EMPIRICAL RESEARCH ON IPO AUDIT FEE IN CHINA

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Abstract
The question of audit fee always is the matter of concern in the audit research area. This article has chosen for the first time a brand-new research area - the audit fee of initial public offerings. We have selected the IPO samples from 1999 to 2006 and examined the determining factors of IPO audit fee through the establishment of IPO audit fee model conforming to the condition of China. The result has further proven the correctness of the traditional audit pricing model. We may see from the return result, IPO audit fee still is influenced by the asset scale of the client, and the scale of auditors. In addition, through analysis of the unique factors of IPO, we can obtain some conclusions different from audit fee of the annual report, the significant purchase, sale, or the replacement of asset in IPO period usually can cause IPO audit fee to increase; in the situation that the auditor simultaneously provides the IPO audit with the verification of the capital, the IPO audit fee is higher.

Key words
IPO; Audit Fee; Audit Risk

INTRODUCTION
The question of audit fee always is the matter of concern in the audit research area. However, the audit fee of initial public offerings (IPO) is touched by few people. This article chooses the audit market of IPO - a brand-new research area, and conducts the system research on the audit fee of IPO. Why do we choose the audit fee of IPO as the object of our study? Unlike the audit of annual report, the audit market of IPO is a market full of intense competition. The audit fee of IPO is much higher than that of annual report, moreover, once a firm participated into IPO audit of a company, it is very easy for the firm to establish long-time cooperation with the
company, therefore, each auditor takes great emphasis on this market. In addition, in the audit market of annual report, the client needs to consider the switch cost when choosing the auditor, but IPO audit is the firm’s primary cooperation with the client, the client need not consider the switch cost when choosing the auditor, therefore competition degree of the IPO audit market is higher than annual report audit market. The behaviour of auditor will become more obvious in such a competitive market, which enables us to examine our theory more powerfully.

LITERATURE REVIEW

There is little literature about the IPO audit, which mainly concentrates in the relation between the auditor’s reputation and the under-pricing of IPO. Beatty (1989) and Balvers et al. (1988) proposed that the under-pricing of IPO, the difference between the IPO price and closing price of the first day, is the function of the ex ante uncertainty of the issue price; Hiring prestigious auditor will reduce this uncertainty. Beatty (1989) discovered in the IPO market, the return of the client of “big eight” is higher than that of “non-big eight”. Beatty (1989) found that the under-pricing of the companies which hiring the prestigious auditor is less, that is, the big firm can reduce under-pricing of the IPO companies. Stein et al, (1994) discovered that many famous dealers advice its clients to hire “big eight” firms, moreover, the market performance of these companies hiring “big eight” is good. Beatty (1993) examined the determining factors as well as the influence of the legal liability on IPO audit fee, and discovered that the determinant factors of the IPO audit fee are related with those of the traditional annual report audit, and accounting firm has considered the legal liability and the audit risk. Brian and Wilkins (1990) used the IPO audit fee to appraise the industry specialization strategy of the accounting firm and discovered when there is not obvious profession leader, audit fee will reduce with the increase in the profession market shares, however, when the market share of accounting firm was obviously higher than that of competitors, it will earn higher audit fee compared to other firms. Different from the former literature, this article is aimed to study the determinant factors of the IPO audit fee, and hopes to update Siminic’s audit fee model in relation to IPO in emerging market.

STRUCTURE OF IPO AUDIT MARKET

First we study IPO audit market share in recent years to understand the IPO audit market overall. Table 1 describes market share of first 4 and first 8 accounting firms from 2002 to 2006. Market share is listed according to IPO company’s gross asset and company number of each accounting firm. In 2002, the total of IPO company is altogether 71, in 2003 IPO company altogether 67, 2004 altogether 100, 2005 altogether 17, in 2006 altogether 66 (data from the Sinofin database). The data from Table 1 shows that IPO audit market in recent years is a concentrated market either
based on the IPO company asset or on company number, which is different from annual report audit market. Table 2 shows IPO audit market share of international “big five” from 2002 to 2006 is quite high, which is same with the annual report market. However their market share decreases progressively year by year.

### TABLE 1. IPO AUDIT MARKET SHARE OF FIRST 4 AND FIRST 8 ACCOUNTING FIRMS (2002-2006)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>based on the</td>
<td>CR4</td>
<td>CR8</td>
<td>CR4</td>
<td>CR8</td>
<td>CR4</td>
</tr>
<tr>
<td>IPO company’s</td>
<td>89.17%</td>
<td>94.21%</td>
<td>81.51%</td>
<td>90.41%</td>
<td>43.24%</td>
</tr>
<tr>
<td>asset</td>
<td></td>
<td></td>
<td>41.51%</td>
<td></td>
<td>56.73%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40.72%</td>
<td></td>
<td>58.49%</td>
</tr>
<tr>
<td>based on the</td>
<td>CR4</td>
<td>CR8</td>
<td>CR4</td>
<td>CR8</td>
<td>CR4</td>
</tr>
<tr>
<td>IPO company</td>
<td>19.72%</td>
<td>32.39%</td>
<td>26.87%</td>
<td>40.3%</td>
<td>24%</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td></td>
<td>25.60%</td>
<td></td>
<td>41.22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23.89%</td>
<td></td>
<td>37.54%</td>
</tr>
</tbody>
</table>

### TABLE 2. IPO AUDIT MARKET SHARE OF INTERNATIONAL “BIG FIVE” (2002 -2006)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>based on the</td>
<td>12.68%</td>
<td>7.46%</td>
<td>6%</td>
<td>5.92%</td>
<td>5.79%</td>
</tr>
<tr>
<td>IPO company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>based on the</td>
<td>89.17%</td>
<td>13.93%</td>
<td>19.41%</td>
<td>18.68%</td>
<td>18.55%</td>
</tr>
<tr>
<td>IPO company’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>asset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### THEORY CONSTRUCTION AND VARIABLE SELECTION

In China, when going to the public for the first time, company must provide audited financial report of past three years. For convenience, we called the financial reporting period, which is disclosed in the stock offering instruction booklet, IPO period. We definite audit fee charged by accounting firms during the IPO period as IPO audit fee (not including the fee of other service, for instance the fee of capital verification, and so on).

In order to examine the influencing factors IPO audit fee in China, We begin from the audit fee model of Simunic (1980) to discuss variables affecting the IPO audit fee. From the research paper of Simunic, we can find that its audit fee model is as follows:

\[ E(c) = cq + E(d) E(\theta) \]

\(^1\)IPO period is the period covered by the IPO audit report, usually 3 years.
In the formula, $E(c)$ is the audit fee; $c$ is unit audit resource consumed, including unit audit opportunity cost and normal profit. $Q$ is the resources which the audit consumes. $E(d)$ is anticipated loss due to audit report issued by CPAs. $E(\theta)$ is the possibility the anticipated loss due to audit report issued by CPAs.

According to the above audit fee model, audit fee consists of $cq$ and $E(d)E(\theta)$. And $cq$ is positively related to the audit work load. $E(d)E(\theta)$ is the reversely related with the audit effort. And $E(\theta)$ is not related with the audit effort. $E(d) = f(q)$ is a strict decreasing function. If we put $E(d)= f(q)$ into the Simunic audit fee model, then we can get:

$$E(c) = cq + f(q)E(\theta)$$ (1)

$$\frac{\partial E}{\partial q} = c + f'(q)E(\theta)$$ (2)

$$f'(q^*) = \frac{-c}{E(\theta)}$$ (3)

From equality (3) we can see in the perfect competitive market, as rational person CPA will certainly first carry on the appraisal of the anticipated loss; Then CPA will balance audit consumption and the audit effort, which can reduce anticipated loss (Pratt & Stice, 1994).

$$f(q^*) = -\int \frac{c}{E(\theta)}dq + k$$ (4)

From (4) we know, the audit work load is decided by probability distribution function of the anticipated loss. It is influenced mainly by the exterior legal environment and the characteristic of the company. In certain exterior legal environment, the audit risk is mainly decided by the characteristic of the company, including: the scale, the complexion degree and the capital structure of company and so on (Simunic, 1980). In addition, the consumption of audit resources is influenced by the scale of accounting firms, audit product curve and so on.

Besides the above traditional variable, some other variables will have the influence on IPO audit fee. Compared to the audit of annual report, the IPO audit has its own characteristic: first, the IPO audit includes the auditing of financial reporting, moreover IPO companies usually carry on the asset restructure before going to public (Lidongping, 2005). Therefore, the IPO audit work load and the complex degree are higher than the annual report audit. Second, IPO Company usually carry on the earnings management to meet requirements of listing (Lixian & Niejieli, 2006), therefore its audit risk usually is also higher than the annual report audit.
TO manifest the IPO audit the characteristic, this article has established the following experiment variable:

1) The mode in which the company goes to public. The IPO companies usually carry on the asset restructure before going to public to improve performance and meet requirements of supervisory department. But CPAs usually participate in the company asset restructure and help the IPO company to establish the accounting entry and the corresponding financial reporting. Simultaneously asset restructure is also an important means of financial package. Therefore the audit work load and the risk of the companies which carry on the asset restructure in IPO period is higher than that of the other companies.

RESTRUC=1, if companies in IPO period carry on the asset restructure; =0, no.

2) Whether the IPO company has behaviour of the significant purchase, the sale, the replacement of asset in IPO period. Some companies may have behaviour of the significant purchase, the sale, the replacement of asset in IPO period. According to the requirement of Chinese Securities Supervisory Association, if IPO company has behaviour of the significant purchase, the sale, the replacement of asset in recent three years of IPO, financial situation and the operating of the asset purchased, sold, or the replaced should be audited by the accounting firm. This will increase work load and the risk of IPO audit.

BIGCHANGE=1, if the IPO company has behaviour of the significant purchase, the sale, the replacement of asset in IPO period; =0, other.

3) The work load of audit. Because the IPO audit usually includes audit of financial report three year, its work load must be bigger than the annual report audit. Because the asset is accumulated through long-term period, therefore the difference between the asset at the end of the IPO year and the asset after IPO year will not be big, thus it is unable to represent well the difference of audit work load of IPO audit and the annual report audit. But the income usually increases along with the expansion of company. And the audit of income cycle and cost cycle is the emphasis of audit work, so the income in IPO period and the income of annual report represent the difference of audit work load in the IPO audit and that of the annual report audit.

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2In China, several companies may put some of the assets together to establish an IPO company. CPAs may helps the IPO company to establish its own account. To meet the requirements of listing the sponsor company will put the best assets into the IPO company.

3Chinese Security Regulation Committee requires that if the asset purchased or sold is over 70% of the company asset, the purchase or the sale of the asset is significant and should be audited separately.
auditor. Therefore, we use the income of IPO period divided by total asset at the end of the IPO period, to represent the work load of IPO audit.

\[
\text{TURNOVER} = \frac{\text{income of IPO period}}{\text{total asset at the end of IPO period}}.
\]

In selection of controlling variable, this article continues to use client scale, audit complex degree, financial situation as well as financial result according to the former audit fee model. In addition, we also choose some new variables to reflect the characteristic of IPO audit:

1) The client scale. The bigger the client scale, the higher the anticipated IPO audit fee (Simunic, 1980). We use the natural logarithm of gross asset at end of the IPO period to reflect the client scale.

\[
\text{LNTA} = \log_{\text{natural}} \text{of gross asset at end of IPO period}.
\]

2) The complex degree of audit. The higher complex degree of audit, the higher the anticipated IPO audit fee. We use the square root of total subsidiary companies to represent the complex degree of audit.

\[
\text{SQSUBS} = \sqrt{\text{total subsidiary companies}}.
\]

3) Financial situation. \( \text{ARTA} = \frac{\text{account receivable}}{\text{gross asset}} \times 100\% \), \( \text{AVARTA} \) is the mean of ARTA during IPO period; \( \text{INVTATA} = \frac{\text{inventory}}{\text{gross asset}} \times 100\% \), \( \text{AVINVTATA} \) is the mean of INVTATA during IPO period; \( \text{CURRATIO} = \frac{\text{current asset}}{\text{current debt}} \), \( \text{AVCURRATIO} \) is the mean of CURRATIO during IPO period. \( \text{LONGDEBT} = \frac{\text{long-term debt}}{\text{gross asset}} \times 100\% \), \( \text{AVLONGDEBT} \) is the mean of LONGDEBT during IPO period.

4) Operating result. The higher the income, the lower the audit risk, and the lower the anticipated IPO audit fee. Considering the IPO companies usually use the non-operating profit to carry on the earnings management, we use adjusted ROA to weigh operating result.

\[
\text{ROA} = \frac{\text{operating profit} - \text{other profit}}{\text{gross asset}} \times 100\%.
\]

\( \text{AVROA} \) is the mean of ROA during IPO period.

5) Indicator of earning management. The indicator of earning management is an important aspect affecting audit risk, we refer to Teoh (1998) and we use asset-adjusted discretionary accrual to represent the IPO earnings management. The bigger the discretionary accruals, the more the earning management. We use modified Jones model, and compute the nondiscretionary accrual using the following equation:

\[
\text{NDA}_{t} = \alpha_{1} \left( \frac{1}{\text{A}_{t-1}} \right) + \alpha_{2} \left( \Delta \text{REV}_{t}/\text{A}_{t-1} \right) + \alpha_{3} \left( \text{PPE}_{t}/\text{A}_{t-1} \right)
\]

In the above equation, \( \text{NDA}_{t} \) is non discretionary accruals of t period adjusted by the asset of t-1period, \( \Delta \text{REV}_{t} \) is the difference between the revenue of t period and the revenue of t-1period.
revenue of t-1 period, PPE<sub>t</sub> is the fixed asset of t period, A<sub>t-1</sub> is the total asset of t-1 period, \( \alpha_1 \), \( \alpha_2 \), \( \alpha_3 \) is the parameter of different industry in different year, the estimated values of these parameter is computed according to the following model:

\[
\frac{TA_t}{A_{t-1}} = a_1 \left( \frac{1}{A_{t-1}} \right) + a_2 \left( \frac{\Delta REV_t}{A_{t-1}} \right) + a_3 \left( \frac{PPE_t}{A_{t-1}} \right) + \varepsilon_t
\]

In the above equation (6), \( a_1 \), \( a_2 \), \( a_3 \) is OLS estimated value of \( \alpha_1 \), \( \alpha_2 \), \( \alpha_3 \), TA<sub>t</sub> is the total accruals of t period, \( \varepsilon_t \) represents discretionary accruals

DAC= discretionary accruals in IPO period / total asset at the beginning of IPO period

6) Characteristic of auditors. The scale of auditor or the reputation of auditor will influence the audit fee. The audit quality of well-known auditor or large-scale auditor is relatively high and their negotiation ability is strong, therefore, its anticipated audit fee is also high (Lishuang, 2003). We divide the auditors who audit IPO market into two kinds: Large-scale auditors and other auditors. The large-scale auditors include international “big five” and the first 8 accounting firms of IPO market calculated by their client quantity in corresponding year.

BIGAUD=1, IPO auditor is the large-scale accounting firm; =0, IPO auditor is other accounting firm.

7) Other services. The accounting firm may provide the profit forecast service and capital verification service to IPO company besides the audit service. Can these services affect the IPO audit fee? Therefore, we have designed the following two dummy variables:

FORCAST=1, the accounting firm may provide the profit forecast service to IPO company besides the audit service; =0, other.

VERIFY=1, the accounting firm may provide the profit capital verification service to IPO company besides the audit service; =0, other.

8) The time the IPO company has established before going to the public.

EXISTIME= the time IPO company have established. (9) Stock exchange.

EXCAHANGE=1, the IPO company is listed in Shanghai stock exchange; =0, the IPO company is listed in Shenzhen stock exchange.

9) The listed year. The guaranteeing and recommending person system is put into practice in 2004; this will influence the audit fee. We have set dummy variable YR1=1, if the IPO company is listed before 2004; =0, if the IPO company is after 2004. The requirement of listing changed in 2001, we have established dummy variable YR2=1, if the IPO company listed before 2001, went on the market; =0, if the IPO company listed after 2001.
10) The province of the listed company. Considering the economic level is different in different province, we refer to Liu Bin (2003) and divide the IPO company into two categories, PROV=1, if the company is located outside Guizhou, Gansu, Qinghai, Ningxia, and Shanxi province; =0, if IPO company is located in Guizhou, Gansu, Qinghai, Ningxia, or Shanxi province. We anticipated that IPO audit fee can be higher in developed area than undeveloped area.

**DATA COLLECTION**

We collect data of the IPO audit fee, the branches of auditor, the way of going to the public, and the data whether the auditor provide other service during besides audit service from the offering booklet from 1999 to 2006. We get the financial data and other correlation data for the sinofin database. We use the SPSS 11.0 statistics software to carry on the data analysis. During the process of data collection, we have rejected the following observation value:

1) The observation, which has not disclosed the IPO audit fee.

2) The observation, which discloses the mixed fee of different service. In the information disclosure, certain observation has disclosed the mixed fee of IPO audit, capital verification and the profit forecast service. Regarding such observation, we cannot find suitable variable to control work load of other service in audit fee decision model, so we deleted these observation.

3) The observation of financial listed company. Because the financial listed company is different from other listed in company in the aspect of business and the risk, therefore we have deleted these observations.

4) The observation of company which simultaneously has B share or H share besides A share. Because this kind of companies have the different investors, and are faced with different supervision environment and market pressure, we delete these observations.

After the following procedure, we have selected 254 example samples (Table 3).

**TABLE 3. IPO AUDIT FEE SAMPLE IN DIFFERENT YEAR**

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample number</td>
<td>14</td>
<td>12</td>
<td>9</td>
<td>52</td>
<td>39</td>
<td>55</td>
<td>14</td>
<td>59</td>
</tr>
</tbody>
</table>

**MODEL ESTABLISHMENT**

The linear regression model is established as following according to the above dependent variables, experiment variables as well as controlled variables:
LNAF = \(b_0 + b_1 \text{LNTA} + b_2 \text{SQSUBS} + b_3 \text{AVARTA} + b_4 \text{AVCURRATIO} + b_5 \text{AVROA} + b_6 \text{DAC} + b_7 \text{BIGAUD} + b_8 \text{RESTRUC} + b_9 \text{BIGCHANGE} + b_{10} \text{AVINVTA} + b_{11} \text{FORCAST} + b_{12} \text{VERIFY} + b_{13} \text{EXISTIME} + b_{14} \text{EXCHANGE} + b_{15} \text{YR1} + b_{16} \text{YR2} + b_{17} \text{PROV} + b_{18} \text{AVLONGDEBT} + b_{19} \text{TURNOVER}\)

**DESCRIPTIVE STATISTICS**

Table 4 shows the descriptive statistics of the model. Table 5 demonstrates the mean of the IPO audit fee is 1,689,500 Yuan (the currency ratio between Yuan and EUR is 770.80 on Oct. 12, 2014).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std.</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSET (Ten thousand Yuan)</td>
<td>179476.846</td>
<td>889974.586</td>
<td>168263.247</td>
</tr>
<tr>
<td>AF (Ten thousand Yuan)</td>
<td>168.951</td>
<td>351.774</td>
<td>953.000</td>
</tr>
<tr>
<td>AVREVENUE (Ten thousand Yuan)</td>
<td>7296.562</td>
<td>9913.854</td>
<td>5693.114</td>
</tr>
<tr>
<td>SQSUBS</td>
<td>1.139</td>
<td>1.324</td>
<td>1.020</td>
</tr>
<tr>
<td>EXISTIME</td>
<td>3.743</td>
<td>1.426</td>
<td>3.9</td>
</tr>
<tr>
<td>ARTA</td>
<td>0.192</td>
<td>0.129</td>
<td>0.236</td>
</tr>
<tr>
<td>AVINVTA</td>
<td>0.187</td>
<td>0.144</td>
<td>0.218</td>
</tr>
<tr>
<td>AVCURRATIO</td>
<td>1.411</td>
<td>0.902</td>
<td>1.653</td>
</tr>
<tr>
<td>AVROA</td>
<td>0.138</td>
<td>0.104</td>
<td>0.185</td>
</tr>
<tr>
<td>AVLONGDEBT</td>
<td>0.115</td>
<td>0.162</td>
<td>0.252</td>
</tr>
<tr>
<td>TURNOVER</td>
<td>3.177</td>
<td>2.191</td>
<td>2.995</td>
</tr>
<tr>
<td>DAC</td>
<td>0.248</td>
<td>0.441</td>
<td>0.332</td>
</tr>
<tr>
<td>RESTRUC</td>
<td>0.496</td>
<td>0.503</td>
<td>1.000</td>
</tr>
<tr>
<td>FORCAST</td>
<td>0.391</td>
<td>0.417</td>
<td>0.000</td>
</tr>
<tr>
<td>VERIFY</td>
<td>0.567</td>
<td>0.458</td>
<td>1.000</td>
</tr>
<tr>
<td>BIGCHANGE</td>
<td>0.538</td>
<td>0.501</td>
<td>1.000</td>
</tr>
<tr>
<td>PROV</td>
<td>0.675</td>
<td>0.502</td>
<td>1.000</td>
</tr>
<tr>
<td>BIGAUDIT</td>
<td>0.315</td>
<td>0.592</td>
<td>0.000</td>
</tr>
<tr>
<td>YR1</td>
<td>0.312</td>
<td>0.472</td>
<td>0.000</td>
</tr>
<tr>
<td>YR2</td>
<td>0.326</td>
<td>0.461</td>
<td>1.000</td>
</tr>
</tbody>
</table>

In addition, the mean of current ratio is 1.411, the mean of long-term debt asset ratio is 11.5%, the mean of the operating ROA is 13.8%. From these statistics, operating result of IPO company is quite good, and the risk is also quite low. The mean of
RESTRUC is 49.6%, which indicates 49.6% of the samples have the asset restructure during IPO period. The mean of the BIGCHANGE is 53.8%, which indicates approximately 53.8% of our samples have IPO company has behaviour of the significant purchase, the sale, the replacement of asset in IPO period.

ASSET = total asset (unit: Ten thousand Yuan).
AF = IPO audit fee (unit: Ten thousand Yuan).
AVREVENUE = the mean of income during IPO period (unit: Ten thousand Yuan).
RESTRUC = 1, if companies in IPO period carry on the asset restructure; = 0, other.
BIGCHANGE = 1, if the IPO company has behavior of the significant purchase, the sale, the replacement of asset in IPO period; = 0, other.
TURNOVER = income of IPO period / total asset at the end of IPO period.
LNTA = the natural logarithm of gross asset at end of the IPO period
AVROA is the mean of ROA during IPO period.
ARTA = account receivable / gross asset x 100%, AVARTA is the mean of ARTA during IPO period; INVTA = Inventory / gross asset x 100%, AVINVTA is the mean of INVTA during IPO period; CURRATIO = current asset / current debt, AVCURRATIO is the mean of CURRATIO during IPO the period. LONGDEBT = long-term debt / gross asset x 100%, AVLONGDEBT is the mean of LONGDEBT during IPO period.
DAC = discretionary accruals in IPO period / total asset at end of IPO period
BIGAUD = 1, IPO auditor is the large-scale accounting firm; = 0, IPO auditor is other accounting firm
FORCAST = 1, the accounting firm may provide the profit forecast service to IPO company besides the audit service; = 0, other.
VERIFY = 1, the accounting firm may provide the profit capital verification service to IPO company besides the audit service; = 0, other.
EXISTIME = the time IPO company have established.
EXCAHANGE = 1, the IPO company is listed in Shanghai stock exchange; = 0, the IPO company is listed in Shenzhen stock exchange.
YR1 = 1, if the IPO company is listed before 2004; = 0, if the IPO company is after 2004.
YR2 = 1, if the IPO company listed before 2001, went on the market; = 0, if the IPO company listed after 2001.
PROV = 1, if the IPO company is located outside Guizhou, Gansu, Qinghai, Ningxia, and Shanxi province; = 0, if IPO company is located in Guizhou, Gansu, Qinghai, Ningxia, or Shanxi province.
COMPARING ANNUAL REPORT AUDIT FEE AND IPO AUDIT FEE

Table 5 shows descriptive statistics of annual report audit (Lishuang, 2003) and that of IPO audit. We may see that the mean of IPO audit fee is higher than that of the annual report audit, which is related to the heavy workload of IPO audit. The mean of current ratio of IPO audit sample is lower than that of the annual report; the mean of the long-term debt ratio of IPO audit sample is higher than that of the annual report audit sample, which shows that the risk of IPO audit is a little big. The mean of revenue of IPO company is also lower than that of the annual report sample. And ROA of IPO company is higher than that of the annual report sample.

Table 5: Comparison of Annual Report Sample and IPO Sample

((unit: Ten thousand Yuan)

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Annual Report Sample (N=1215)</th>
<th>IPO Sample (N=254)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNASSET</td>
<td>11.544</td>
<td>12.0978</td>
</tr>
<tr>
<td>AUDIT FEE</td>
<td>30.239</td>
<td>171.951</td>
</tr>
<tr>
<td>SQSUB</td>
<td>1.952</td>
<td>1.139</td>
</tr>
<tr>
<td>CURRENT RATIO</td>
<td>1.570</td>
<td>1.411</td>
</tr>
<tr>
<td>LONG-TERM DEBT ASSET RATIO</td>
<td>0.048</td>
<td>0.115</td>
</tr>
<tr>
<td>REVENUE</td>
<td>73218.200</td>
<td>7296.562</td>
</tr>
<tr>
<td>ROA</td>
<td>3.3%</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

MODEL REGRESSION

We carry on the multi-dimensional linear regression to the sample. The F statistics of regression model is significant under 1% levels, and the adjusted R² is 0.528, so the explanation of the model is good. The collinearity diagnosis showed that there is not independent variable and the VIF value does not surpass 10.0, thus indicated after the model does not have the multiple collinearity problems. Regarding the cross-section data, the WHITE heteroscedasticity examination demonstrates that the residual heteroscedasticity of regression mode is not significant.

Table 6 demonstrates that the regression coefficient of the experiment variable RESTRUC is 0.089, and it is not significant. The regression coefficient of experiment variable BIGCHANGE is 0.181, and is remarkable under 5% level, which indicates the significant purchase, the sale, the replacement of asset in IPO period usually
cause the audit fee increase. The coefficient of TURNOVER is 0.016, but it is not significant.

Table 6 shows, that among the controlled variables, the coefficient of the client scale and IPO audit fee is significant under 1% level, which is consistent with the traditional audit price research. However, SQSUBS is not significant under 10% level. The coefficient of AVLONGDEBT and DAC is also not significant under 10% level. The coefficient of BIGAUDIT is significant under 10% level. This indicates the international “big five” and domestic big auditors earn audit premium, in IPO audit market than the other auditors. The coefficient of variable VERIFY is positive and significant under 10% level. This indicates that when the auditors simultaneously provide capital verification and IPO audit service, the audit fee price is higher. The coefficient of variable EXCAHANGE is positive and significant under 1% level. This indicates that the audit fee of IPO company listed the Shanghai stock market is higher. The year variable YR2 is negative and remarkable under 1% level. This indicates that, the IPO audit fee before 2001 is lower than that after 2001. I think it reflects the changes of the listing requirements.
CONCLUSION

We use the revised audit fee model to conduct the research on IPO audit fee. The explanatory ability of the model is good, and the adjusted $R^2$ is 0.54. We may see from the regression result, which is consistent with the traditional audit fee model. IPO audit fee is affected by the client scale and the auditor scale. When the auditors simultaneously provide capital verification and IPO audit service, the audit fee price is higher. The audit fee of IPO company listed the Shanghai stock market is higher than that of Shenzhen stock market. Our regression result has further proven the traditional audit fee model. In addition, we analyse the unique factor of IPO, and obtain some conclusions different from the annual report audit. the significant purchase, the sale, the replacement of asset in IPO period usually cause the audit fee increase; when the auditors simultaneously provides capital verification and IPO audit service, the audit fee price is higher.

REFERENCES


