

# **Research on Industry Leaders' External Auditing Demand in China**

-Based on the Signal Transfer Theory

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# Abstract

This paper validates the demand for audit's signal transfer theory by China's A-share listed company data. As having a significant influence on the region and the industries where they locate in, industry leaders will catch more attention. In this case, compared to other companies, industry leaders have stronger demands for high-quality audit services, because it can transmit a signal to the market that they are under a good company supervision. However, high growth industry leaders don't have a stronger demand for high quality audit services than other ones as we refer in the hypothesis. The reason is that even industry leaders do not have external financing needed, they will still choose high-quality audit services, as it can transfer a good signal to the outside world.

# **Keywords**

Industry Leaders, High-Quality Audit Services, Signal Transfer Theory

# **1. Introduction**

In recent years, great changes have taken place in audit market in China. Firstly, with the reform of accounting firm, more and more foreign accounting firms come into China and enable the Chinese audit market to provide high quality audit services; Secondly, along with China's economic system reform thorough gradually, the enterprise ownership structure changes greatly. The conflict between shareholders and management agency and the one between controlling shareholders and the external medium and small shareholders become increasingly prominent, which make the market demand for high quality audit service stronger (Yanyan Wang, 2006) [1].

The great changes in audit market makes the enterprises of our country began to demand for high-quality audit services. Improving the quality of the audit services in our country is conducive to better the function of the audit. The fundamental cause of the audit is the separation of ownership and management of enterprises. In order to supervise the enterprise managers' behavior better, audit arises at the historic moment. However, at the beginning of the audit system was introduced into China, the listed companies in China had no demand for high quality audit services, so the audit was just useless decoration.

For a long time, agency theory has been the mainstream theories to explain audit requirements. Even so, the agency problem is not the only cause of audit requirements. Signal transfer theory and audit theory of insurance complement the agency theory to explain the audit requirements. Auditing's function is not only to supervise the managers, but also to transmit the signal that enterprises are under good supervision to the market.

Industry leaders refer to companies which have a deep influence on other enterprises in a certain industry and regions which they locate in. Also, they make outstanding contributions to the industry or country. Industry leaders, as the head of the industry, catch the attention because of its outstanding performance. When attracting attention from all sides, enterprises' movements will transmit information to the world. Therefore, the enterprise behavior is crucial, and will do direct impact on outside investors' impression to enterprises [2].

As enterprise operating results report, financial statement is an important way for outside investors to understand the enterprise. At the same time, high quality financial report has become a tool for enterprises to transmit good signal to outside investors. For this reason, industry leaders demand for high-quality audit service more likely than non-leading enterprises, because it can tell outside investors that they are under a good supervision. The rest of this article is an in-depth discussion on this question.

## 2. Literature Review

## 2.1. The Audit Demand Theory

In 1976, Jensen and Meckling proposed the agent theory [3]. Agency problems include two aspects, the first one is the conflict between shareholders and management authorities. As management separated from enterprise ownership, the first kind of agency problem took place. Shareholders commit their companies to the professional executive with managerial abilities. Managers always, however, are not the owner of the company, so they will seek personal gain in the process of operation, which will harm the interests of the shareholders. The second kind of agency problem is mainly due to a conflict between controlling shareholders and minority shareholders. The controlling shareholders have absolute control of the company, thus they have the ability to obtain private benefits from the company, to encroach on the interests of small and medium shareholders.

Jensen and Meckling (1976) argued that business enterprise management authorities had an incentive to introduce supervision or guarantee mechanism to alleviate the agency problem, in order to convince investors that their interests are protected. Audit acts as the role [3].

#### 2.1.1. Maintaining the Integrity of the Specifications

Researches on the relationship of agency conflicts and audit demand can be divided into two stages: voluntary audit stage and mandatory audit one. Before external audit had been required to provide by the law, research about the agency conflict and auditing demand's relationship mainly focused on whether the enterprise have an incentive to hire external audit to restrict the management authorities of opportunistic behavior. When the external audit became mandatory requirement, the demand for audit entered the stage of mandatory audit requirements. During audit compulsory phase, researched mainly focused on whether the enterprise have an incentive to hire high quality external audit. Sun Zheng, Cao Yu (2004) found evidence of high quality audit requirements. Their study showed that abroad overseas individual shares and legal person share shareholders had an incentive to promote management to choose high quality audit [4]. Yanyan Wang (2006) found that companies with serious agent conflict had an incentive to choose high quality audit, in order to send positive signals to the market and attract potential investors. In addition, she found that the demand for high quality audit in our country had positively correlated relationship between enterprise's ownership concentration, and audit quality demand will increase when ownership concentration become higher, which supported the audit requirements' entrenchment effects [1].

#### 2.1.2. Maintaining the Integrity of the Specifications

Audit demands insurance hypothesis is different from the audit agency theory, information hypothesis and signal hypothesis. During the process of reducing the risk of financial information, audit demands insurance hypothesis

not only emphasizes the audit verification mechanism, but also emphasizes the audit risk transfer mechanism [5] (Xue Zuyun *et al.*, 2004). It says: audit contains information value and insurance value. In addition, the financial statement users can not only reduce the financial information risk by the help of certified public accountants, but also can transfer the risk to them, at least partly [5].

### 2.1.3. The Audit Demand Theory of Signal Transmission

The audit demand signal hypothesis is based on the competitive capital market. Signal hypothesis thinks that the enterprises listed financing also faces fierce competitions, they must send positive signals to the market to show themselves are good choices for the investors. The signal here is refers to an action which enterprises with high quality can take, while enterprises with low quality to adopt will be considered to be unwise. This is because for these enterprises with low quality, cost for taking the action will be much higher than the benefits. As for this, such actions can send a positive signal to the market. So qualified enterprises can use this kind of action to distinguish themselves from the low quality enterprises, and achieve some specific purpose. The audit is considered to be such a mechanism that can distinguish high quality from the low one.

## 2.2. High Quality of Audit Service

From the perspective of contract theory, due to the importance of accounting earnings when making a contract, the authorities usually achieve the purpose of opportunism by adjusting the accounting earnings, especially among enterprises. On the other hand, the flexibility of accrual accounting provides manipulation space for the authorities' opportunism behavior. However, this action will reduce earning's information content under accrual accounting. Once outside investors recognize the authorities' opportunistic behavior, they will demand a higher cost of capital [1] (Yanyan Wang, 2006). Therefore enterprise with higher accrued items generally have higher agency cost. Audit plays an important role on limiting the opportunistic earnings management of the enterprises, which is in order to reduce the agency costs. Due to high quality audit's reputation loss of opportunity cost is much higher than low quality audit's, so in order to reduce risk, high quality audit will choose conservative and prudent accounting policies, and will ask the customers to their policy choices when disagreements happen. (Francis *et al.*, 1999).

Warfield *et al.* (1995) found that low management shareholding enterprises' (high agency costs), earning information content was low, and manipulation of the accrued items was higher. However, Gul (1999) argued that Warfield *et al.*'s conclusion depends on audit quality, as high quality auditing can alleviate negative relationship between agency conflict and the earning information content. The results show that the earning information contents of enterprises which audited by big six are higher than other firms' and the negative relationship between earning information content and management shareholding are weaker.

Yanyan Wang (2006) found that, in the same situation, enterprises with high quality external audit had fewer manipulated accrued items of than other ones. Earning information content of customers with high quality external audit was higher, and negative relationship between the agency costs and earning value relevance was weaker than enterprises without high quality external audit [1].

Obviously, high-quality audit can reduce the space of manipulation so that can transfer positive signal to the market and ease the scruple of outside investors about agency conflicts.

## **3. Research Hypotheses**

Industry leaders become the focus of the public because of their importance to their industries or regions where they locate. Therefore, their movements are signals to the investors.

As the result of one year's operation, financial statements play an important role at helping investors to understand enterprises' performance in the past year. The enterprises want a good result of their operations without doubt, but even they do not achieve it, they are reluctant to let outside investors to get this information. Because of this, prettifying financial statements and financial table fraud occur frequently. The result of managers and accountants' fraud poor management performance can't be found from the company's financial statements and investors are cheated at last. Therefore, not all the financial statements show operating performance of the companies. In order to prove the authenticity of the financial statements of the enterprise to outside investors, and the objectivity of the financial statements' auditing opinions, well-run companies have demands for high quality audit service. Generally speaking, as the head of the industry, Industry leaders want outside investors to believe they are under a good supervision and the financial statements which reflect their good operating conditions are true. We formally state our hypothesis as follows.

H1: In order to deliver good signal to outside investors, industry leaders prefer audit services provided by the big four accounting firms.

Industry leaders with good growth need more funding to develop new projects. Issuing new shares and bonds is an important means to refinance. Whether the company's stock and bond can be issued smoothly depends on the company's reputation in the capital market. Thus, we propose H2: In order to refinance better, enterprises with good growth are more likely to choose the audit services provided by Big Four accounting firms.

## 4. Research Design

## 4.1. Data Description

We collect all A-share companies' data from the China Stock Market and Accounting Research database (CSMAR), which starts from 2003 and ends at 2013. Since from 2003, the audit opinion of the audit report is different from the previous one, so in order to insure the accuracy of the study, we select the 2003 as a starting point.

## 4.2. Identify the Headings

We use Model (4.1) and Model (4.2) to test H2 and H3 respectively:

Auditor = 
$$\beta_0 + \beta_1 LT + \beta_2 growth + \beta_3 size + \beta_4 lev + \beta_5 fshare + \beta_6 sshare + \beta_7 da + \beta_8 sk + \varepsilon$$
 (4.1)

Auditor =  $\beta_0 + \beta_1 LT + \beta_2 growth + \beta_3 size + \beta_4 lev + \beta_5 fshare + \beta_6 sshare + \beta_7 da + \beta_8 sk + \beta_9 LT \times growth + \varepsilon$  (4.2)

The meanings of the variables in the model are as follows:

#### 4.2.1. Dependent Variable

Auditor is a dummy variable, which represents demand for high quality of audit service. It means that if the company is audited by big 4, value will be 1, otherwise 0. Previous research evidence shows that big six can provide high quality supervision, especially for enterprises with serious information asymmetric (Francis, 1999; Becker, 1998; Teoh and Wong, 1993), so we takes big four as the proxy variable of high quality audit demand.

#### 4.2.2. Independent Variable

LT is a dummy variable, and if the company is one of the industry leaders, the value will be 1, otherwise 0. Industry leaders refer to those companies whose assets rank in 5% among the whole industry.

Growth is behalf of the company's growth, represented by operation revenue growth.

Size indicates the size of the company, using the natural logarithm of total assets as proxy.

Lev represents the company's financial leverage, using the long-term debt to capitalization ratio as proxy.

fshare indicates the ratio of the largest shareholder, and sshare indicates the proportion of the second to the fifth largest shareholder. Previous studies have indicated that the agency conflict will affect the audit demand. The proportion of the first largest shareholder and the company's second type agency problem is proportional. The second to fifth largest shareholders proportion have a certain role on against acts to the first major shareholders.

da represents listed companies' accruals. Previous studies have indicated that listing companies; accruals will affect their demand for high quality audit of listing Corporation (Yanyan Wang *et al.*, 2006) [1].

sk indicates the degree of separation between the control rights and ownership of the listed companies.

Industry and year dummy variables are not shown in the model. Classification of the industry is based on the "listing Corporation industry classification guidelines" published by China Securities Regulatory Commission in April 4, 2001 promulgated.

## 4.3. Sample Characteristics and Descriptive Statistics

Table 1 provides descriptive statistics for the main variables of the model. As we can see from Table 1, most of

Variables	Obsevation	Mean	Standard deviation	Min	Max
Auditor	17,069	0.060109	0.237696	0	1
fshare	17,069	37.47744	15.87651	2.1969	89.4086
sshare	17,069	16.54208	12.10823	0	60.9674
da	17,069	7.80E+08	4.93E+09	4159.53	2.50E+11
Growth	17,069	3.171187	78.55627	-2266.48	4882.52
sk	17,069	1.471594	1.401567	1	62.5336
lev	17,069	0.155915	0.488909	0	30.676
Size	17,069	21.61703	1.23925	15.71515	28.48203
lt	17,069	0.050325	0.218621	0	1

the listed companies' audit reports issued unqualified opinion. Among the listed companies, the range of controlling shareholders' ownership is very big, reaching about 87%. What's more, the standard deviation of controlling shareholders' ownership is also very big. The total share proportion of the second to fifth largest shareholders' are difference among listed companies and the standard deviation is about 12%. The difference among the accrual items is the largest of all the variables, and the size of the standard deviation is the highest among all variables. The range of growth of listed companies is about 60 times. The ratio of ownership and control is 1, and that means the controlling shareholder has 100% ownership of the listed company. Its maximum is about 62, and that means the ratio of ownership and control is about 62. The standard deviations of the financial leverage among listed companies are almost the same, but the range of financial leverage reaches about 30. Standard deviation of the company size is about 1.2, and the range is about 13.

## **5. Empirical Results and Analysis**

We can see the regression results in model (1) from **Table 2**, the coefficient of LT is 0.085, and it is significant at 1% confidence level. It shows that industry leaders' demand for high quality audit is significantly higher than the non-industry leaders'.

Industry leaderstransfer the signal that they are under good supervision through the choice of high quality audit to the market. Through the choice of high quality audit, the industry leaders can distinguish themselves from the non-industry leader ones. The empirical results verify the hypothesis 1, and also support the audit demand signaling hypothesis.

In the regression results of the model (2), the coefficient of LT is still significantly positive, which further proves the hypothesis and signal transmission theory. In the model (2), in order to verify the hypothesis 2: the industry leaders with high growth are more inclined to choose high quality audit, the model has joined the cross variable LT  $\times$  growth. In the regression results of the model (2), the regression coefficient of LT  $\times$  growth is close to zero, and there is no statistical significance. The reason may be that industry leaders will choose high-quality audit to distinguish themselves from other non-industry leaders. However, even if the companies do not need to raise funds for developing new projects through equity capital financing, the industry leaders will still choose high-quality audit services, so that the external investors will always have full confidence to the business decision-making. Therefore, in the regression results of the model (2), LT  $\times$  growth does not have statistical significance, and the numerical value is close to zero.

## **6.** Conclusion

We use data from A-shares listed companies to verify that industry leaders have demands for high quality audit. It is found that the industry leaders are more inclined to choose the audit services provided by the big four compared with the non-industry leading enterprises. But industry leaders with high growth are not as previously assumed that they have stronger demands for higher quality audit services than other industry leaders. Industry leaders can be able to distinguish themselves from non-industry leader ones through the choice of high-quality

Table 2. Regression result.			
	(1)	(2)	
-	Auditor	Auditor	
LT	0.085***	$0.086^{***}$	
	(0.000)	(0.000)	
Growth	-0.000	-0.000	
	(0.307)	(0.528)	
Size	0.049***	0.049***	
	(0.000)	(0.000)	
lev	-0.005	-0.005	
	(0.196)	(0.197)	
fshare	0.001****	0.001***	
	(0.000)	(0.000)	
sshare	0.002***	$0.002^{***}$	
	(0.000)	(0.000)	
da	0.000****	$0.000^{***}$	
	(0.000)	(0.000)	
sk	$0.002^{*}$	$0.002^*$	
	(0.051)	(0.051)	
$LT \times growth$		-0.000	
		(0.259)	
_cons	-1.056***	-1.056***	
	(0.000)	(0.000)	
Ν	17069	17069	
adj. R-sq	0.136	0.136	

Notes: \*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels respectively.

audit services, so as to deliver a good signal to the market. It verifies the theory of the signal transmission of audit demand. As the industry leaders, even if they do not need to raise funds for the development of new projects, they will still choose high-quality audit services in order to deliver a good signal to the market. Therefore, the industry leaders with high growth don't have a stronger demand for high quality audit than other ones.

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