinions can also be excluded.

To explore the auditors' attitude to innovation risks, the relevant regression results are shown in **Table 4**. The coefficients of R&D1, R&D2, R&D_Z in Column 1 to 3 are not significant. That is, auditors don't improve their efforts when facing the innovation, so the paper preliminary judge that the higher audit fees and probability of issuing non-standard audit opinions are just the results of auditors' negative and preservative attitude. In the regression results of innovation activities to restatement of financial report, R&D1, R&D2 and R&D_Z are not significantly negative in Column 4 to 6, showing that auditors cannot reduce the likelihood of financial statement restatements after the audit of corporate innovation activities, even for capitalized R&D expenditures, the likelihood of financial statement restatements is higher. This also provides additional evidence that auditors charge higher fees for capitalized R&D expenditures and are more inclined to issue non-standard audit opinions. The above results concluded that auditors respond to the innovation risks negatively. And the Hypothesis 6 is supported.

4.3. Further Analysis

1) The adjusting effect of enterprise risk tolerance

In Chinese unique market environment, The political connection between state-owned enterprises and the government, on the one hand, makes state-owned enterprises have stronger rent-seeking capacity than non-state-owned enterprises, and there is an implicit government guarantee (Fang Junxiong, 2007) [26]. The risk brought by enterprise innovation activities has a relatively small impact on state-owned enterprises. On the other hand, while enjoying "protection", state-owned enterprises also need to bear greater social responsibilities, which to some extent limits their earnings management behavior (Gao Yan, 2008) [40]. So innovation activity has little effect on stated-owned enterprises. And their political association makes them have stronger bargaining power with auditors, so this paper bases on the nature to explore the effect of enterprise innovation activities on audit fees. **Table 5** shows that the innovation activities of state-owned enterprises have no significant impact on audit fees, while in the sample group of non-state-owned enterprises, the coefficient of R&D1 is 0.0162, the coefficient of R&D2 is 0.0023, and the coefficient of R&D_Z is 0.0025, which are significant at the level of 1%, 5%, and 5% respectively. The above results show that the risk tolerance ability has a significant adjusting effect. For the non-state-owned enterprises

Table 4. The auditors' attitude to innovation risks.

	LAG			Restatement		
	(1)	(2)	(3)	(4)	(5)	(6)
R&D1	-0.0010 (-0.20)			-0.0005 (-0.01)		
R&D2		-0.0002 (-0.51)			0.0008 (0.18)	
R&D_Z			-0.0002 (-0.32)			0.007** (2.34)
R&D_F			-0.0001 (-0.23)			-0.0068** (-2.10)
Size	0.0576*** (7.62)	0.0578*** (7.63)	0.0578*** (7.62)	-0.0546** (-1.76)	-0.0553* (-1.77)	-0.0319* (-1.95)
Lev	-0.0923*** (-3.17)	-0.0922*** (-3.16)	-0.0922*** (-3.17)	0.7162*** (4.04)	0.7187*** (4.06)	0.3857*** (4.11)
OtherRev	0.2444* (1.74)	0.2442* (1.74)	0.2444* (1.74)	2.6900** (2.53)	2.6871** (2.53)	1.3859** (2.39)
Turnover	0.1302** (1.87)	0.1306* (1.88)	0.1306* (1.88)	-0.6010* (-1.82)	-0.6083* (-1.83)	-0.3544** (-2.03)
CashFlow	-0.0370 (-1.00)	-0.0369 (-0.99)	-0.0368 (-0.99)	-0.4514 (-1.03)	-0.4499 (-1.02)	-0.2372 (-1.03)
Growth	-0.0177*** (-3.60)	-0.0176*** (-3.60)	-0.0177*** (-3.60)	0.2335*** (4.46)	0.2335*** (4.46)	0.1275*** (4.44)
Roa	-0.5527*** (-7.19)	-0.5530*** (-7.20)	-0.5531*** (-7.20)	-2.1391** (-2.55)	-2.1385** (-2.55)	-1.0738** (-2.46)
Loss	0.0351*** (3.75)	0.0351*** (3.76)	0.0351*** (3.76)	0.1453 (1.21)	0.1456 (1.21)	0.0906 (1.42)
IIR	-0.0051 (-0.32)	-0.0052 (-0.33)	-0.0053 (-0.34)	-0.4530*** (-3.22)	-0.4530*** (-3.22)	-0.2196*** (-3.00)
Ret	-0.0410*** (-7.27)	-0.0410*** (-7.27)	-0.0410*** (-7.27)	0.0312 (0.40)	0.0312 (0.40)	0.0271 (0.66)
Sd_Ret	0.0740 (1.50)	0.0741 (1.50)	0.0740 (1.50)	0.9421 (1.46)	0.9356 (1.45)	0.478 (1.38)
Big4	0.0079 (0.34)	0.0079 (0.34)	0.0079 (0.34)	-0.4235*** (-2.67)	-0.4234*** (-2.67)	-0.1982*** (-2.58)
_cons	3.2582*** (20.08)	3.2549*** (20.03)	3.2544*** (19.99)	-1.4255** (-2.05)	-1.4113** (-2.03)	-0.7948** (-2.17)
year	Control	Control	Control	Control	Control	Control
Industry	Control	Control	Control	Control	Control	Control
N	14958	14958	14958	14958	14958	14958
adj. R-sq	0.0849	0.0849	0.0849	0.0800	0.0800	0.0803

Table 5. The adjusting effect of enterprise risk tolerance.

	State-owned enterprises			Non state-owned enterprises		
R&D1	0.0151			0.0162***		
	(1.40)			(2.67)		
R&D2		0.0013			0.0023**	
		(1.15)			(2.38)	
R&D_Z			0.0014			0.0025**
			(1.06)			(2.30)
R&D_F			0.0013			0.0009
			(1.16)			(0.95)
Size	0.3355***	0.3357***	0.3345***	0.3355***	0.3349***	0.3341***
	(18.48)	(18.55)	(18.52)	(47.70)	(19.37)	(19.34)
Lev	-0.0862	-0.0850	-0.0853	0.0248	0.0245	0.0241
	(-1.59)	(-1.56)	(-1.57)	(0.89)	(0.48)	(0.48)
OtherRev	0.9154***	0.9148***	0.9159***	0.2244	0.2276	0.2245
	(4.18)	(4.17)	(4.18)	(1.60)	(1.23)	(1.21)
Turnover	0.2902**	0.2899**	0.2871**	0.2094***	0.2072**	0.2062**
	(2.06)	(2.06)	(2.04)	(3.16)	(2.08)	(2.07)
CashFlow	0.0124	0.0112	0.0108	0.0859*	0.0849*	0.0843*
	(0.25)	(0.22)	(0.21)	(1.93)	(1.71)	(1.70)
Growth	-0.0081	-0.0080	-0.0080	0.0039	0.0037	0.0038
	(-0.97)	(-0.97)	(-0.97)	(0.70)	(0.50)	(0.51)
Roa	0.0229	0.0259	0.0266	0.1084	0.1097	0.1115
	(0.17)	(0.19)	(0.20)	(1.22)	(0.90)	(0.91)
Loss	0.0219	0.0221	0.0219	0.0371***	0.0367***	0.0368***
	(1.60)	(1.61)	(1.61)	(2.80)	(2.61)	(2.62)
IIR	-0.0760**	-0.0767**	-0.0761**	0.0135	0.0145	0.0158
	(-2.53)	(-2.56)	(-2.53)	(0.69)	(0.53)	(0.58)
Ret	-0.0080	-0.0081	-0.0078	0.0013	0.0012	0.0010
	(-0.98)	(-1.01)	(-0.97)	(0.19)	(0.16)	(0.13)
Sd_Ret	0.0237	0.0214	0.0223	0.0562	0.0558	0.0557
	(0.32)	(0.29)	(0.30)	(0.86)	(0.71)	(0.71)
Big4	0.1607**	0.1611**	0.1611**	0.3682***	0.3670***	0.3677***
	(2.44)	(2.44)	(2.44)	(12.12)	(4.19)	(4.19)
_cons	6.0058***	6.0011***	6.0262***	5.8750***	5.8869***	5.9032***
	(15.12)	(15.16)	(15.25)	(39.66)	(15.97)	(16.03)
year	Control	Control	Control	Control	Control	Control
Industry	Control	Control	Control	Control	Control	Control
N	6895	6895	6895	8063	8063	8063
adj. R-sq	0.6605	0.6606	0.6601	0.6198	0.6203	0.6203

with weaker risk tolerance, the more enterprises activities investment or the higher the capitalized R&D expenditure, the more auditors tend to increase audit fees.

2) The adjusting effect of the character of audit firms

DeAnglo (1981) [41] pointed out that the precondition for external audit to play a role is the professional competence and independence of auditors. In terms of professional competence, on the one hand, the bigger audit firms have a more complete training mechanism, talent reservation. On the other hand, diversified client resources also provide auditors with more business training opportunities. And the reputation of the bigger audit firms is extremely worth. Under the theory of “The deep pocket”, Concession to their customers and audit failure makes auditors more likely to be claimed by information users. Hence, large audit firms have stronger motivation and pressure to maintain high independence. And in terms of the ability to remain independent, small audit firms have limited customer groups and income sources, so they have a strong economic dependence on customers. Driven by long-term business relationship, small audit firms may try to avoid some behaviors that are not conducive to their customers. In contrast, large audit firms serve larger group, and the degree of dependence on their customers would be significantly lower than others. From the above analysis, we could conclude that the professional competence and independence of big audit firms is higher than that of small audit firms. With reference to other literatures, this paper choose the big four and non-big four as the indicator to adjust. Showed in **Table 6**, the higher the innovation activities investment, the probability of issuing non-standard audit opinions will not be increased for either the big four or the non-big four. Only when facing the capitalized R&D expenditure with higher accounting complexity, the big four are more inclined to issue non-standard audit opinions compared with the non-big four.

5. Robust Tests

5.1. The Signaling Hypothesis

When the enterprise’s innovation activity is higher, the enterprise may choose to hire high-quality audit services for the purpose of easing the financing pressure and reducing agency costs, so as to send a good signal to the market. It may also lead to the increase of audit fees, but the audit report lag is not affected. In order to exclude this probability, this paper selects the robustness test of whether the audit firm is one of the four big firms as an alternative indicator for hiring high-quality audit services. When the audit firms are the big four, the dependent variable is 1, otherwise, is 0. The test model is constructed as follows:

$$\begin{aligned} \text{Big4} = & \beta_0 + \beta_1 \times \text{R\&D} + \beta_2 \times \text{R\&D_F} + \beta_3 \times \text{Size} + \beta_4 \times \text{Lev} + \beta_5 \times \text{OtherRec} \\ & + \beta_6 \times \text{Turnover} + \beta_7 \times \text{CFO} + \beta_8 \times \text{Growth} + \beta_9 \times \text{ROA} + \beta_{10} \times \text{Loss} \\ & + \beta_{11} \times \text{IIR} + \beta_{12} \times \text{Ret} + \beta_{13} \times \text{Sd_Ret} + \lambda_i + \tau_i + \varepsilon_{it} \end{aligned}$$

Model (5)

Table 6. The adjusting effect of the character of audit firms.

	The Big Four			Non-Big Four		
R&D1	0.0212 (0.02)			0.0687 (0.79)		
R&D2		-0.0507 (-0.69)			0.0081 (0.82)	
R&D_Z			-0.1889*** (-3.45)			-0.0196 (-1.56)
R&D_F			-0.0029 (-0.05)			0.0405** (2.55)
Size	1.0238*** (3.09)	1.0036*** (2.91)	1.0917*** (2.81)	0.7844*** (11.51)	0.7838*** (11.46)	0.7886*** (11.52)
Lev	-2.8522 (-1.27)	-2.6445 (-1.11)	-2.1963 (-0.92)	-4.3265*** (-13.47)	-4.3273*** (-13.47)	-4.3484*** (-13.49)
OtherRev	9.4957 (0.98)	10.7399 (0.99)	6.8062 (0.61)	-5.7849*** (-3.52)	-5.7844*** (-3.52)	-5.8593*** (-3.58)
Turnover	-12.0687* (-1.76)	10.2208 (-1.52)	-7.2942 (-0.91)	2.8318*** (3.82)	2.8282*** (3.82)	2.8649*** (3.87)
CashFlow	-9.8695 (-0.99)	-10.9813 (-1.05)	-15.4305 (-0.99)	0.5441 (0.72)	0.5396 (0.71)	0.5132 (0.67)
Growth	6.0461* (1.95)	6.4915* (1.84)	7.3422 (1.49)	-0.1210 (-1.06)	-0.1216 (-1.07)	-0.1184 (-1.03)
Roa	28.2298 (1.24)	30.8326 (1.29)	38.9269 (1.27)	6.1873*** (4.11)	6.1884*** (4.11)	6.1781*** (4.09)
Loss	1.6247 (0.80)	1.9786 (0.85)	2.1432 (0.77)	-0.7442*** (-3.85)	-0.7450*** (-3.86)	-0.7534*** (-3.90)
IIR	1.3843 (1.33)	1.0962 (0.85)	0.5817 (0.40)	0.6603** (2.28)	0.6568** (2.27)	0.5976** (2.04)
Ret	0.9128 (0.47)	1.0045 (0.50)	0.6554 (0.31)	0.6319*** (3.65)	0.6312*** (3.64)	0.6441*** (3.70)
Sd_Ret	5.3277 (1.08)	4.3638 (0.95)	2.7057 (0.58)	-3.5448*** (-3.01)	-3.5399*** (-3.00)	-3.4827*** (-2.95)
_cons	-19.5760*** (-2.94)	-18.8918*** (-2.67)	-19.9523** (-2.54)	-10.2169*** (-6.86)	-10.2037*** (-6.83)	-10.2519*** (-6.86)
year	Control	Control	Control	Control	Control	Control
Industry	Control	Control	Control	Control	Control	Control
N	558	558	558	13906	13906	13906
Pseudo R ²	0.5772	0.5801	0.6057	0.2997	0.2997	0.3014

The regression results are showed in **Table 7**. The coefficients of R&D1, R&D2, R&D_Z are 0.0002, 0.0001, 0.0017 respectively, but not significant. That is, the more enterprises invest in innovation activities, the higher the complexity of accounting treatment will not lead enterprises to choose high-quality audit services. The result excludes the signaling hypothesis.

Table 7. Robust test—signaling hypothesis.

	1 = the big four, 0 = Non-big four		
R&D1	0.0002 (0.00)		
R&D2		0.0001 (0.13)	
R&D_Z			0.0017 (0.42)
R&D_F			0.0021 (0.47)
Size	1.2485*** (29.52)	0.0256*** (5.34)	0.6394*** (28.62)
Lev	-2.0515*** (-7.09)	-0.0153 (-1.25)	-1.0615*** (-7.40)
OtherRev	-1.6469 (-0.88)	-0.0854 (-1.20)	-0.9416 (-0.98)
Turnover	2.4851*** (5.40)	-0.0373 (-1.11)	1.3155*** (5.54)
CashFlow	4.7991*** (7.44)	0.0208 (1.51)	2.4833*** (7.62)
Growth	-0.4764*** (-3.91)	-0.0051** (-2.43)	-0.2595*** (-4.36)
Roa	-0.7055 (-0.58)	0.0209 (0.59)	-0.4007 (-0.65)
Loss	0.0685 (0.34)	0.0050 (1.21)	0.0764 (0.77)
IIR	1.1892*** (5.73)	0.0054 (0.66)	0.5954*** (5.76)
Ret	0.1246 (1.10)	0.0067** (2.53)	0.057 (1.00)
Sd_Ret	-1.0644 (-0.96)	-0.0088 (-0.35)	-0.4192 (-0.78)
_cons	-29.2902*** (-30.25)	-0.5308*** (-5.20)	-15.2417*** (-29.54)
year	Control	Control	Control
Industry	Control	Control	Control
N	14958	14958	14958
Pseudo R ²	0.3126	0.1394	0.3076

5.2. Endogeneity Test

As an important third party, based on the convenience and professionalism, auditing is conducive to reducing information asymmetry affecting the ability of enterprise to obtain external funds and adversely affecting the selection and investment of enterprises in innovation activities.

In order to reduce or eliminate the endogenous influence, the paper uses 2SLS and selects government subsidy as the tool variable of enterprise innovation activities with referring to a previous literature (Xu Jingchang, 2017) [4]. The results of the two-stage regression are shown in **Table 8**. The P values of F statistics is 0.0000, indicating that the tool variable is valid. In the second stage of the regression, and from these particular coefficients, we could conclude that after controlling for endogeneity, the above results are all valid.

Considering that the audit fees may be already decided in advance, in order to relieve this problem and weaken the endogenous impact of this conclusion, this paper selects audit fees of the next year as a alternative variables with referring to Lin Wanfa (2018) [42]. Shown in **Table 9**, the larger enterprise innovation is, the capitalized R&D expenditure, the higher the audit fees. Relative hypothesizes are supported.

Table 8. Robust test—endogeneity test.

	First stage	Second stage (Audit Fee)	Second stage (Opinion)	Second stage (LAG)	Second stage	Second stage (Audit Fee)	Second stage (Opinion)	Second stage (LAG)
Subsidy	3.13e-09*** (4.55)				2.37e-09***			
R&D		0.1611*** (4.35)	-0.0283*** (-3.45)	-0.0135** (-2.01)				
R&D_Z						0.2121*** (3.62)	-0.0375*** (-3.08)	-0.0178* (-1.93)
Size	0.4172*** (7.73)	0.2850*** (13.67)	0.0528*** (7.32)	0.0199*** (4.65)	0.5135*** (10.45)	0.2433*** (6.84)	0.0618*** (5.81)	0.023*** (3.85)
Lev	-0.1364** (-2.00)	0.0552*** (3.47)	-0.2481*** (-8.45)	-0.0024 (-0.75)	-0.1038* (-1.76)	0.0552*** (3.14)	-0.2623*** (-7.39)	-0.0024 (-0.73)
OtherRev	2.6937 (1.35)	1.5689*** (4.32)	-0.2325* (-1.88)	0.5256*** (5.57)	4.4701** (2.40)	1.0546** (2.11)	-0.1270 (-0.85)	0.5688*** (5.48)
Turnover	7.8803*** (11.81)	-1.1265*** (-3.55)	0.3488*** (4.56)	0.1532*** (2.61)	8.0005*** (13.11)	-1.5542*** (-3.15)	0.4294*** (3.90)	0.1892** (2.42)
CashFlow	-2.7979*** (-3.79)	0.6057*** (3.69)	-0.0718* (-1.78)	-0.1346*** (-3.60)	-3.0501*** (-4.62)	0.802*** (3.52)	-0.1052** (-2.11)	-0.1511*** (-3.51)
Growth	0.064 (0.6)	-0.0152 (-0.84)	-0.0014 (-0.27)	-0.0114** (-2.20)	0.0527 (0.55)	-0.0161 (-0.77)	-0.0009 (-0.17)	-0.0113** (-2.15)

Continued

Roa	3.9448***	-0.7375**	0.1848**	-0.2532***	2.7693**	-0.6895**	0.1539*	-0.2572***
	(2.74)	(-2.51)	(2.39)	(-4.01)	(2.17)	(-2.08)	(1.86)	(-4.02)
Loss	-0.1620	0.1037**	-0.0972***	0.0462***	-0.2578	0.1323***	-0.1026***	0.0438***
	(-0.66)	(2.43)	(-8.19)	(5.23)	(-1.20)	(2.65)	(-7.99)	(4.72)
IIR	-0.3965	0.0455	-0.0055	-0.0441***	-0.8807***	0.1685**	-0.0270*	-0.0545***
	(-1.47)	(0.93)	(-0.53)	(-4.20)	(-3.70)	(2.28)	(-1.83)	(-4.11)
Ret	0.0024	-0.0129	0.0155**	-0.0421***	0.0513	-0.0234	0.0177**	-0.0413***
	(0.02)	(-0.47)	(2.56)	(-6.47)	(0.35)	(-0.72)	(2.59)	(-6.15)
Sd_Ret	4.1613***	-0.6359**	0.0798	0.0957	4.3706***	-0.8927**	0.1294	0.1173*
	(3.07)	(-2.29)	(1.20)	(1.57)	(3.58)	(-2.40)	(1.54)	(1.71)
Big4	-0.1236	0.7133***	-0.0341***	-0.0349***	-0.2217	0.7403***	-0.0396***	-0.0372***
	(-0.49)	(16.22)	(-4.05)	(-4.79)	(-0.99)	(14.66)	(-4.09)	(-4.86)
_cons	-9.5195***	7.0587***	-0.0575	4.1116***	-11.0321***	7.8653***	-0.2293	4.0437***
	(-7.64)	(14.98)	(-0.38)	(42.25)	(-9.69)	(10.25)	(-1.06)	(30.61)
year	Control	Control	Control	Control	Control	Control	Control	Control
Industry	Control	Control	Control	Control	Control	Control	Control	Control
N	14958	14958	14958	14958	14958	14958	14958	14958
Prob > F/chi ²	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 9. Robust test—alternative variable (audit fee).

	Audit_Fee
R&D	0.0021** (2.32)
R&D_Z	0.0035*** (3.53)
R&D_F	-0.0005 (-0.70)
Size	0.3166*** (22.51)
Lev	0.0184 (0.43)
OtherRev	0.4673*** (2.87)
Turnover	0.2719*** (2.62)
CashFlow	0.0613 0.0615

Continued

	(1.51)	(1.52)
Growth	0.0087	0.0091
	(1.39)	(1.46)
Roa	0.2304**	0.2328**
	(2.17)	(2.19)
Loss	0.0356***	0.0362***
	(3.04)	(3.10)
IIR	-0.0637***	-0.0616***
	(-2.92)	(-2.82)
Ret	0.0097	0.0096
	(1.56)	(1.55)
Sd_Ret	-0.0179	-0.0193
	(-0.29)	(-0.31)
Big4	0.1696***	0.1688***
	(3.89)	(3.88)
_cons	6.3911***	6.4164***
	(21.04)	(21.16)
year	Control	Control
Industry	Control	Control
N	12614	12614
Adj-R-sq	0.6406	0.6405

6. Conclusions

Under the background of government encouraging the innovation, the paper explores the relationship between innovation and auditors' behaviors, attitude. In addition, combined with various background analyses, this paper has certain theoretical and practical significance. The paper finds that auditors give full consideration to the government's policy direction, in the face of the risks of enterprise's innovation activities, behaviors are more robust, but only in the audit fees and audit opinion, having no increase in its own efforts or reducing restated financial statements. On the whole, the auditors are negative in response to innovation risks.

The exposure of the phenomenon shows in the era of innovation, it is necessary and correct for the government to require the audit work to face the new era and to implement the audit and economic integration development. And the conclusion also shows that the current external legal environment is not strict enough, and suggests that relevant departments continue to further perfect the relevant system, strengthen supervision, fully arouse the enthusiasm of the auditor, and improve the auditor's vigilance.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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