ISSN: 2688-9323

Does Government Audit Intervention Improve the Quality of Internal Control of Central Enterprises?

Jianglin Tu

School of Economics and Management, Chongqing University of Posts and Telecommunications, Chongqing 400065, China

867353927@qq.com

Abstract

This paper is based on the Central Enterprise Audit Announcement issued by the National Audit Office of China from 2010 to 2018, using empirical method to study the impact of government audits on the quality of internal control of central enterprises. Research has found that government audit has a significant effect on improving the internal control quality of central enterprises, but this effect only occurs in the current and subsequent periods of intervention, and after two periods, audit effectiveness diminished, which shows that government audits have a short-term nature.

Keywords

Government Audit; Internal Control; Central Enterprises.

1. Introduction

On June 20, 2018, the Audit Office released the 2016's audit report of the financial income and expenditure of 35 central enterprises. The main issues involved included unreasonable financial accounting, unrealistic operating performance, weak internal management, and inadequate risk management and control. The existence of the above problems reflects the management defects of some central enterprises, such as imperfect internal control. The government audit concerns not only the management and use of financial funds and asset management, but also the power and behavior of the public sector to participate in socio-economic activities, and then covers the healthy operation and development of the economy and society. Does the government audit, which is an external monitoring method, affect the daily operation and management of central enterprises?

In the "Thirteenth Five-Year National Audit Work Development Plan", the National Audit Office pointed out that for corporate audits, the goal is to promote the improvement of quality and efficiency of state-owned enterprises, maintain value and increase value, and strengthen and optimize the state-owned enterprises. Among them, it is particularly emphasized that: 1. conduct a comprehensive audit of state-owned companies; 2. audit at least once within 5 years for enterprises with state-owned and state-owned capital holding or dominant position. The audit focused on the integrity and preservation and appreciation of domestic foreign assets, the status of assets and liabilities, profit and loss, major investment decisions and investment performance, development potential and hidden risks, corporate governance and internal control, and compliance with relevant national laws and regulations 3. Pay attention to the state-owned enterprises' implementation of major national policies and measures. Among them, corporate legal person governance, internal control, and compliance with laws and regulations involve internal control of the enterprise.

ISSN: 2688-9323

2. Literature Review and Hypothesis

2.1. Literature Review

Generally speaking, the related research on internal control mainly focuses on four aspects: internal control system, internal control evaluation system, internal control quality influencing factors, internal control and corporate governance. The factors that affect the effectiveness of internal control can be divided into internal factors and external factors. Internal factors are mainly corporate governance structures, and external factors are mainly external audits. Chi Guohua[1] used the background characteristics of executives as the starting point. Using the relevant data of China's A-share listed companies from 2009 to 2011, they found that the background characteristics of executives have a certain impact on the quality of internal control of enterprises. Bo Lan[2] used the 2010 Shanghai A-share listed company's annual report to study and found that the effectiveness of internal control was significantly positively related to factors such as equity concentration, directors and supervisors holding shares, whether to engage an accounting firm and asset size, and negatively related to auditor changes. Chen Hanwen[3] took Chinese A-share listed companies in the 2007-2012 period as the research object, and empirically analyzed the influence of the personal characteristics of the chairman (that is, the age of the chairman, education level, and length of service) on the quality of the company's internal control. The study found that the quality of internal control has improved significantly with the increase of the chairman's age, the improvement in education, the increase in office hours, and the increase in salary levels. Zhang Xianmei[4] chose a non-financial A-share listed company in Shanghai in 2011 as the research object, and found that the concentration of equity, growth of the company, the size of the board of directors, and the board of supervisors were significantly positively related to the effectiveness of the company's internal control. And audit costs, corporate mergers and reorganizations, risk levels, and the concurrent appointment of chairman and general manager are significantly negatively related to the effectiveness of corporate internal control.

Based on the results of the government audit announcement, Chu Jian[5] used a double difference model to study the impact of government audits on the effectiveness of internal control of central enterprises. Both Chi Guohua [1]and Duan Xuncheng[6] found that government audits lag in improving the effectiveness of internal control of enterprises, and the improvement of internal control quality is mainly concentrated in two consecutive periods after the audited year. The lifting effect of control is beginning to diminish. However, Wu Yeqi[7] found that in the year after the audit, the audited central enterprises had very little effect on the improvement of performance and internal control, that is, the involvement of government audits in promoting the effectiveness of internal control of central enterprises was not significant. Further, Zhang Zenglian[8] use PSM-DID found that, unlike social expectations, government audits cannot improve the internal control design and operation of state-owned listed companies, but may reduce the effectiveness of their internal controls.

2.2. Hypothesis

Although internal control theory has developed to a mature stage, it still has certain limitations. In order to give full play to the role of internal control, corporate personnel from senior leaders to grassroots employees must comply with the assumption of rational economic people, but in practice these groups are more or less opportunistic. They are not able to fully comply with relevant regulations, so the actual implementation of a well-designed internal control is not satisfactory. In addition, for-profit enterprises must consider the cost-benefit principle in their daily operations and management. At the same time, due to rapid changes in the external environment, internal control cannot be improved in a timely manner.

ISSN: 2688-9323

As an external supervision mechanism, government audit can overcome the limitations of the above-mentioned defects to a certain extent.

First, compared with the CPA audit, the government audit supervision power is derived from the law and is a highly authoritative supervision mechanism enforced by government departments. Its rights are not interfered by any group, and state-owned enterprises have not the ability to bargain. In addition to the inspection function of the government audit, its audit decision also has the right to supervise and rectify, forcing the audited unit to rectify the problems detected and improve the system. Secondly, due to the announcement of the audit results, social media will follow-up reports, which will put greater pressure on companies, forcing them to rectify problems that have been checked out as soon as possible. Finally, because the government audit funds come from fiscal appropriations, on the one hand, there is no need to worry about "renewal issues" caused by the financial reports issued that do not meet the requirements of corporate managers. On the other hand, there is no need to consider the cost-benefit principle. All business activities can be audited regardless of cost. Through the above theoretical analysis, it is shown that government audit may have an impact on the internal control of central enterprises, so is there any lagging or short-term effects of this impact? So we make the following hypothesis.

Hypothesis: government audit can effectively improve the quality of internal control of listed companies controlled by central enterprises.

3. Research Design

Since 2010, the National Audit Office has announced the results of financial audits conducted by central enterprises in the previous year. Based on the data that can be collected, the sample financial statements range from 2009 to 2017. According to the financial revenue and expenditure announcement of the Central Enterprise Group issued by the National Audit Office from 2010 to 2018, this study manually sorted out the listed companies controlled by the Central Enterprise Group: (1) Exclude listed companies in the financial and insurance industries; (2) Exclude ST listed companies; (3) Exclude listed companies whose holdings have changed within one year before and after the audit; (4) Exclude listed companies whose internal control-related data are missing. Financial data of listed companies are mainly from the CSMAR database.

Indicator 1: Measurement method of government audit

At present, there are two types of measurement methods used by the academic community in government auditing. The first is for government departments to measure their revealing function by the amount of problems found through audit, to measure their defensive function by the number of cases transferred to inspection agencies etc., and to measure their preventive function by the adoption rate of audit opinions put forward. The second is for state-owned enterprises, which are mainly divided into two types. The first one, taking 1 for listed companies and their group companies for the year in which they are audited and the year after that, otherwise take 0. The second is from the audit intervention to the announcement of the results. Here, the annual value is 1 and the rest are 0. On this basis, the results of each year are accumulated year by year, that is, the higher the value is, the further away from the audit intervention year. However, this method implies a hypothesis that the effectiveness of government audits is increasing year by year, which is contrary to actual perception, so this method was not selected in this study. In the study of this article, the listed company and its affiliated group companies will take 1 in the year of auditing and the following years, otherwise take 0. If multiple audits have been performed, the first audit is taken.

Indicator 2: Quality of internal control

There are three main evaluation methods for the quality of internal control in academia: the first one is based on whether the internal control report is disclosed or not. The second is to use questionnaires and effective surveys to collect information to objectively and accurately evaluate the quality of internal control. The third is to determine the measurement index based on the relevant information and data disclosed by the listed company. However, most listed companies in China currently choose to disclose internal control variables, so a simple 0-1 variable is not effective. At present, the academic world more uses the internal control index of Shenzhen Dibo listed companies and the "Internal Control Index of Chinese Listed Companies" of the Xiamen University research group as the indicators of the quality of internal control. This article will use Shenzhen Dibo listed company's internal control index as a measure of internal control quality.

And review existing literature, the following control variables were selected:

Size, is the logarithm of the total assets at the end of the year. Roa, means return on total assets ratio. Lev is debt to asset ratio at the end of the year. At the same time, considering the impact of cpa audit on the quality of accounting information, the Big4 variable take 1 if the company is audited by the Big Four accounting firms, otherwise take 0. Growth, choose the growth rate of the main business income. Lhr means the shareholding of the largest shareholder. Dual, if the chairman and general manager are held by one person this year, take 1, otherwise take 0. Indep is the proportion of independent directors in all directors. Board, board size.

Drawing on existing literature practices, this paper uses the following dual difference model to test the impact of government audits on the quality of internal control:

$$\text{Model 1:IC} = \alpha_0 + \alpha_1 * didaudit + \alpha_2 * Control + \sum Firm + \sum Year + \varepsilon$$

$$\text{Model 2:IC} = \alpha_0 + \alpha_1 * audit + \alpha_2 * Audit + \alpha_3 * Audit1 + \alpha_4 * Audit2 + \alpha_5 * Control + \sum Firm + \sum Year + \varepsilon$$

Among them, didaudit will take 1 in the year of auditing and the following years, otherwise take 0. And audit is a dummy variable, which is 1 in the year before the government audit intervention, otherwise it is 0; Audit is a dummy variable, which is 1 in the government audit intervention year, otherwise 0; Audit1 is a dummy variable, taking 1 in audit intervention year, and the audit announcement year, otherwise 0; Audit2 is a dummy variable, and the year following the audit announcement takes 1, otherwise 0. If only α_2 and α_3 are significant, it indicates that they are short-term, and if α_4 is also significant, it indicates that they are long-term.

4. Empirical Research

Table 1 shows descriptive statistics of important variables for the entire sample. As we can see, the quality of internal control of listed companies controlled by central enterprises varies widely, with the lowest being 200.93 and the highest reaching 995.36, so the standard deviation is also large. Although they are listed companies controlled by state-owned enterprises, the gap between the largest shareholder's equity is as high as 89.1% and the lowest is 11.4%. It can also be seen that the size difference between different companies is extremely large. The average value of assets is 9.409 billion, the highest is 2400 billion, and the lowest is only 310 million. The revenue growth of different companies is also very different. The average growth rate of main business income is 18%; the average number of

ISSN: 2688-9323

board members is 9 and the average independent directors account is 37.2%. In addition, from the dual average, it can be seen that only a small number of companies in the sample have the chairman of the company concurrently as the general manager.

Table 1. Descriptive statistics

	N	Mean	min	max	Median	p25	Std. Dev.
IC	2205	690.794	200.93	995.36	690	638.83	97.176
Size	2205	22.965	19.552	28.509	22.676	21.761	1.693
Roa	2205	0.035	-0.341	0.265	0.03	0.011	0.052
Big4	2205	0.166	0	1	0	0	0.372
Lhr	2205	0.424	0.114	0.891	0.426	0.308	0.146
Growth	2205	0.18	-0.862	11.843	0.105	-0.035	0.612
Dual	2205	0.066	0	1	0	0	0.248
Lev	2205	0.528	0.016	1.157	0.544	0.386	0.201
Indep	2205	0.372	0.143	0.8	0.333	0.333	0.065
Board	2205	2.23	1.386	2.773	2.197	2.197	0.198

According to the models 1 and 2, the following regression results are obtained. The second column of Table 2 shows the regression results of Model 1. The data shows that the adjusted R-square is 55.06%, indicating that the model fits well. The didaudit coefficient is 9.47, which is significant at the level of 5%, indicating that government audit intervention can have a positive effect on the effectiveness of internal control of the enterprise; at the same time, it can also be seen that the enterprise which has a large scale, strong profitability and rapid development, has high quality of its internal control.

Table2's third column shows the regression results of Model 2, which reflects the impact of government audit intervention on the effectiveness of each period of control. This column shows that the Audit and Audit1 coefficients are significant at the 10% level, but the audit2 coefficients are not significant. That is to say, the government audit can only promote the effectiveness of the internal control of the enterprise in the year of intervention and the year of announcement, but the promotion effect of the government audit is reduced after two years of intervention, which proves that the effectiveness of government audit is short-term and time-effective.

ISSN: 2688-9323

Table 2. Regression results

Variable	Model1	Model2
didaudit	9.468**	
	(1.990)	
aduit		0.533
Audit		10.053*
		(1.64)
Audit1		12.417*
		(1.860)
Audit2		1.717
		(0.220)
Size	18.055***	17.353***
	(4.170)	(4.010)
Roa	754.947***	754.705***
	(15.320)	(15.340)
Big4	-2.394	-4.398
	(-0.250)	(-0.450)
Lhr	-19.951	-20.368
	(-0.680)	(-0.680)
Growth	27.847***	27.919***
	(6.490)	(6.470)
Dual	-7.294	-7.344
	(-1.000)	(-1.010)
Lev	1.255	4.581
	(0.080)	(0.280)
Indep	-26.189	-27.551
	(-0.570)	(-0.600)
Board	-20.167	-19.428
	(-1.190)	(-1.140)
_cons	305.189***	320.832***
	(2.860)	(3.000)

5. Conclusion

This article uses 2008-2017 China's central enterprise holding listed companies as a research sample, and takes government audit, an external evaluation and supervision mechanism, as the starting point, to study its impact on the quality of internal control of central enterprises. Through theoretical and empirical analysis, it is found that government audit has a significant effect on improving the internal control quality of central enterprises, but this effect only occurs in the current and subsequent periods of intervention, which shows that government audits have a short-term nature.

The findings of this paper have important policy implications. 1. In actual work, government audits indeed have played their role in verification and supervision. 2. Because government audit has a short-term effectively to improve the quality of internal control of enterprises, audit institutions should promptly strengthen the supervision of subsequent rectifications of problem companies after the announcement of audit results, and strengthen the accountability of relevant responsible persons. 3. In order to ensure the long-term deterrence of government audits, state-owned enterprises should be audited every two years.

References

[1] Guohua Chi, Ruijia Guo, Huijin Wang. Can Government Audits Improve the Institution of Internal Control? An Empirical Analysis Based on the Listed Companies of Central Enterprises Holding. Nankai Business Review. Vol. 22(2019) No. 01, p. 31-41.

[2] Lan Bo, Haixin Yao. A Study on the Factors Affecting Internal Control Efficiency of Public Companies: An Empirical Analysis from Corparate Governance and External Audit Perspectives. Journal of Capital University of Economics and Business. Vol. 14(2012) No. 04, p. 71-78.

[3] HanWen Chen, Weicheng Wang, Chairperson of the Board of Directors: Personality, Compensation and Internal Control. Journal of Xiamen University(Arts & Social Sciences Edition). Vol. 02 (2014). p. 90-99.

[4] Xianmei Zhang, Chunyi Zhang, Xiaojun Cai. A Study on the Factors Affecting Internal Control Efficiency of Public Companies: Evidence from A-share Companies in Shanghai Stock Exchange. Research on Economics and Management. Vol. 08 (2013), p. 66-73.

[5] Jian Chu, Junxiong Fang. Does Government Auditing Improve the CSOEs' Internal Control Quality? Journal of Accounting and Economics. Vol. 32(2018). No.05, p. 18-39.

[6] Xuncheng Duan, Lixin Tang. Intervention of Government Auditand Effectiveness of Internal Control of State-owned Enterprises---Evidence Based on Audit Announcement. Communication of Finance and Accounting. Vol. 13(2018),p. 3-7.

[7] Yeqi Wu. Research on Governance Effects of Government Audit for Central Enterprises. China Auditing Review. Vol. 01 (2017),p. 68-81.

[8] Zenglian zhang, Yiting Liu. Government Audit and the Effectiveness of Internal Control of Central Enterprises---Empirical Analysis Based on the Announcement of Auditing Central Enterprise Audit Results. Reform of Economic System. Vol. 03(2019), p. 171-178.