Empirical Research on QFII Shareholding Ratio and Audit Quality

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Abstract

This paper takes A-share listed companies from 2016 to 2020 as samples to study the correlation between the QFII shareholding ratio and audit quality by using OLS model. It is found that when the audit quality is measured by the size of accounting firm, the QFII shareholding ratio is directly positively proportional to tendency of listed companies to choose the "Big Four" accounting firms. When the audit quality is measured by audit cost, the QFII shareholding ratio is directly positively proportional to audit cost of listed companies. When the audit quality is measured by audit opinions, the QFII shareholding ratio of listed companies is directly positively proportional to the possibility of listed companies obtaining standard unqualified audit opinions, therefore QFII holding shares can improve the audit quality of listed companies. By comparison with state-owned listed companies, QFII shareholding ratio has a more significant positive relationship with choosing the big Four accounting firms and bearing higher audit fees in non-state-owned listed companies. Compared with high-growth listed companies, the positive relationship between QFII shareholding ratio and the acquisition of standard unqualified audit opinions is more significant in low-growth listed companies.

Keywords

QFII Shareholding Ratio; Big4; Audit Fees; The Audit Opinion.

1. Introduction

In recent years, qualified foreign institutional investors (QFIIs) have developed rapidly in capital market of China, and more and more medium and long-term funds have entered China, making a big step forward in the opening of capital market in China. At present, qualified foreign institutional investors' number has increased from 272 in 2014 to 558 by the end of 2020. By the end of September 2020, the market value of domestic stocks held by foreign institutions and individuals reached 2.75 trillion yuan. The implementation of the new QFII/RQFII regulations and supporting rules reflects the government's strong support for QFIIS and the increasing role of QFIIs in the securities market.

Qualified foreign institutional investor (QFII) is a kind of institutional investor, which is growing rapidly in China and has become the dominant force in the securities market. Whether institutional investors can effectively improve the audit quality of listed companies has aroused the interest of scholars at home and abroad. Koh (2007) found that the more shares held by long-term institutional investors in listed companies, the less opportunistic earnings management behaviors of listed companies would be. Song Yunling et al. (2020) and Wang Huaiming (2021) believe that institutional investors are more professional than individual investors, and that institutional investors are more able to actively participate in corporate governance through field research, thus inhibiting earnings management behavior of corporate management and ensuring independent audit.

At present, China's studies on institutional investors' shareholding and audit quality mainly focus on the homogeneity of institutional investors at the beginning, and later on heterogeneity, such as long-term and short-term, pressure-sensitive and pressure-resistant perspectives. There are few literatures that independently study the relationship between QFII shareholding

ratio and audit quality. Based on all A-share listed companies from 2016 to 2020, we studies the influence of QFII shareholding ratio on audit quality of listed companies, enriching the literature on the influence of institutional investors on audit quality.

2. Research Hypothesis

As a result of the existence of agency problems, management may manipulate surplus in order to achieve the target about their interest，and may hide the problems existing in the enterprise itself. When the true information is published, the invested entity's share price will fall sharply, which will serious damage to the interests of the qualified foreign institutional investors. Different from domestic institutional investors, QFIIS facing different cultural, social and geographical obstacles, pay more attention to the supervision of the invested enterprises, trust the international Big Four accounting firms, and pay more audit fees for the supervision enterprises. H1 is proposed: the relationship between QFII shareholding ratio and the tendency of listed companies to choose the international "Big Four" accounting firms is positive; The QFII shareholding ratio has a positive proportional relationship with the audit cost of listed companies.

Compared with individual investors, QFIIS have obvious advantages in capital, information and technical analysis, and can more accurately locate the financial information of the invested company, and more easily identify the earnings manipulation of the management, so as to establish better internal governance of the enterprise. If QFIIS hold a small proportion of shares and do not plan to hold them for a long time, QFIIs will sell part of the company's shares to avoid losses, and put pressure on the management through herd effect, which makes the management reduce earnings management behavior and improve audit quality. If the QFII holds a large proportion of shares and intends to hold them for a long time, the QFII is more closely related to the fate of the invested units. Once false information is exposed, QFIIS are more likely to suffer huge losses. QFIIs will take the initiative to supervise the investee and restrain the investee from manipulating earnings, which is conducive to improving audit quality. Hypothesis H2 is proposed: The relationship between QFII shareholding ratio and possibility that listed companies can obtain standard unqualified audit opinions is positive.

State-owned enterprises serve specific government objectives and control is in the hands of the government. In comparation with non-state-owned enterprises, enterprises owned by state have more political connections. On the one hand, enterprises owned by state have less pressure to acquire resources from creditors and investors, and less need to obtain external audit certification, so it is less necessary to hire the international Big Four and pay high audit fees. On the other hand, as management of enterprises owned by state have more political power, the governance role of QFII on the invested units is affected. Hypothesis H3 is proposed: In Comparation with companies owned by state, the QFII shareholding ratio has a more significant positive relationship with choosing the big Four accounting firms and bearing higher audit fees in non-state-owned listed companies.

When the company is in rapid development, the company changes rapidly, the information can not be effectively feedback, the company is in a poor information environment, shareholders are difficult to supervise the management's behavior choice. When the company is in rapid growth and the information is more asymmetric, The effect of QFII shareholding on enterprise management's investment decisions is reduced, and the potential governance benefits of declining earnings management and audit quality improvement are also reduced. Therefore, hypothesis H4 is proposed: Compared with high-growth listed companies, the positive relationship between QFII shareholding ratio and the acquisition of standard unqualified audit opinions is more significant in low-growth listed companies.

3. Research Design

3.1. Selecting Sample

This paper takes all A-share listed companies from 2016 to 2020 as the research object, obtains all variable data from CSMAR database, and conducts preliminary data sorting through the following process: excluding financial industry companies, ST companies, *ST companies and companies with missing data; The data is indented at a 1% rate.

3.2. Variable Design

3.2.1. Dependent Variables

At present, scholars mainly measure audit quality by auditing cost, earnings management degree, size of accounting firm, audit opinions and so on. Referring to bu danlu and tu changwen (2017), this paper adopts whether to employ the international (Big4), audit cost (Acost) and audit opinion (Atype)as the measurement indicators of audit quality. Big4 indicates whether the listed company is audited by the top four international firms. If yes, the value is 1; if no, the value is 0. Acost is the log of the audit cost. Audit opinion is measured by Atype. If it is a standard unmodified opinion, the value is 1. If no, the value is 0.

3.2.2. Independent Variables

The QFII shareholding ratio is calculated by dividing the number of QFII shares invested in the same listed company by the total number of shares in the company.

3.2.3. Control Variables

Size is equal to the logarithm of the company's total assets. Lev (financial leverage) is measured through dividing total liabilities by total assets. ROA (profit level) is expressed as dividing return by total assets. Growth represents the percentage of Growth in a company's revenue. Age indicates when the company went public. Separation indicates the degree of separation of two weights. Top1 is taken as the shareholding ratio of the largest shareholder. Indep is dividing the numbers of directors by the number of independent directors. Bloss refers to the annual loss. If it is the loss, the value is 1, it is 0 otherwise. State indicates whether the company is state-owned. If yes, the value is 1. If no, the value is 0.

3.3. Model Design

Referring to the model design of Bu Danlu and Tu Changwen (2017), we set the following regression model:

$$\begin{aligned} Big4 = &\alpha_1 + \alpha_2 QFII + \alpha_3 Size + \alpha_4 Lev + \alpha_5 ROA + \alpha_6 Growth + \alpha_7 Age \\ &+ \alpha_8 Separation + \alpha_9 Top1 + \alpha_{10} Indep + \alpha_{11} Bloss + \alpha_{12} State + \beta \end{aligned} \quad (1)$$

$$\begin{aligned} A\cos t = &\alpha_1 + \alpha_2 QFII + \alpha_3 Size + \alpha_4 Lev + \alpha_5 ROA + \alpha_6 Growth + \alpha_7 Age \\ &+ \alpha_8 Separation + \alpha_9 Top1 + \alpha_{10} Indep + \alpha_{11} Bloss + \alpha_{12} State + \beta \end{aligned} \quad (2)$$

$$\begin{aligned} Atype = &\alpha_1 + \alpha_2 QFII + \alpha_3 Size + \alpha_4 Lev + \alpha_5 ROA + \alpha_6 Growth + \alpha_7 Age \\ &+ \alpha_8 Separation + \alpha_9 Top1 + \alpha_{10} Indep + \alpha_{11} Bloss + \alpha_{12} State + \beta \end{aligned} \quad (3)$$

The above three models are for the whole sample. In addition, the whole sample is classified into enterprises owned by state and by non-state for model 1, and model 1 regression is conducted respectively. According to Model 2, the whole sample is classified into enterprises

owned by state and by non-state, and model 2 regression is conducted respectively. According to Model 3, the whole sample is classified by revenue growth into enterprises with high growth and enterprises with low growth, and model 3 regression is conducted respectively.

4. Empirical Analysis

4.1. Descriptive Statistics

Table 1. Descriptive statistics

variable	mean	min	p50	max	sd
Big4	0.0500	0	0	1	0.230
Acost	13.92	11.51	13.82	19.40	0.690
Atype	0.960	0	1	1	0.200
QFII (%)	0.100	0	0	2.760	0.400
Size	22.24	19.89	22.06	26.27	1.310
Lev	0.410	0.0600	0.400	0.930	0.200
ROA	0.0300	-0.420	0.0400	0.210	0.0800
Growth (%)	0.160	-0.640	0.100	2.800	0.440
Age	10.66	-0.0700	8.690	27.12	8.080
Separation (%)	4.500	0	0	28.07	7.170
TOP1 (%)	33.45	8.560	31.16	73.35	14.48
Indep	0.380	0.250	0.380	0.600	0.0700
Bloss	0.110	0	0	1	0.310
State	0.290	0	0	1	0.450

Descriptive statistics of all variables in the sample are shown in Table 1. The average of Big4 of listed A-shares is 5%, indicating that the proportion of listed A-share companies hiring the international Big Four accountants is low. The mean values of Acost are 13.92. The mean values of Atype are 0.96. The average value of QFII is 10%. At present, the shareholding of qualified foreign institutional investors has increased greatly, but the average level is still relatively low. The mean values of Top1, Separation and Age were 33.45%, 4.5%, and 10.66 years respectively, and the standard deviations were 14.48, 7.17, and 8.08, respectively, indicating that Top1, Separation and Age were significantly different. The mean value of enterprise Size is 22.24, and the mean value of Lev is 41%. The mean value of Bloss is 11%, ROA is 3%, and Indep is 38%. The standard deviation of enterprise Size, Lev, ROA, Growth, Bloss, and Indep is relatively small, indicating that the distribution of the above indicators of listed A-shares is relatively average.

4.2. Regression Analysis

Table 2 demonstrates results of OLS model . The regression results of Model 1 are demonstrated in second column, mainly reflecting the impact of QFII on Big4. The third column reflects the regression results of Model 2, mainly reflecting the relationship between QFII and Acost. The regression coefficient of QFII in both Model 1 and Model 2 is significantly positive at the level of 1%, which proves hypothesis 1 that the QFII shareholding ratio has a positive proportional connection with the tendency of listed companies to choose the international "Big Four" accounting firms. The QFII shareholding ratio of listed companies has a positive proportional relationship with the audit cost of listed companies.

Column 4 reflects the regression results of Model 3, mainly reflecting the relationship between QFII and Atypes. The regression coefficient of QFII is positive at the 5% level significantly, proving hypothesis 2 that QFII shareholding ratio has a positive proportional relationship with the likelihood of listed companies receiving standard unqualified audit opinions.

Table 2. Full sample OLS regression results

Variables	Big4	Acost	Atype
QFii	0.27***(3.70)	0.03***(3.55)	0.44**(2.21)
Size	1.05***(23.94)	0.41***(112.17)	0.27***(5.97)
Lev	-1.27***(-3.88)	0.04(1.6)	-3.38***(-13.41)
ROA	3.84***(3.46)	-0.63***(-9.36)	4.06***(8.01)
Growth	-0.25**(-2.21)	0.01(1.39)	0.40***(3.26)
Age	-0.00(-0.1)	0.00**(2.51)	-0.06***(-8.86)
Separation	0.03***(6.38)	-0.00***(-3.16)	-0.00(-0.71)
TOP1	0.02***(5.46)	0.00**(2.34)	0.01***(3.36)
Indep	-0.44(-0.74)	0.05(1.06)	0.75(1.16)
Bloss	0.24(1.05)	0.05***(2.97)	-1.18***(-8.73)
State	0.12(1.06)	-0.12***(-12.30)	1.56***(11.29)
_cons	-27.94***(-27.13)	6.12***(23.26)	-0.64(-0.54)
Adjusted R2	0.262	0.589	0.325
Number of observations	13,236	14,851	14,813

Table 3. Regression results of OLS subsample

	Big4		Acost		Atype	
	Soes	Non-soes	Soes	Non-soes	high-growth	low-growth
QFii	0.13	0.37***	0.02	0.04***	0.32	0.49**
Size	1.19***	1.00***	0.50***	0.36***	0.44***	0.17***
Lev	-2.01***	-0.87*	-0.27***	0.18***	-2.41***	-3.42***
ROA	1.18	5.10***	-1.17***	-0.45***	3.01	3.65***
Growth	-0.42**	-0.17	-0.01	0.03***	-0.52***	2.36***
Age	0.03**	-0.02	0.00	0.00***	-0.07***	-0.05***
Separation	0.06***	0.01	-0.01***	0.00	0.02	-0.01
TOP1	0.02***	0.02***	-0.00**	0.00**	0.01	0.02***
Indep	0.27	-1.76**	0.13	-0.05	-0.20	0.89
Bloss	-0.23	0.64**	-0.01	0.07***	-1.90***	-0.88***
State					1.58***	1.47***
_cons	-31.34***	-25.78***	3.06***	7.24***	-6.10**	1.46
A-R²	0.287	0.197	0.621	0.547	0.264	0.357
N	4,167	8,810	4,882	9,969	2,888	11,893

The second and third columns show sub sample of enterprise owned by state and non-state. The correlation coefficient between QFII shareholding ratio in state-owned enterprise sample and Big4 is not significant, and QFII shareholding ratio in non-state-owned enterprise has significant positive correlation with Big4 at 1% level. Fourth and fifth columns show sub sample of enterprise owned by state and non-state. The correlation between QFII and Acost is not obvious in state-owned enterprise sample, and the regression coefficient between QFII and Acost in non-state-owned enterprise is significantly positive at 1% level. The above proves that hypothesis 3, compared with listed companies owned by country, the relationship among QFII shareholding ratio and choosing the big Four accounting firms and bearing higher audit fees are more significant positive.

Column 6 and 7 divide the whole sample into samples of high growth and low growth samples. Companies with above-average revenue growth rate are classified as high-growth companies, and those with below-average revenue growth rate are classified as low-growth companies. it can be seen that in the high-growth sample, the regression coefficient of QFII to Atype is not obvious; in low-growth sample, the correlation coefficient between QFII shareholding ratio and

Atype is significantly positive at the level of 1%. The above proves that hypothesis 4, relative to high-growth listed companies, there is a more significant positive relationship between the shareholding ratio of QFII in low-growth listed companies and the acquisition of standard unqualified audit opinions.

5. Conclusion

This paper uses OLS model to analyze the sample data of all A-share listed companies from 2016 to 2020, and studies the correlation between the shareholding ratio of qualified foreign Institutional Investors and audit quality. It is found that when the audit quality is measured by the size of accounting firm, the QFII shareholding ratio of listed companies is positively proportional to the tendency of listed companies to choose the "Big Four" accounting firms. When the audit quality is measured by the audit cost, the QFII shareholding ratio of listed companies is positively proportional to the audit cost of listed companies. When the audit quality is measured by audit opinions, the QFII shareholding ratio of listed companies is positively proportional to the possibility of listed companies obtaining standard unqualified audit opinions, so it can be seen that QFII holding shares of listed companies can improve the audit quality of listed companies. compared with listed companies owned by country, the relationship among QFII shareholding ratio and choosing the big Four accounting firms and bearing higher audit fees are more significant positive. Compared with high-growth listed companies, the positive relationship between QFII shareholding ratio and the acquisition of standard unqualified audit opinions is more significant in low-growth listed companies. QFII shareholding can play an external supervision role in corporate governance, which is conducive to ensuring the independence of external audit and improving audit quality. Relevant government departments should implement more measures to attract qualified foreign institutional investors to enter the Chinese market, which can not only attract more foreign capital and improve the vitality of the capital market, but also strengthen the supervision of external audit, improve the enterprise audit system and improve the audit quality.

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