Does the power of negotiation influence audit fees? Evidence from the Chinese context

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Abstract: This paper aims to test the impact of negotiation power between auditors and audited companies, in relation to audit fees. The study found that there is a significant positive relationship between auditors' power of negotiation and the audit fees. In addition, it found that there is a significant negative relationship between the size of the audited companies, their negotiating power and the audit fees. These findings indicate that when companies negotiate with Big4 audit firms, their bargaining power does not have a significant effect on the audit fees. Nevertheless, if the auditor is not one of the Big4, there is a significantly negative relationship between the company's bargaining power and audit fees. The relationship therefore changes according to the size of a company. If a company is large, there will be a negative relationship with the audit fees. However, if it is a small company, the relationship is not significant.

Keywords: audit negotiation; audit fees; bargaining power; accounting firms; audit clients.

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1   Introduction

Auditing is one of the most significant services provided by accounting firms, and audit fees are an extremely vital problem in relation to research on the auditing market. Before the certified public accountants (CPAs) audit a company, the negotiation of audit fees is an indispensable procedure. The competition among audit firms becomes more and more intense, so the companies' managements' decisions may depend on the amounts charged as audit fees which, under the conditions of other factors, will be the same. In addition, the competition for audit fees may affect auditors' independence and lead to there being an impact on the quality of audit, because the quality of an audit may depend on the real expenditure of CPAs, which is influenced by the audit fees. In general, the lower the audit fees, the poorer the quality.

In recent years, the Chinese market has witnessed an important increase in the number of listed companies. In return, this has created an important demand for auditing services. However, the Chinese market still lacks several firms. This dysfunction between offer and demand has created an opportunity to stimulate negotiation in an increasingly dynamic market. The challenge is significant for those auditing firms that are trying to gain a foothold in the market.

Auditing fees are a hot topic in theoretical research. Simunic (1980) has set a model for auditing fees which is the starting point for research in this area. In China, the research on auditing fees started in 2001, the year when the China Securities Regulatory Commission (CSRC) regulated that listed companies must reveal the amount that they have paid for auditing fees. Different researchers undertake research by considering different aspects of audit fees. Some of their conclusions are similar and some different. However, their contributions have led to research in this area becoming deeper. In addition, with the significant development of the economy, some new factors that influence audit fees have been found. In this study, a new factor, bargaining power, is considered, in order to enrich the research system for audit fees. The study will demonstrate the correlation between the bargaining power of accounting firms, the audited companies and audit fees. It will also give recommendations to both accounting firms and companies.

The application of Chinese new accounting and auditing principles has enlarged the scope of audit negotiation and made it more important for auditing services. According to

the principle, audit negotiation is the process and outcome that auditors and management of audited companies negotiate in relation to some of the issues relating to the auditing service. The game of audit negotiation is a complicated process; the negotiation result will be influenced not only by the negotiation environment, but also by different negotiators. In the past, research has been undertaken by analysing how the negotiation environment influences the result, and some undertaken from the perspective of negotiation strategies. Nevertheless, little research has been carried out to analyse how the different negotiators can affect the result of audit negotiations.

In China, there are only a few studies on audit negotiation. Fewer still show the correlation between the bargaining power of accounting firms, or companies and audit fees. Actually, the special auditing market environment in China is very good for audit negotiation research. Using new statistics to analyse the correlation between bargaining power and audit fees will therefore contribute to the application of negotiation skills to audit negotiation, which is significant for the development of auditing theories.

In audit fee negotiations, as rational economists, auditors from accounting firms will try to settle at a price that is as high as possible. On the other hand, the management of the audited companies hopes to obtain the lowest price, in order to save costs. There is therefore a game theory between the two negotiators. However, in the audit markets, due to some problems, for instance, information asymmetry and the lack of management, the two negotiators do not have the same information and bargaining power, which means they are not on the same level. They are thus not equal in this game. This raises the question about how this unequal place will influence the amounts charged for auditing fees. In recent years, some accounting firms have begun to achieve audit premium income after merging, is this premium related to the bargaining power of accounting firms? This study examines the impact of the negotiating power, which refers to the bargaining power between auditors (i.e., accounting firms) and audited companies, on the auditing fees for those companies that are listed in the Chinese A-share market.

2 Literature review

2.1 International studies on audit negotiation

Murnighan and Bazerman (1990) suggested that a multifaceted research strategy, combining theory, description and prescription, provides the greatest potential for progress in the study of audit negotiations. Since the beginning of this century, academics who are specialists in the audit negotiation area have begun to give attention to the overall research on audit negotiation. They have used questionnaires, interviews and some other methods, to carry out in-depth research on the negotiations between auditors and the audited companies. Beattie et al. (2000), from the UK, used the questionnaire method to undertake research on auditor-client negotiations. They asked the auditors to recall the situations in which companies who provided only an audit service also provided the highest auditing fees, and to answer the questionnaire. They also divided the conversations between the auditors and their clients into two categories, which are discussion and negotiation, according to the level of the conflicts. The result shows that the two main issues during the negotiations are problems with financial statements and the amounts charged for audit fees. Some other issues, like the implementation of laws and regulations, can be resolved by discussion.

Beattie et al. (2004) selected six cases among 2,000 on which to undertake more in-depth interviews and to analyse the documentation through the use of grounded theories and techniques. They developed a new-grounded theory and a model that related to those factors that may affect both the quality and the results of auditor-client negotiations. They also found some factors that may affect these negotiations, for instance, the relationship between negotiators, the negotiation strategies they use, and the audit result, in relation to financial statements, etc.

Gibbins et al. (2001) invited 93 experienced auditors to recall their real negotiation experiences and gathered evidence from these auditors and their clients about the negotiations. This study provided preliminary descriptive evidence that made up the fundamental form and model of audit negotiations, which is significant for future research. This study, however, is only concerned with one negotiator, i.e., the auditor, but ignores the perspective of the chief financial officers (CFOs) from the audited companies. Gibbins et al. (2007) thus conducted a further study, using a similar questionnaire and a similar number of CFOs from audited companies. The results showed that the main issues, from the CFOs' perspectives, are revenue assurance, expense capitalisation, the disclosure range of financial statements and asset impairments, etc. They argued that these issues were not points of conflict between the auditors and themselves, but they were able to solve these problems together. In addition, the CFOs tend to believe that audit and negotiation aim to comply with accounting measurement and the disclosure principle, instead of revealing economic substance. Audit negotiations relating to financial statements are common, 81% of CFOs have joined in with such negotiations. Gibbins et al. (2005) examined the consistency of the perspectives of the auditors and their clients in relation to auditing negotiations, based on the comparison of their audit negotiation memories. The results showed that there is strong consistency between the two kinds of negotiators' memories, concerning the types of negotiation problems, the people who joined in the negotiation, the factors in the negotiating process, and the importance of the accounting background. Both of the parties believed that certain backgrounds would affect negotiations, and the differences in their negotiation models would affect their negotiation strategies and results.

Musah (2017) examined the determinants of the audit fee (i.e., the client size, the type of auditing firm, profitability, loss, client risk, year, and whether they were multinational companies) of companies listed on the Ghana Stock Exchange. The study found that the client size and the type of auditing firm are among the determinants of audit fees. The findings revealed that there are significant implications, that arise from the type of audit firm and client size, for the negotiation of auditing fees.

Ettredge et al. (2018) examined the audit fee shocks that are associated with the implementation of the Sarbanes-Oxley Act's (SOX) internal control tests and reports. Regarding the relationship between auditing fees and auditors' bargaining power with clients, the study found that there was a positive association.

The discussion of prior studies, above, forms a clear overall outline for further research on audit negotiations. Their fundamental evidence and negotiation model will be the foundation for research in this area in the future.

2.2   *Chinese studies on audit negotiation*

Peng (2009) conducted research on the organisational forms of Chinese accounting firms. The result showed that different forms of organisations will reach different results in

auditing negotiations. When negotiating with their clients, it is more possible for accounting firms with limited liability to obtain an agreement, than it is for those with a general or special partnership. Yan (2011) conducted research on the impact of negotiation strategies on audit negotiation based on the experimental economics method. The study found that the concession strategies of clients have an impact on the results of audit negotiations.

Yan et al. (2010) applied the experimental economics methods in order to show that the customary system of rotation has great impact on audit negotiation. The accounting firms will have more possibility to reach an agreement during negotiations under the rotation system of a signature CPA than ordinary accounting firms. Even different rotation systems will have different impacts on the results of negotiation. Yan et al. (2010) also offered a statement on the direction of research on Chinese audit negotiations, based on current international researches. Similarly, Jixun and Lixia (2011) conducted research on the impact of the importance of clients on audit negotiation, based on experimental economic methods. The study found that auditors always use a cooperative negotiation strategy when they negotiate with clients who are more important, and they have a higher possibility of gaining agreement than they do with less important clients.

Zhang (2017) examined the impact of abnormal audit fees on the audit quality of listed companies in China. The study found that an abnormal audit fee was negatively associated with audit quality. This was due to the strong bargaining power of the client over the auditors, which decreased the audit fees, thus lowering audit quality.

Su and Wu (2017) examined the effects of the public disclosure of audit fees on the bargaining power between the client and auditor. They argued that, prior to the mandatory public disclosure of audit fees, there was a lack of information for both the auditor and client about how much other companies were charged by their auditors. The study found that there is a significant relationship between public audit fee disclosure and negotiating power. They revealed that the disclosure of audit fee decreases the bargaining power of auditors, leading to the overcharging of clients, and this weakens their ability to increase the fees for undercharged clients. In addition, the disclosure of the audit fee increases the bargaining power of clients over auditors when they negotiate the audit fees.

It is evident from the above discussion that there are a limited number of studies that have examined the relationship between audit fees and negotiating power in China.

2.3   Review of the factors that affect audit fees

According to the literature, there are three main kinds of factors that may affect the audit fees, which are factors taken from aspects relating to accounting firms, the clients' characteristics and the supervisory department.

2.3.1   The accounting firms' aspect

In relating to the ways in which accounting firms affect audit fees, Simunic (1980) is considered to be the founder in this research area. He invented the audit fees model for the first time in 1980, and it became fundamental for further research on this topic. Even today, his model is still being used in auditing research. Simunic (ibid.) conducted an experiment through which to examine several factors that may affect auditing fees through the use of his model, and he concluded that the dimensions of audited companies, the complexity of companies, the risk levels (*measured by the asset-liability ratio and the*

revenues in two recent years) and internal management, have significant impacts upon audit fees. He also found that the effect of the dimension of accounting firms on audit fees was not examined. Francis and Simon (1987) updated Simunic's model and did further research in the Australian audit market. His result is similar to Simunic's, apart from one factor. He concluded that there was a positive correlation between the dimension of an accounting firm and its audit fees. Johnson et al. (1995) conducted a study on New Zealand's audit market, and they concluded that the audit fees of the five biggest accounting firms are higher than those of others by 24.1%. The results confirm that the dimensions of accounting firms have an impact on their audit fees.

The auditors' expertise in a certain industry affects the auditing fees. The research offered different results in regard to the relationship between the auditors' expertise and audit fees, due to the different samples and the different countries in which they were carried out. There are three major findings. The first is that there is no correlation. Pearson and Trompeter (1994) conducted a study on the correlation between auditor's expertise and audit fees. Their results showed that there is no significant correlation between them. The second is that there is a positive correlation. Chen and Elder (2001) conducted a study on those auditors who have expertise in the regulated industry in the USA. The result showed that they have a significant audit premium when they audit companies in this industry, but there is no premium when they audit companies from other industries. The last is that there is a negative correlation. DeFond et al. (2000) conducted a study on the realty industry in Hong Kong. The result showed that there were lower audit fees for auditors who have expertise in the realty industry than for those who had no expertise. They concluded that there is a negative correlation between audit fees and auditor's expertise in a certain industry.

In relation to the alternation of auditors affecting the auditing fees, Turpen (1990) found that listed companies who are in deficit for several years prefer to employ another accounting firm to audit companies and to provide higher audit fees than before, in order to achieve the goal of opinion shopping. Craswell et al. (1995) found that the audit fees for the first year, in which the accounting firms changed from non-Big8 to Big8, is significantly lower than it is in the following years. They believed that this was a low price strategy to attract new customers. Accounting firms with a good reputation offered a low audit price to get the clients and to provide a high quality audit later. Then, their clients will rely on their high quality service and would be prepared to pay higher audit fees in order to retain the relationship. The accounting firms thus achieve the objective that will earn an audit premium for them in the years that follow.

2.3.2   *The aspect of the client's characteristics*

Firth (1985) added a variable, 'β', to the audit fees model in order to measure the risk. The analyses showed that there is a significantly positive correlation between audit fees and the dimensions of the audited companies, unsystematic risk and the ratio of the average balance of accounts' receivables and total assets. Anderson and Zeghal (1994) found that there is a positive correlation between audit fees and the client's dimension, complexity, and the cost of their internal audit. Francis and Stokes (1986) divided the sample into two parts, which are listed companies with large and small-scales. After the research, they concluded that there is an audit premium for the Big8 accounting firms only from those listed companies that are of small-scale, but that there is no premium from the large-scale listed companies.

2.3.3   The aspect of regulatory factors

The governments of Western countries hardly regulate audit fees, due to there being free competition in the market. From the 1980s to the 1990s, American Institute of Certified Public Accountants (AICPA) decreased the risk of monopoly in the audit market by relieving the restriction on the advertising competition among accounting firms. This policy caused great interest among researchers in this area. Several studies were conducted, from different points of view, in order to examine the influence of this policy on the auditing market. For example, Antle and Nalebuff (1991) investigated the influence of this policy on audit premium during 1982 and 1987 in the Australian audit market. The study did not support the view that the audit premium of the Big8 is due to a monopoly.

2.4   Review of studies on the relationship between bargaining power and audit fees

Zhang (1999) found that, during a negotiation, a negotiator who has more resources will force the other party, who has fewer resources, to reach an agreement, due to his superiority, instead of making concessions. Xia and Lin (2003) examined the reasons for the negative relation between audit fees and the total amount of a company's assets. The study found that there are two main reasons. One is that accounting firms provide a low price in order to earn the opportunity for cooperation with big companies. The other is that companies with a large amount of assets have more resources with which to negotiate, such as the support of the government. They thus have stronger negotiating power.

Hatfield et al. (2008) designed an experiment with which to simulate negotiations between auditors and their clients through the use of a computer. The results showed that the experience of the negotiators had a great impact on audit fees. Su et al. (2009) conducted a study on the correlation between the negotiating ability of auditors and clients and audit fees. The result showed that their negotiating ability had a significant impact on audit fees. Ran (2010) conducted an experiment through which to examine the impact of auditor's negotiating consultation and client's negotiation knowledge on the auditor's negotiation judgement. The study found that if the client had more knowledge of negotiation, and the auditor did not get the support of a negotiating consultant, the auditor was at a disadvantage during the negotiation.

Wang and Tuttle (2009) conducted a study on the impacts of legal regulations on audit fees during negotiation, from the perspective of the accounting firms. The study concluded that, under regulations, the accounting firms must apply the rotation system and rotate regularly, which will increase the costs of accounting firms. The reasons are as follows. On the one hand, they will lose some profit when they lose old clients and find new ones. In contrast, it will cost them a lot of money in order to get to know the new client before they cooperate. In such a situation, the auditors will therefore raise their audit price in order to cover loss when they negotiate with clients.

3   Theoretical framework and hypotheses development

3.1   The theoretical framework and hypotheses development

The price of a product is influenced by supply and demand in the market, and this applies also to the audit price. According to the pricing theory of marketing, the main factors in pricing a product are cost, customer and competitor, which are also called supply, demand and competition. In China, auditing, as a service, is a communal service. Its price is regulated by legislation, government, and the accountants' association, either directly or indirectly. The regulation is thus one of the factors. Figure 1 displays the pricing interval model for audit. The initial price is in the interval below, in which the clients are willing and able to pay over and above the cost of this service. Competition in the market, and regulation, are included in this interval, which accommodates the pricing process.

Figure 1   The interval-pricing model of auditing
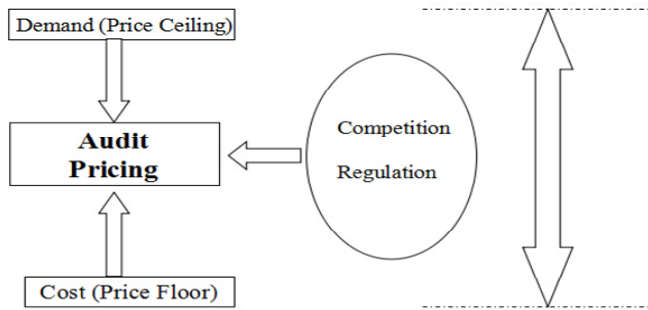
The model shows that the market is composed of demand and supply for every product or service. The demand for the audit service comes from those companies who need to be audited, which supports the development of the audit service. The price ceiling that result from the demand depends on the client's willingness to pay and their payment ability, as well as the value that they put on the service. Certainly, different clients have different demands. The accounting firms can provide an auditing service only if the audit price is higher than the audit cost. The audit cost includes the auditors' salaries, operational costs, acquisition costs, official and other costs. In the intensely competitive environment of the audit market, accounting firms use many strategies to compete with other firms. For instance, some accounting firms expand their market share by providing a lower audit price. No matter what strategy they use, the result of the competition will always influence the profit they earn. The quality of the audit service affects the investment decisions of investors. The regulation of the auditing market is necessary, and the Chinese Government has setup many regulations in order to avoid there being too much competition in the audit market. Some local governments have also setup policies with which to regulate the price floor for auditing.

Figure 1 shows the adoption of accounting, the adaptation of the basic negotiation setting and the categories of the contextual features of accounting. The accounting issue, audit-client process and the accounting outcome are the three main elements of the model. It will also be influenced by auditor-client history, and the outcome influences the next interaction. In auditor-client negotiations, some factors that affect the negotiation process and outcomes are very prominent, such as external conditions (which include

GAAP, GAAS, statutory power, accountability and deadlines), the interpersonal context (which includes the auditor-client relationship, personal and organisational agendas, expectations and risks) and the parties' capabilities (such as accounting expertise, negotiating expertise, relationships within the auditor-client relationships, etc.).

3.2 The hypotheses development

3.2.1 The relationship between audit fees and the bargaining power of accounting firms

During the negotiating of audit fees, the accounting firm, as a provider of audit services, plays the role of a seller, and their objectives are to get the clients and to earn profits by asking for audit fees that are as high as possible. In the audit market, the two negotiating parties are actually two parties in unequal places in game theory, due to the information asymmetry and the regulation system's imperfections. The accounting firms may strengthen their bargaining power, in order to raise their price, by stating the complexity of the service, their responsibility for all of the shareholders and their professional auditing service, etc. However, in the Chinese auditing market, there is intense competition among accounting firms. So, when they negotiate with companies, they will provide a more conservative price, reduce the risk of losing clients and meet their requirements as much as possible, which even go against the independence principle of an audit. So, accounting firms are at a disadvantage during an audit fee negotiation. However, according to Xiping (2009), the Big4 accounting firms still attract a very high premium in the Chinese audit market. Some accounting firms also obtain a high level of premium after they merge with others. Both Big4 and these stated accounting firms have in common that they are companies with large-scales and good reputations. It can thus be concluded that large-scale and a good reputation will strengthen the bargaining power of accounting firms. At the same time, some listed companies which are of small-scale and have weak bargaining power hope to cooperate with the big and famous accounting firms who can provide a high-quality service. These companies will make compromises on audit fees in order to obtain agreement. Based on the above discussion, the first hypothesis is developed as follows:

H1   There is a significant positive relationship between the audit fees and the negotiating power of the accounting firms.

3.2.2 The relationship between audit fees and the bargaining power of audited companies

In audit negotiations, the companies audited also have many powers, including the power of deciding with which accounting firm to cooperate, the power to bargain for a lower price, and the power to decide what kind of auditing environment is provided to auditors. As the buyer of audit services, the audited companies will try as much as possible to make the price low. Xia and Lin (2003) found that there is a negative correlation between the asset scale of a company and audit fees in the Chinese market. There are two reasons. On the one hand, the companies with large-scale assets also pay more tax, so they will obtain special policies from the government. They thus have stronger bargaining power. On the other hand, the big companies also need other services from accounting firms, like consultation, which is also attracts a lot of business for these firms. The accounting firms

will decrease the audit price in order to earn the cooperation of other business. The second hypothesis is therefore as follows:

H2   There is a significant negative relationship between the audit fees and the bargaining power of the audited companies.

4   Research method

The sample used in the study consists of 462 companies listed on the A-share market in China in the year 2014. The audit fees of these listed companies, which are audited by the top 20 Chinese accounting firms, is the dependent variable of this empirical analysis. The data are taken from the financial information revealed by Chinese Institute of Certified Public Accountants (CICPA) and data from financial institutes were not included because of their specialty and complexity. The natural logarithm of audit fees was used in the analysis in order to reduce the heteroskedasticity that is caused by different dimensions.

According to the former studies, there is a correlation between the scale of accounting firms and their audit fees, which mean that those that are of larger scale earn more auditing fees than those of smaller scale. CICPA has published a list of the top 50 accounting firms in China in 2014. However, the auditing fees generated by the top 20 accounting firms account for 79.8% of the total amount of audit fees. This study therefore regards the audit fees of listed company that were audited by top 20 accounting firms in 2014 as the sample. Qingfa (2010), and others, have shown that the Big4 accounting firms earn significantly more premium than others. The analysis therefore assumed that the Big4 have stronger bargaining power than the others. The explanatory variable of the accounting firms' negotiating ability was defined as '1' for the Big4, and '0' for others.

The bargaining of the audited companies was measured based on Wenbin et al.'s (2009) model, as follows:

$$Power_{ij} = \frac{S_{kj}}{\sum S_{ijk}}$$

The numerator S_{kj} represents the audit fees of company, j, in a certain year, denominator $\sum S_{ijk}$ represents the total audit fees of the accounting firm from the industry, k.

Apart from bargaining powers, there are other factors that may affect the amounts of audit fees. The analysis thus still needs some control variables. They are asset, leverage ratio, gross profit, loss or not, tenure or not, and the audit opinion. The following multiple linear regression model was applied between the audit fees and the bargaining powers:

$$LnFee = b_0 + b_1 Power1 + b_2 Power2 + b_3 Asset + b_4 Leverage + b_5 Gross\ profit$$
$$+ b_6 Loss + b_7 Tenure + b_8 Opinion + \varepsilon$$

where

*Power*1   the bargaining power of accounting firms

*Power*2   the bargaining power of audited companies

Asset   the company's assets

Leverage   the ratio of total liabilities and total assets

Gross profit   the gross profit of a company

Loss   if the net income of a company is positive, the loss of it is 0, if the net income is negative, the loss is 1

Tenure   if the accounting firm that audited a company is the same as that in previous years, the tenure is 1, if the accounting firm has been changed to another one, the tenure is 0

Opinion   if the audit opinion is standard unqualified, the opinion is 1, if not, the opinion is 0.

5 Results and discussion

5.1 Descriptive statistics

Table 1 shows the descriptive statistics. Table 1 shows that the lowest audit fee is only 0.3 million, the highest is 40.5 million, and the mean value is 4.8523 million. The gap between the lowest and highest audit fees is 37.5 million, which means that there are large differences among the audit fees of different companies. There are also big differences in relation to their assets, leverage ratios and gross profits. It is thus concluded that large differences exist among the companies' scales. For *Power2*, which refers to the bargaining power of companies, the mean value is 28%, far from the lowest and highest values, which are 1% and 81%. There is thus also a big difference in the bargaining powers of different companies.

Table 1   Descriptive statistics results

	Minimum	Maximum	Mean	Std. deviation
Audit fees	0.300	40.500	4.852	6.572
Power1	0.000	1.000	0.466	0.501
Power2	0.010	0.810	0.281	0.149
Asset	8,790	68,3047	53,726.427	106,643.089
Leverage	0.290	0.960	0.674	0.157
Gross profit	792	612,559	43,199.485	95,118.500
Loss	0.000	1.000	0.106	0.31036
Tenure	0.000	1.000	0.912	0.28377
Opinion	0.000	1.000	0.970	0.16898

5.2 Correlation analysis

The correlation coefficients are shown in Table 2. From Table 1, the coefficient between audit fees and *Power1* is 0.309 and the significance is 0.000, which is lower than 0.01, so the result is significant, and there is a significantly positive correlation between audit fees and the bargaining power of accounting firms. Similarly, the coefficient between fees and *Power2* is –0.054, and the significance is lower than 0.01. The audit fees are therefore

negatively correlated with the bargaining power of companies. The audit fees are also significantly positively correlated with assets, and are negatively correlated with the leverage ratio, the loss and the tenure. For audit fees and gross profit, there is a positive correlation between them, but the significance is 0.394, so the correlation is not significant.

Table 2   Pearson correlation analysis results

		Audit fees	Power1	Power2	Asset	Gross profit	Leverage
Audit fees	Correlation	1					
	Sig. (2-tailed)						
Power1	Correlation	0.309**	1				
	Sig. (2-tailed)	0.000					
Power2	Correlation	–0.054**	–0.041	1			
	Sig. (2-tailed)	0.000	0.679				
Asset	Correlation	0.889**	.512**	.537**	1		
	Sig. (2-tailed)	0.000	0.000	0.000			
Gross profit	Correlation	0.007	–0.015	0.077**	0.036	1	
	Sig. (2-tailed)	0.394	0.492	0.004	0.072		
Leverage	Correlation	–0.011**	–0.021	0.091	–0.031**	0.987**	1
	Sig. (2-tailed)	0.003	0.075	0.083	0.001	0.000	

Note: **Correlation is significant at the 0.05 level (two-tailed).

5.3   Regression analysis

Table 3 shows the regression results of the relationship between the bargaining power and the audit fees. Table 3 shows that R^2 is 0.869 and adjusted R^2 0.860, F-statistics are 90.370, and significance is 0.000, so the regression equation is significant. The standard error of estimate is 0.433, which means that the interpretation of explanatory variables and controlled variables to audit fees is more than 43%. The parameter of *Power*1 is 0.710 and the significance is 0.000, hence it is obvious that the negotiating power of the accounting firms and audit fees have a significantly positive relationship. This result indicates that when the bargaining power of accounting firms is higher, their audit fees were raised at the same time. This supports the first hypothesis, i.e., H1, and hence it is accepted. Moreover, Table 3 shows that the parameter of *Power*2 is –1.906 and is at a 0.000 significance. There is thus a statistically significant negative relationship between the audit fees and the negotiating power of the audited companies. This indicates that large audited companies have high bargaining power that reduces the audit fees. This also supports the second hypothesis, i.e., H2, and thus it is accepted. In addition, the audit fees have a significantly positive correlation with companies' assets, and have a significantly negative correlation with companies' bargaining power, loss and tenure. The positive correlation with opinion and gross profit are not significant.

Table 3 Regression analysis results – overall

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	5.433	1.718		3.162	0.002
Power1	0.710	0.111	0.307	6.388	0.000
Power2	−1.906	0.381	−0.246	−5.005	0.000
Asset	0.408	0.041	0.577	9.861	0.000
Gross profit	0.129	0.166	0.029	0.778	0.438
Loss	−0.281	0.152	−0.075	−1.851	0.006
Tenure	−0.226	0.157	−0.056	−1.444	0.015
Opinion	0.425	0.271	0.062	1.571	0.119

Model summary

R	R-square	Adjusted R-square	Std. error of estimate
0.932	0.869	0.860	0.43350

ANOVA

Model	Sum of squares	df	Mean square	F	Sig.
Regression	118.878	7	16.983	90.370	0.000
Residual	17.853	95	0.188		
Total	136.730	102			

Table 4 Regression analysis results of the companies audited by the Big4

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	3.789	2.924		1.296	0.202
Power2	−1.311	0.539	−0.208	−2.430	0.210
Asset	0.512	0.064	0.748	7.997	0.000
Gross profit	0.226	0.301	0.053	0.750	0.057
Loss	−0.013	0.314	−0.003	−0.040	0.368
Tenure	−0.238	0.231	−0.074	−1.028	0.130
Opinion	1.219	0.480	0.177	2.540	0.015

Selecting only cases for which *Power*1 = 1.00

Model summary

R	R-square	Adjusted R-square	Std. error of estimate
0.899	0.809	0.781	0.46659

ANOVA

Model	Sum of squares	df	Mean square	F	Sig.
Regression	37.704	6	6.284	28.864	0.000
Residual	8.926	41	0.218		
Total	46.631	47			

Further analyses were conducted to test whether there are differences between Big4 accounting firms and non-Big4 accounting firms. In addition, to test whether there are differences between the different sizes, i.e., the scale, of the audited companies. Tables 4 and 5 shows the regression results of those companies audited by Big4 and non-Big4 accounting firms. The results show that R^2 of the regression is 0.809, and the adjusted R^2 is 0.781, F-statistics are 28.864. R^2 and adjusted R^2 from Table 5, and are 0.826 and 0.805 separately, and the F-statistics are 38.103. Both of the regression equations from Tables 4 and 5 are therefore significant. However, there is a big difference between the results of Tables 4 and 5. This is *Power2*, the bargaining power of the audited companies.

Table 5   Regression results of the companies audited by non-Big4

Model	Unstandardised coefficients		Standardised coefficients	*t*	*Sig.*
	B	*Std. error*	*Beta*		
(Constant)	7.870	2.060		3.820	0.000
Power2	–2.527	0.532	–0.422	–4.750	0.000
Asset	0.321	0.055	0.517	5.789	0.000
Gross profit	0.150	0.184	0.050	0.814	0.419
Loss	–0.461	0.167	–0.192	–2.763	0.018
Tenure	–0.020	0.215	–0.006	–0.091	0.009
Opinion	–0.168	0.327	–0.037	–0.513	0.610
Selecting only cases for which *Power1* = 0					

Model summary

R	R-square	Adjusted R-square	Std. error of estimate
0.909	0.826	0.805	0.37759

ANOVA

Model	Sum of squares	df	Mean square	F	Sig.
Regression	32.595	6	5.432	38.103	0.000
Residual	6.843	48	0.143		
Total	39.438	54			

Table 4 shows that there is a negative correlation between *Power2* and *audit fees*, but the significance of it is 0.21, more than 0.05. The correlation of *Power2* on audit fees is therefore not significant, which means the effect of the bargaining power of the audited companies on audit fees is small when they negotiate audit fees with Big4 accounting firms. Nevertheless, when they negotiate with others, their bargaining power does make sense, Since, in Table 5, the significance of *Power2* is 0.00 and its standardised coefficient is –0.422, there is therefore a significantly negative correlation between audit fees and audited companies' bargaining power when the companies negotiate with non-Big4 accounting firms. There may be some possible reasons. First, the bargaining power of Big4 accounting firm is so strong that the other party is not able to weaken it. Second, Big4 accounting firms have a competitive advantage through their large-scale and good reputation, so they do not pay much attention to gaining clients, whether the company has strong bargaining power or not. The amounts of the audit fees are hardly reduced at all by the company's strong power. Thirdly, some companies are eager to be audited by Big4 accounting firms, because it will help their better development in the

market. In this case, they do not pay much attention to audit fees. These companies are willing to pay more money in order to be the client of one of the Big4 companies. Such a situation, in which there is much demand and little supply, thus came into the auditing market.

Table 6 Regression results of the companies of large-scale (size) that are audited by non-Big4 companies.

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	14.081	3.581		3.932	0.000
Power2	–2.259	0.595	–0.461	–3.797	0.000
Gross profit	0.102	0.406	0.031	0.251	0.003
Loss	–1.028	0.488	–0.276	–2.105	0.041
Tenure	–0.313	0.327	–0.115	–0.956	0.034
Opinion	0.408	0.582	0.090	0.700	0.007

Selecting cases for which *Asset* > 23.46 and *Power*1 = 0

Model summary

R	R-square	Adjusted R-square	Std. error of estimate
0.591	0.349	0.278	0.74466

ANOVA

Model	Sum of squares	df	Mean square	F	Sig.
Regression	13.683	5	2.737	5.935	.001
Residual	25.508	46	.555		
Total	39.191	51			

Nevertheless, as mentioned, if the accounting firm is not one of the Big4, there is a significantly negative correlation between the company's bargaining power and audit fees. As other accounting firms do not have the large-scale and good reputation of the Big4. They are not able to ask whatever price they want, since they may decrease audit fees in order to gain clients. Even when the other party is a big company and has strong bargaining power, the small accounting firms are likely to make the audit fees as low as possible in order to compete with the Big4 and to gain clients, so that the scale of the accounting firm will gradually become larger and larger. For other variables, audit fees are significantly and positively correlated with assets and opinion in Table 4, and are not significant with other variables. In Table 5, audit fees are significantly and positively correlated with assets, and are negatively correlated with loss and tenure. Other correlations are not significant.

Table 6 and Table 7 show the results of the test for differences in the size (i.e., scale) of the companies audited by Big4 and non-Big4 accounting firms. For large-scale companies (i.e., large audited companies), the result is the same as the previous one. The correlation between bargaining power and audit fees is significantly negative. The R^2 and adjusted R^2 are 0.349 and 0.278, the F-statistics are 5.935, and the significance is 0.001. The regression is thus significant. However, for small-scale companies, the result is different. In Table 7, the significance of *Power*2 is 0.11, which is more than 0.05. Although the coefficient is negative, it cannot be said that there is a negative relation

between them, because it is not significant. If a company's size is small, its bargaining power has little effect on auditing fees during audit fee negotiation with accounting firms. To examine the regression, R^2 is 0.502, and the adjusted R^2 is 0.471, the F-statistic is 7.270 and significance is 0.013, less than 0.05, so the regression is significant.

Table 7   Regression results of the companies with small-scale (size) audited by non-Big4

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	16.012	3.015		5.311	0.000
*Power*2	–2.881	1.086	–0.355	–2.653	0.110
Gross profit	0.340	0.338	0.134	1.006	0.020
Loss	–0.300	0.259	–0.165	–1.160	0.252
Tenure	–0.537	0.460	–0.191	–1.166	0.005
Opinion	1.038	0.765	0.218	1.357	0.182

Selecting cases for which *Asset* ≤ 23.46 and *Power*1 = 0

Model summary

R	R-square	Adjusted R-square	Std. error of estimate
0.482	0.502	0.471	0.61529

ANOVA

Model	Sum of squares	df	Mean square	F	Sig.
Regression	5.149	5	1.030	7.270	0.013
Residual	17.036	45	.379		
Total	22.185	50			

6   Conclusions

This study aims to test the impact of the negotiating power between auditors and the audited companies on auditing fees in China. Many variables affect the amount for audit fees; apart from the company's assets, gross profits, leverage ratio, loss or not, tenure and opinion, in the auditing report, the audit fees are also influenced by the bargaining power of accounting firms and the bargaining power of the audited firms. In general, the study found that the audit fees significantly and positively influence the bargaining power of accounting firms, and on the other hand, negatively affect the bargaining power of the audited companies. More specifically, the study found that Big4 accounting firms already have very strong bargaining power that has an impact on the audit fees. On the other hand, the large audited company's bargaining power does affect the audit fees of non-Big4 accounting firms, but not those of the Big4.

The results of the study have some implications and we offer some recommendations. For the accounting firms, especially for non-Big4 firms, firstly, whenever a non-Big4 accounting firm wants to improve its bargaining power in relation to audit fees; it must improve its auditing quality. The price of the audit service depends on its quality. A high audit quality is not only good in drawing a higher price, but is also necessary for the accounting firm's future development. Non-Big4 accounting firms can therefore optimise

the structure of their staff and provide a good development platform for them. In the service industries, staffs are the most important factor. For accounting firms, auditors are the most significant. They are the guarantee of a high-quality service. Accounting firms should hire those auditors who are professional and well experienced. They should also provide the auditors with a good working environment and a good development platform, as well as enough training, in order to keep them working for the company for the long-term, and to develop them well in the future. In addition, they should enhance the audit quality control system and reduce risk. The risk in relation to the auditing process cannot be neglected, and sufficient attention should be paid to it. Accounting firms should implement the project quality checking system and take other actions in order to control risk and improve quality. Finally, they need to improve the auditor's ethical standards and to develop a healthy company culture. Professional ethics are necessary in the auditing area. It may even decide the fate of an accounting firm. The famous scandal of Enron is a big warning of this sort of occurrence. Arthur Andersen, one of the biggest accounting firms, went bankrupt overnight, because of their lack of professional ethics. So, accounting firms should conduct a healthy working culture in order to help the auditors to improve their ethical standards. Second, the accounting firm should designate a professional negotiator, who is professional in negotiating and very knowledgeable about the important elements of auditing. The professional negotiator will bring a much greater premium to accounting firms during an audit negotiation, than a partner who is not good at negotiating brings (Ran, 2010). Third, the use of an appropriate initial price and initial offer are very significant in negotiation. It will lead the other party's expectations. The best strategy for a win-win result for an auditor is the HRESSC Strategy, which refers to a strategy that combines a high real expectation with a little systematic concession (Shengfang, 2012).

For audited companies, especially small sized ones, there are some recommendations for improving their bargaining power. The companies might enlarge their scale (i.e., their size). This is a complicated method, but it is necessary for a company, not only for its audit fees, but also for its future development. Companies might develop new technology in order to improve efficiency and save cost, so that they are be able to improve their core competence. In addition, they should set strong internal control systems with which to enhance the internal audit. Scale enlargement should be carried out, based on a complete internal control system. For those listed companies who already have a large-scale, they should transfer their scale priority into negotiating priority. They should take advantage of their large-scale during the negotiations in order to let the accounting firm know that this company has the ability and potential to develop well in the future, so that they are willing to decrease audit fees to gain this company as a client. In addition, companies should also hire or train professional negotiators, who will enhance the bargaining power of the company. Second, the company might develop and improve its reputation. The small accounting firms are likely to make concessions on audit price in order to gain a client from a company with a good reputation and a high social position.

For the Chinese regulators: firstly, they might legislate to give some statutes with which to purify the intensely competitive environment in the audit market. The statutes should clearly define the rights and obligations of accounting firms and audited companies, in case some ambiguous action should lead to a bad result. In addition, the government should improve and perfect laws, like Corporate Law, in order to ensure the appropriate rights of both accounting firms and the companies that they audit. Secondly, the regulators might take some action to support mergers of accounting firms. In addition,

in merging different areas, the regulators might help by coordinating with local government so as to earn a profitable policy from the government. This would mean that it was more advantageous for small accounting firms to merge with each other. Finally, the regulators might setup an organisation to provide a negotiation consultation service to accounting firms, especially to small accounting firms. Ran (2010) has suggested that if an auditor can get enough consultation about negotiation, it would help them to get more benefit from that negotiation.

This study has some limitations. First, there may be some other control variables, e.g., the level of a company's internal control, that have an impact on the audit fees, but it did not include this in the regression model. Future research might consider this issue. Second, the current study only focused on the audit fees, but other payments to accounting firms are neglected. Future studies might address this point. Finally, the sample of the study consisted of company's listed on one stock exchange in China. Future research might include companies from different stock exchanges in the country.

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