# 東海大學會計學系碩士班 碩士論文

The Effect of Clients from Leading Companies on Auditors' Pricing Strategy: Evidence from Initial Engagement of A Shares in China

龍頭客戶對會計師首次查核審計公費策略之影響:以 中國 A 股之探討

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中華民國一〇五年七月

#### ACKNOWLEDGEMENT

感謝 陳俊合 老師、 許書偉 老師、 林秀鳳 老師 給予我寶貴的意見, 讓這篇論文更臻完整。

著名的教育家陶行知曾經說過:「先生不應該專教書,他的責任是教人做 人;學生不應該專讀書,他的責任是學習人生之道」。在寫論文的一年裡,影響 我最多的不是學到如何寫論文、推假說等等,而是在和指導老師一次又一次地見 面中學到如何做事及做人,要感謝指導老師 林秀鳳 老師 在面對我們的論文時 總是充滿熱情和認真,不厭其煩的回答問題,讓我學到要積極認真的去面對事情 並在其中找到樂趣;在我沒有注意到的地方或是犯錯時也會適時的提醒,讓我學 會在做事之前必須要先思考,想得越多錯的越少並提醒自己不再犯相同的錯誤。 老師身上有太多可以學習的地方,只可惜相處時間太短,每次和老師見面完覺得 自己又成長了一些,改變我的是在一件又一件的小事中慢慢潛移默化地被老師影 響。以後會記得的不是 stata 怎麼跑、論文怎麼寫,而是寫論文的這一年裡與秀 鳳老師相處的點點滴滴,感恩我能在學習的路上遇到秀鳳老師。

感謝我在碩士班裡交到的朋友,在我的低潮時期拉我一把,包容我許多的 缺點也給我很多幫助,有了你們更加豐富了我的碩士生活,讓我的碩士兩年過得 快樂開心,過去感謝有你們,希望未來也還是有你們。另外,要感謝兩位在我人 生有重大意義的朋友,一位認識了 20 年,一位陪伴了我在美國的四年時光,謝 謝你們無條件的支持跟不離不棄。

我是幸運的也是自豪的,擁有父親的性格,走在母親走過的道路上。 感謝 父親的放任自由,感謝母親的用心栽培。我的一切都來自於你們,我所得到的成 績歸於你們。

陳彥蓉 謹誌於

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中華民國一零五年七月



# ABSTRACT

Prior studies have examined auditors' characteristics such as auditors' ability, specialization, reputation and even audit quality. This study shows the idea of the effect of clients' reputation on the audit fees, and examines the relationship between audit fees and influence of clients from leading companies in different industries. The empirical research shows that there are some difference of audit fees strategy between U.S. and China.

This study uses OLS model to estimate the clients' reputation on audit fees. China public company data are collected from China auditing section of Taiwan Economic Journal (TEJ) database for the period of 2003-2014. The observations were selected only for companies who issue "A" shares in Shanghai and Shenzhen Stock Exchange. The dependent variable represents the logarithm of audit fee in the current year, which is to examine the effect of client from leading companies on the audit fees of initial engagement. Two test variables are examining the industrial difference.

This study argues that the reputation of leading companies could make auditors to charge premium audit fees from other clients. Based on this reason, auditors will give leading companies discounts in audit fees. However, when the size of companies increase, their audit fees also increase due to complex procedure and higher audit risks. This study finds that when clients from leading companies don't get audit fees discount means auditors are dominate audit fees decision. Auditors will determine their audit fees on their cost and time spent, regardless Big N or Non-Big N. Then, this study posits that clients from leading companies' reputation will help auditors in their audit fees negotiations with other clients. Clients are separated into two group, clients are in the same or different industry with clients from leading companies. This study finds that the reputation of clients from leading companies only works for the clients are in the different industry with clients are in the same industry with clients from leading companies. There is no audit fees discount or premium for the clients are in the same industry with clients from leading companies.

**Keywords:** leading companies; audit fees; clients' reputation; initial engagement; pricing strategy.

# **TABLE OF CONTENTS**

| ACKNOWLEDGEMENT  | i                          |
|--|----------------------------|
| ABSTRACT   | ii                         |
| TABLE OF CONTENTS  | . iii                      |
| LIST OF FIGURES  | . iv                       |
| LIST OF TABLES   | v                          |
| 1. INTRODUCTION<br>1.1 RESEARCH BACKGROUND AND MOTIVE<br>1.2 RESEARCH PURPOSE<br>1.3 RESEARCH FRAMEWORK.   | 1<br>1<br>3<br>4           |
| <ol> <li>LITERATURE REVIEW</li></ol>   | 6<br>6<br>7<br>10          |
| <ul> <li>3. RESEARCH DESIGN</li></ul>  | 15<br>15<br>16<br>20<br>23 |
| <ul> <li>4. RESEARCH RESULTS</li> <li>4.1 DESCRIPTIVE STATISTICS</li> <li>4.2 REGRESSION RESULTS</li> <li>4.3 ADDITIONAL ANALYSIS</li> <li>4.4 SENSITIVITY ANALYSIS</li> </ul> | 25<br>25<br>27<br>31<br>36 |
| 5. CONCLUSION  | 46                         |
| REFERENCES   | 49                         |

# LIST OF FIGURES

| Figure 1 Research Framework | . 5 |
|-----------------------------|-----|
| Figure 2 Concept Map        | 15  |



# LIST OF TABLES

| Table 1 Initial Audit Engagement Fees and Lowballing 11                              |
|--|
| Table 2 Variables Definition    22   |
| Table 3 Sample Selection   24  |
| Table 4 Sample Distribution  |
| Table 5 Effect of Leading Companies on Audit Fees of General Clients                 |
| Table 6 Effect of Companies' Size on Audit Fees of General Clients                   |
| Table 7 Effect of Non-Big N/ BIG N Audit Firms on Audit Fees                         |
| Table 8 Effect of BIG N Audit Firms on Audit Fees of Large/Small Company             |
| Table 9 Effect of Non-BIG N Audit Firms on Audit Fees of Large/Small Company 35      |
| Table 10 Effect of Leading Companies on Audit Fees of General Clients after          |
| Winsorized   |
| Table 11 Effect of Companies' Size on Audit Fees of General Clients after Winsorized |
|  |
| Table 12 Effect of Leading Companies on Audit Fees of General Clients under          |
| Different Complexity of Transactions   |
| Table 13 Effect of Companies' Size on Audit Fees of General Clients under Different  |
| Complexity of Transactions   |
| Table 14 Effect of Non-Top 10/ Top 10 Audit Firms on Audit Fees 41                   |
| Table 15 Effect of Top 10 Audit Firms on Audit Fees of Large/Small Company 42        |
| Table 16 Effect of Non-Top 10 Audit Firms on Audit Fees of Large/Small Company 43    |

# **1. INTRODUCTION**

## **1.1 RESEARCH BACKGROUND AND MOTIVE**

Brand name is a valuable asset for companies, but establishing it in a short time is difficult. Companies might need to do a lot of works and efforts to keep and develop their credit because credit of a company is considered as an intangible asset. In accounting, the brand name either for auditors and clients is one of factors for the bargaining power.

The effects of auditors' brand name are sufficiently documented in previous researches but those of clients are rarely discussed. Most of previous studies are focused on auditors' characteristics such as auditors' ability, specialization, and reputation or even audit quality (Palmrose 1986; Craswell, Francis, and Taylor 1995; Casterella, Francis, Lewis, and Walkers 2004; Carson 2009; Cahan, Jeter, and Naiker 2011; Lin, Chen, and Chen 2013; Minutti-Meza 2013). However, Asthana and Kalelkar (2014) conduct a research on clients' perspectives; they use S&P 500 index to examine the effects of clients' reputation on audit fees, revealing that audit fees for clients included in the index are discounted, whereas those for non-S&P clients increase simultaneously. This study adopts that by Asthana and Kalelkar (2014) as a fundamental structure and extends and specifies the differences in the level of influence of large clients in different industries on audit fees.

This study examines the relationship between audit fees and the effects of clients from leading companies in different industries. Firstly, lowballing is inevitable when auditors negotiate audit fees with clients. Auditors consider lowballing as a strategy rather than aimless price reduction scheme. This is because audit services are higher-quality experience goods, and when companies are uncertain about auditors' service, auditors would provide clients with certain incentives to purchase their services (Craswell and Francis 1999). Specifically, auditors aim for leading companies because the high reputation of such companies is of extra value to auditors. However, the time and cost of auditing are also the issue that auditors need to consider.

The second issue to be examined in this study is the differences in the influence of clients from leading companies in various industries on audit fees. Therefore, clients in auditors' clienteles are divided into two groups. The first group comprises clients from leading companies and general clients within the same industry, whereas the second group comprises clients from leading companies and general clients from different industries. In addition, this study argue that when general clients are in the same industry as clients from leading companies, they are more willing to pay for higher audit fees for audit services. Compared with those in the other group, such clients can benefit from auditors' industry knowledge spillover from leading companies clients (Lin et al. 2013).

The difference between the study by Asthana and Kalelkar (2014) and this study is that Asthana and Kalelkar examine the effect of S&P 500 clients' reputation on non-S&P 500 clients, whereas this study discusses the client reputation, in addition to considering the needs of clients from different industries. For instance, the reason the general clients are willing to pay premium fees to auditors is because of the reputation of auditors' client from leading companies. Furthermore, the industry knowledge spillover of auditors could be one of the factors considered by general clients from the same industry. Therefore, this study classifies the leading companies from different industries into different categories, moreover, this study will also present a situation in which the level of industrial influence of leading companies on other industries differs, and in which auditors have clients from leading companies.

This study highlights a shifting of auditors' perspectives. In the past, the auditors offered discounted price to the clients from the leading companies because the size of a company is a crucial factor in negotiating of audit fees. Most clients from leading companies hold a dominant position in the negotiation of audit fees because of their size; therefore, auditors need to provide discounts to such clients who are from leading companies (Casterella et al. 2004). However, this study argues two scenario wherein auditors may provide discounts as a strategy for future benefits or ask premium for cost recovery to the clients from leading companies. Auditors offer discounted price as a type of motivation to attract clients (Craswell and Francis 1999). At the same time, large sized companies usually acquire higher audit quality and reports; therefore, auditors also will consider their profits whether could cover the time and cost in auditing (Asthana and Boone 2012). In sum, the lack of bargaining power is not the only reason for auditors to offer discounted or premium price to the clients from leading companies.

# **1.2 RESEARCH PURPOSE**

Lowballing is a common condition in accounting (Chan 1999; Desir, Casterella, and Kokina 2014). There are two perspectives being argued about the effect of lowballing, however, the points they argue are mostly about auditors' audit quality or independence (Dopuch and King 1996; Gramling, Jenkins, and Taylor 2010; Cameran, Francis, Marra, and Pettinicchio 2015). The working pressure of auditors is rarely being discussed. Because lowballing reduces the audit fees but doesn't reduce the time and cost auditors spent on work if they want to maintain their audit quality and reputation as usual. Even though reputed clients could bring future benefits to auditors, they also enhance auditors' work on auditing. The meaning behind reputation always equal to high quality report, comprehensive internal control or high expectation from investors. In other words, lowballing could bring the advantages to auditors but auditors might also consider its attached disadvantages.

The followings are the aims of this study:

1. To examine whether auditors would give the leading companies discount or premium in audit fees.

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2. To examine if the clients from leading companies have significant influence on the rest of clients in auditors' clientele.

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3. To examine if the influence of clients from leading companies could be different due to the dissimilar industries.

# **1.3 RESEARCH FRAMEWORK**

This study is separated into five main parts. The outline of each part are expressed as following:

Chapter 1 Introduction

This part contents the research's background and motive, purpose and framework.

Chapter 2 Literature review

This part subjects to the review of prior researches on the effect of client reputation and initial audit engagement fees and lowballing, as well as obtaining a general idea from this field.

Chapter 3 Research design

This part contains the development of hypotheses, and research model and variables, which includes research data and sampling.

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Chapter 4 Empirical results

This part contains the statistic description and the analysis of the outcomes.

Chapter 5 Conclusion

This study ends in chapter 5 with summary and conclusion, and the limitation of this study.



**Figure 1 Research Framework** 

# **2. LITERATURE REVIEW**

## 2.1 THE AUDIT ENIVIEOMNET IN CHINA

In China, the first accounting firm was established in 1981. More and more accounting firms come into China market, even international accounting firms. Then, The Chinese Institute of Certified Public Accountants (CICPA) was formed in 1988. During 1994-1996, CICPA issued several regulations. For instance, Law of the People's Republic of China on Certified Public Accountants and independence auditing standard were announced in 1994 and 1995. China's audit market and environment are getting approach to international standards. Those regulations increase auditors' independence and audit quality.

Further, China Securities Regulatory Commission (CSRC) issued serial regulations from 2000. Those regulations include government encourages audit firms extend their size by consolidation and allow them to establish branches in other cities. In 2001, China Securities Regulatory Commission Announcement No.6 required all listed companies to disclose their audit fees information. In 2003, CICPA required the rotation of accountants and disclosed top 100 accounting firms on their website. In 2006, CICPA developed more comprehensive accounting firms' evaluation system.

Furthermore, CSRC encourage local accounting firms cooperate or consolidate with international accounting firms for increasing audit quality. Big N audit firms are treated with high respect and attention. However, in A shares' audit market, local accounting firms still take advantage in social network. And it is the weakness part of Big N audit firms (Chen, Su, and Wu 2007).

Before economic reform in China, all companies are belong to government. After economic reform, private enterprises spring up and more state-owned enterprises are privatization. Even though amount of private enterprises increase, state-owned enterprises still take a big part of market shares. According to Firth, Fung and Rui (2006) state-owned enterprises will have better monitoring system and profits and most of them are large sized companies.

## 2.2 THE IMPACT OF CLIENT REPUTATION

According to Asthana and Kalelkar (2014), they state that previous studies discussed about the effect of decline of auditors and clients' reputation on auditor switching, market shares, and stock prices. However, their research is to examine how the enhancement of client reputation can reduce the audit fees. Moreover, the audit firms can use client reputation to enhance their bargaining power to other clients. The authors used S&P 500 index as the standard to represent client's reputation, and used it to examine the change in audit fees when the clients are added or excluded from the S&P 500 index. The results show that clients that entered the S&P 500 index have a significant decline tin heir audit fees, especially on the first two years. However, once the clients fall out of the index, they have to pay more for their audit fees. This shows that reputation of the clients have a direct effect on their audit fees. Also, auditors benefit from clients' S&P 500 index reputation. Therefore, the auditors that have the S&P 500 clients are able to charge higher audit fees to non-S&P 500 clients, and hence proving the rent extraction theory. The research finds that clients that uphold a good reputation not only benefit themself, it also benefits auditors. For instance, the S&P 500 clients are known to be able to differentiate the quality auditors, being chosen by those clients will increase auditors' bargaining power over non-S&P 500 clients.

The objective of Lin et al. (2013) research is to differentiate the industry specialist and non-specialist auditors by their bargaining power. Compare to the non-specialist, industry specialist auditors typically have better audit quality and greater economies of scale. Therefore, the industry specialist auditors tend to charge premium audit fees to their clients. Due to their higher audit quality, leading companies are more willing to hire the specialist auditors. Specialist auditors then are able to use their clients' reputation to boost their brand name, hence obtaining a higher bargaining power over other clients. The main reason of auditors' ability to charge premium fees is that, they have an extensive knowledge of a certain industry, which makes them outstanding in those particular industries. Even though auditors could not get the fee premium from clients from leading companies, they can make up to it by charging more on the other clients. The bargaining power of auditors is dependent of their clients' reputation. The reputation of clients from leading companies is one of the main factors that allows auditors to increase their bargaining power during audit fees

negotiations with other clients. Furthermore, specialization is the key factor that increases auditors bargaining power which allowing the auditors to charge a fee premium. However, the auditors' bargaining power is also dependent on current competitive level of an industry. Regardless, specialization is important to auditors. When clients are able to distinct auditors from the others, they are more likely to designate them.

Chen, Noronha, and Singal (2004) examine the addition and deletion of S&P 500 index because adding to the index or deleting from the index contains information. Authors use price as the proxy to test when a company enters the index, investors are positive to its performance. Therefore, membership in the S&P 500 index will increase the ability of firms to attract new capital because financial institutions or investors are more willing to invest into S&P 500 companies. The meaning behind S&P 500 index or well-known industry leadership might be proper corporate governance, low audit risk and so on. This information is positively implicit to investors, which match with certification hypothesis. Therefore, when a company is added to the S&P 500 index, their price increase. However, when a company is deleted from the index, there is no price change. The reason is that adding to the index has positive price effects and reduces the information asymmetric. Conversely, deleting from the index only has small to nonexistent effects. Furthermore, S&P 500 companies will have higher performance and efficiency and future cash flows. The outside monitoring system such as investors or analysts would be very effective, and therefore, it can reduce the information asymmetry and have stable liquidity. Thus, the price will positively reflect that the companies are added to the index and cause demand shift.

How do the auditors differentiate themselves? According to Porter, auditors can charge the premium audit fees if clients value the services. In Casterella et al. (2004) research, the authors emphasize the auditors' industry specialization is a differentiation. Industry expertise is a competitive advantage for auditors. Therefore, when the clients can differentiate the auditors' value, the more audit fees the clients are willing to pay. However, clients' size would be one of the factors that influence audit fees. The larger sized clients will have a strong negotiating or bargaining power to lower the audit fees. Specialization has a great effect on audit fees. Although smaller clients have to pay higher fees to specialization auditors, the clients obtain high audit quality that worth the money spent. In another words, auditors can only charge premium audit fees to clients that have less bargaining power than themselves. In addition, the auditors gain industry knowledge and product efficiency enhancement mostly from large size clients. Those large size also help to distinct the chosen auditors from other, hence indirectly publicizing them for having excellent audit quality. Therefore, it is very profitable to the auditors giving discount to the large size clients, and imposing premium fees onto small clients.

Harris and Gurel (1986) research is to explain the price increase in the market by using several theories. They find that after companies were introduced in the S&P 500 index, the demand for the security increases. Investors sell the security of companies who are deleted from the index, and at the same time, purchase the security of recently added companies. The price and volume effect associates with the changes in companies' security. When companies are added into the S&P index, their volume increases. Their share price increases in the market due to the shift in demand, which supports Price Pressure Hypothesis, but the price effect only take place in the period or year 1978-1983 due to the small index funds in the first few years. Investors are optimistic for their future performance when companies are added to the S&P 500 index. The reason might be because of the prestige of S&P 500 index, being a wellknown ranking that can appropriately reflect the industrial composition and leadership of the companies.

As a summary, the reputation of client has a significantly effect on other clients. It can indirectly affect the other clients' audit fees. The better the reputation of the clients have, the stronger the auditors' bargaining power over other clients will be, and hence, the higher the audit fees of other clients will become.

# 2.3 INITIAL AUDIT ENGAGEMENT FEES AND LOWBALLING

When researchers study about the initial audit engagement, the issue of lowballing often happens. Prior studies have many arguments for lowballing. There are two points of view regarding lowballing. One of the groups argues that lowballing will affect auditor independence (DeAngelo 1981; Huang, Raghunandan, Huang, and Chiou 2015). Another party argues that lowballing has no influence on auditor independence or audit quality (Dopuch and King 1996; Gramling et al. 2010). Both perspectives have good points to support their arguments.

Securities and Exchange Commission (SEC) and the Commission on Auditors' Responsibilities (CAR) believe that lowballing will harm auditor independence and audit quality because they think auditors use lowballing as a way to gain future quasirent. Lowballing became a hot issue because of Sarbanes-Oxley Act (SOX). Regulators such as the Public Company Accounting Oversight Board (PCAOB) think that after SOX, new auditors could manage the pressure of lowballing (Desir et al. 2014). However, lowballing is not successfully mitigated after SOX. Auditors could not get free from lowballing regardless being Big 4 or not. As a result, Auditors continues to discount their initial year audit fees.

From the other point of view, lowballing or price-cutting will not affect auditor independence. Dopuch and King (1996) find that there are no any cause and effect between lowballing and reduction of audit quality. Auditor independence will only be challenged under limited circumstances such as clients' pressure and reporting issue (Magee and Tseng 1990). The policy to restrict lowballing is to prevent auditors from getting more profits in the future rather than protecting auditor independence (Chan 1999).

In recent researches, lowballing still exists. Auditors still continue to give a discounted price on their initial engagement year. Regulators are concerned about the influence of lowballing, but in the competitive market lowballing is a necessary but not sufficient condition for causing auditor independence problem (Simon and Francis 1988).

| Author            | Year | Research Topic                                | Research Result                                |
|-------------------|------|---|--|
| DeAngelo          | 1981 | CAR and SEC argue that lowballing on          | The author claimed that lowballing is a way    |
|                   |      | initial audit engagement will affect auditor  | to gain future quasi-rent. It is a competitive |
|                   |      | independence.                                 | advantage and will not affect auditor          |
|                   |      |   | independence.                                  |
| Francis and Simon | 1987 | Comparing to the other audit firms, Big 8     | Even thought Big 8 have fee premium, for       |
|                   |      | have audit price premium because of their     | the initial audit engagement, the price is     |
|                   |      | product differentiation.                      | still significantly lower than the continuing  |
|                   |      |   | engagements.                                   |
| Simon and Francis | 1988 | The authors examine the effect of audit fees  | The evidence provided that the initial audit   |
|                   |      | cutting on initial audit engagement and the   | fees discount will only last for three years   |
|                   |      | time it will take to returns to normal level. | then, audit fees start increasing.             |
| Magee and Tseng   | 1990 | Lowballing or price-cutting will not reduce   | Only under limited circumstances that are      |
|                   |      | auditor independence. It is way to retain     | clients' pressure and reporting issue last     |
|                   |      | clients.                                      | multiple periods, auditor independence will    |
|                   |      |   | be challenged.                                 |
| Turpen            | 1990 | The author examines the price cutting effect  | The initial engagement fees for new clients    |
|                   |      | to determine if auditors have pricing         | are significantly lower than continuing        |
|                   |      | differential on initial engagement fees.      | engagement during 1982-1984 time period        |

# Table 1 Initial Audit Engagement Fees and Lowballing

| Table 1 (continued) |      |   |   |  |  |
|---------------------|------|---|---|--|--|
| Author              | Year | Research Topic                                | Research Result                               |  |  |
| Schatzberg and      | 1994 | This paper examines and develops the          | Informational advantage concerning audit      |  |  |
| Sevcik              |      | relationship between lowballing pricing and   | cost and quality create valuable knowledge    |  |  |
|                     |      | auditor independence.                         | that allows incumbent auditors to earn        |  |  |
|                     |      |   | quasi rent in sometimes. Thus, for            |  |  |
|                     |      |   | obtaining the information, auditors lowball   |  |  |
|                     |      | 15/17   | in the initial period.                        |  |  |
| Dopuch and King     | 1996 | The authors examine the effect of             | However, the authors did not find any         |  |  |
|                     |      | lowballing on audit quality because auditors  | cause and effect between lowballing and       |  |  |
|                     |      | might try to avoid lost or reduce cost in the | reduction of audit quality. The reduction of  |  |  |
|                     |      | early period.                                 | lowballing might be the behavioral factor     |  |  |
|                     |      |   | override economic rationality in competing    |  |  |
|                     |      | C = S   | market.                                       |  |  |
| Lee and Gu          | 1998 | SEC and other regulators stated that          | The main difference is who own the right to   |  |  |
|                     |      | lowballing would hurt auditor                 | fire and hire auditors. If the owners control |  |  |
|                     |      | independence. However, authors claimed        | the decision, lowballing can increase         |  |  |
|                     |      | that lowballing could actually enhance        | auditor independence because it enhances      |  |  |
|                     |      | auditor independence.                         | the efficiency of the monitoring process.     |  |  |
| Chan                | 1999 | Auditor specialization is a key factor to     | The research shows that lowballing is         |  |  |
|                     |      | allow auditors to obtain more bargaining      | normal in the competitive world, and the      |  |  |
|                     |      | power in order to charge premium fees.        | policy to restrict lowballing is because      |  |  |
|                     |      |   | auditors want to gain more profit.            |  |  |

| Table 1 (continued)  |      |   |  |  |  |  |
|----------------------|------|---|--|--|--|--|
| Author               | Year | Research Topic                                  | Research Result                              |  |  |  |
| Craswell and Francis | 1999 | When only upgrades from non-Big 8 to Big        | If there is public disclosure about audit    |  |  |  |
|                      |      | 8, audit fees discount exist. The reason is     | fees, the initial engagement fees discount   |  |  |  |
|                      |      | that buying higher priced and quality           | will be efficiently impeded together         |  |  |  |
|                      |      | product needs some inducements.                 | potential independence issue.                |  |  |  |
| Ghosh and            | 2006 | The authors pointed out that when the           | Therefore, large audit firms will face less  |  |  |  |
| Lustgarten           |      | demand over supplier, lowballing intensity      | price discount when competing with           |  |  |  |
|                      |      | will increase.                                  | clients.                                     |  |  |  |
| Huang,               | 2009 | The authors predicted that there would be       | The result shows that after SOX, auditors    |  |  |  |
| Raghunandan, and     |      | less lowballing in initial audit engagement     | become more conservative when accepting      |  |  |  |
| Rama                 |      | fees after SOX, compare to before SOX.          | new client and determining the price.        |  |  |  |
| Gramling et al.      | 2010 | One of the groups argued that auditors use      | Lowballing will only affects auditor         |  |  |  |
|                      |      | lowballing to attract more clients might        | independence if the future profit is greater |  |  |  |
|                      |      | compromise their independence.                  | than the costs of independence loss.         |  |  |  |
| A INNIES             |      |   | However, if the cost of independence loss    |  |  |  |
|                      |      | UNITE   | outweigh future benefit, lowballing will     |  |  |  |
|                      |      | 1955  | have no effect on auditor independence       |  |  |  |
| Hay                  | 2013 | Previous researches focus on the                | The additional studies show that the         |  |  |  |
|                      |      | relationship between audit fee premium and      | internal control and corporate governance    |  |  |  |
|                      |      | specialist auditors, and also to find that non- | are highly associated with audit fees.       |  |  |  |
|                      |      | audit services are positively relate to audit   |  |  |  |  |
|                      |      | fees  |  |  |  |  |

| Table 1 (continued) |      |   |  |  |  |  |  |
|---------------------|------|---|--|--|--|--|--|
| Author              | Year | Research Topic  | Research Result                              |  |  |  |  |
| Desir et al.        | 2014 | Lowballing will decrease auditor  | According to the research, after SOX,        |  |  |  |  |
|                     |      | independence. However, PCAOB thought  | auditors did not free of lowballing during   |  |  |  |  |
|                     |      | that after SOX, new auditors could manage                                     | the sample period (2007-2014) no matter      |  |  |  |  |
|                     |      | the pressure of lowballing.   | Big 4 or non-Big 4. Audit firms still        |  |  |  |  |
|                     |      | 1   | discounted their initial year audit fees.    |  |  |  |  |
| Cameran et al.      | 2015 | In European countries, mandatory auditor                                      | In Italy, mandatory auditor rotation did not |  |  |  |  |
|                     |      | rotation was recommended. The authors   | improve audit quality. Moreover, it          |  |  |  |  |
|                     |      | selected Italy to examine that auditors pay                                   | enhances the lowballing and the cost is      |  |  |  |  |
|                     |      | the same efforts but their initial engagement imposed on the future audit fee |  |  |  |  |  |
|                     |      | fees decrease.  |  |  |  |  |  |
| Huang et al.        | 2015 | When clients are switching both auditors to                                   | The research finds that if there were both   |  |  |  |  |
|                     |      | new audit firms, there is a significant                                       | auditors switching, it would more likely     |  |  |  |  |
|                     |      | discount for initial audit engagement fees.                                   | cause problematic audits, positive           |  |  |  |  |
|                     |      | A INNIES  | discretionary accruals, and removal of       |  |  |  |  |
|                     |      | · UNIT  | MAO because of initial audit fees discount.  |  |  |  |  |
|                     |      | 1955  |  |  |  |  |  |

# **3. RESEARCH DESIGN**

# **3.1 CONCEPT MAP**

Based on previous studies, it can be divided into two main research topics. First of all, does leading company have the price advantage and further affect the rest clients' audit fees in auditors' clientele? Furthermore, does the influence of clients from leading companies could be different due to the dissimilar industries? Following is the concept map for the study:



#### **Figure 2 Concept Map**

#### **3.2 HYPOTHESIS DEVELOPMENT**

Company size may be the primary determinant between companies and audit firms in the negotiation of audit fees. The size of a company is one of the factors that may not only influence whether audit fees are increased or decreased, but also affect the bargaining abilities of both parties involved. For clients, company size can be an advantage and a weakness. It is an advantage because compared with clients from large companies, those from small companies would pay premium audit fees becase of a lack of bargaining power Casterella et al. (2004); therefore, size could increase clients' bargaining power. Clients from large companies will have higher bargaining power and can negotiate audit fees with auditors, compared with those from other companies. For auditors, the audit quality and industry specialization are two factors for auditors influencing fees modification during negotiation with clients (Lin et al. 2013; Chan 1999); clients are willing to pay higher fees for specialist auditors because of their audit quality and expertise. Hence, the bargaining conflict is a difficult, troublesome, and disconcerting issue between clients from large companies and auditors.

Prior researches show that even though auditors have great audit quality and expertise, lowballing is still a common phenomenon in recent years. Craswell and Francis (1999) indicate that discount pricing of higher-quality experience goods is a motivations for companies to purchase when they want to upgrade to Big 4 auditors. Considering that audit market is extremely competitive, discount pricing could attract clients' attention and be willing to designate auditors. Therefore, in the initial engagement, auditors will offer audit fees discounts to companies for gaining their incentive to purchase their audit service. In addition, auditors may obtain benefits from clients in the future. However, to acquire such beneficial companies, auditors usually use lowballing as an incentive to persuade companies to purchase their service (Reynods and Francis 2001). Lowballing may reduce conflicts between auditors and clients from large companies.

Asthana and Kalelkar (2014) and Lin et al. (2013) state that companies acquire a reputation by either being a leader in the industry or by being part of well-known awards. According to their research, when a company is included in the S&P 500 index, the audit fees significantly decrease; conversely, when a company is excluded from the index, the audit fees increase. This indicates that company reputation has additional

value to auditors. Auditors with S&P 500 clients can not only increase their industry knowledge but also increase their reputation of brand names. Evidence thus shows that auditors whose clienteles include S&P 500 clients offer premium audit fees to non-S&P 500 clients. Therefore, auditors are willing to offer discounted prices to clients from leading companies.

Auditors' reputation depends on two conditions: the type of clients in their portfolios and their level of specialization. Auditors who have industry specialization and knowledge charge higher audit fees, particularly when auditors are from Big N audit firms (Craswell, Francis, and Taylor 1995).

Major clients or clients from leading companies will be monitored by external agencies and investors. Therefore, they usually emphasize their audit report quality and reputation in the open market. Consequently, auditors have to strive to achieve their goals. In other words, auditors would have to invest more time and cost in major clients or clients from leading companies. Moreover, leading companies are usually be monitored by external agencies and investors. If auditors make mistakes or audit failure when auditing major clients or clients from leading companies, the pressure and criticism from public opinion is greater than from nonleading companies, thereby increasing audit risk. Therefore, when auditors have reputed clients, they might charge them premium audit fees.

H1: Ceteris paribus, auditors' strategy for audit fees will be affected by clients from leading companies.

At the beginning of audit fees bargaining, it keeps the balance between auditors and clients. However, the balance could be broken due to the auditors have their own clients who are from the leading companies. Auditors could put themselves at an advantage in the negotiation of audit fees over general clients. This makes auditors differentiate themselves. To give them advantage position to dominate the audit fees for rest of clients.

Prior studies have shown the evidence that clients believe if auditors had great reputation will lead to higher audit quality. And, therefore, external users would attach importance to their financial reports. Moreover, auditors could have extra audit fees due to the industry expertise will enhance audit quality because of higher error detection (Solomon, Shields, and Whittington 1999; Owhoso, Messier, and Lynch 2002; and Minutti-Meza 2013). Also, Palmrose (1986) and Arnett and Danos (1979) mention that Big 8's audit report is recommended to use by bankers, audit committees and underwriters. Which means audit firms' reputation and quality are significant to external users. However, audit firms' reputation might be effected by clients' reputation. Asthana and Kalelkar (2014) stated that auditors, who have S&P 500 clients, can get higher audit fees without spending their extra time and cost during auditing for non-S&P 500 index clients. This consists with rent extraction effect rather than cost recovery. By the rent extraction effect, auditors could charge premium audit fees to non-S&P 500 clients because they have S&P 500 clients' reputation.

Clients from leading companies are counted as one type of reputed clients. When auditors have audit experience for clients from leading companies, general clients might assent to auditors' ability and audit quality. Thus, auditors will get the reputation effect from clients from leading companies (Lin et al. 2013). Leading companies are top of the industry no matter technology skills or resources they own. Furthermore, the auditors will use the effects of clients from leading companies to attract general clients and make them willing to pay higher fees for the industry knowledge and specialization.

On the other hand, when auditors acquire clients from leading companies, they cannot get adequate price for their work and cost they spend (Casterella et al. 2004; Lin et al. 2013). The reason is that auditors will give them discount pricing for their reputation effect. However, auditors can treat it as a strategy to make themselves different form other auditors because giving clients from leading companies discount price is an investment for establishing auditors' reputation and specialization (Cahan et at. 2011; Lin et al. 2013). Later, auditors can get the premium price from general clients to compensate the costs.

As mention above, based on rent extraction or compensation of costs, auditors will collect higher price from general clients. In fact, even though clients have greater bargaining power, they are more willing to pay a higher price to appoint the same audit firms with leading companies. But, the premium price might be the discrepancy between various industries for general clients. Rather than having clients from the different industries, the auditors would get the fee premium easier from general clients who are in the same industry as auditors' clients from leading companies. The reason is

that, in the same industry, companies share the same technology skills or resources, on the contrary, it is difficult for clients from the different industries to get and gain the resources or skills and share them together. Once the auditors obtain the industry knowledge from clients from leading companies, auditors will have knowledge spillover (Lin et al. 2013). The audit experience and industry knowledge can apply to the general clients.

In short, clients are more likely to pay a higher price to auditors who have clients from leading companies. Besides, the impacts of reputation effect of clients from leading companies will become stronger when clients in auditors' clientele come from the same industry. General clients would pay the price over the standard to auditors in return for specific industry knowledge and better audit quality. Overall, auditors could charge premium audit fees to general clients.

- H2a: Ceteris paribus, auditors who have clients from leading companies can charge premium fees to general clients in the same industry.
- H2b: Ceteris paribus, auditors who have clients from leading companies can charge premium fees to general clients in other industry.
- H2c: Ceteris paribus, auditors who have clients from leading companies can charge higher fees to general clients in the same industry more than in other industry.



#### **3.3 RESEARCH MODEL AND VARIABLES**

This study uses the logarithm of audit fee (LAF) in the current year to examine the effect of client from leading companies on the audit fees of initial engagement. The audit fee model is based on Craswell et al. (1995), which is as following:

$$LAF = \beta_{0} + \beta_{1}LC + \beta_{2}ALNSI + \beta_{3}ALNDI + \beta_{4}LTA + \beta_{5}Sub + \beta_{6}CATA + \beta_{7}Liq + \beta_{8}Lev + \beta_{9}ROA + \beta_{10}Loss + \beta_{11}BIG_N + \beta_{12}Opin + \beta_{13}Exch + \beta_{14}CPA1spe +.$$
(1)

First, take the logarithm of audit fees (*LAF*) as the dependent variable to test the relationship between initial audit fees and the influence of clients from leading companies. *LC* is a dichotomous variable when it with a value of 1 means in the year a firm is the leading company. *ALNSI* represents a general client and clients from leading companies of same industry in the year of auditors' portfolio. *ALNDI* represents a general client and clients from leading auditors' portfolio.

To test H1, when  $\beta_1$  is positive, it means a firm is leading companies and it would have higher audit fees. Auditors would charge them higher audit fees. In contract, when  $\beta_1$  is negative, it means a firm is leading companies and it would have lower audit fees. Auditors would will give them audit fees discount. To support H2a and H2b, the  $\beta_2$  and  $\beta_3$  should be positive. When a firm is a general client, auditors' would charge it higher audit fees because auditors have clients' reputation from leading companies. Then, compare  $\beta_2$  and  $\beta_3$  to examine H2c. When  $\beta_2$  is greater than  $\beta_3$ , it supports H2c that general clients would pay higher fees to auditors when they are in the same industry with clients from leading companies.

Rest variables are control variables, to control the companies' size by using logarithm of total assets (*LTA*) because audit fees are higher for larger companies (Simunic 1980; Asthana and Kalelkar 2014). *Sub* is include in the control variables for measuring the decentralization (Sumunic 1980) which is a dichotomous variable with a value of 1 in the year a firm is within group, and 0 otherwise. *Sub* also can be measured the complexity of transactions (Shiue, Chang, and Kao 2008). Audit fees will increase

due to clients' inherent risk (*CATA*, *Liq*, *Lev*, *ROA*, *Loss*, *Opin*) (Minutti-Meza 2013; Huang et al. 2015). *CATA* is using current assets to total assets. *Liq* represents liquid assets deflated by current and short-term liabilities. *Lev* is total liabilities deflated by total assets. *ROA* equals net income before cumulative effect of accounting changes deflated by total assets. However, companies are having loss (*Loss*) might have lower audit fees because they cannot afford high audit fees (Craswell and Francis 1999). Loss is a dichotomous variable with a value of 1 in the year a firm is having loss, and 0 otherwise. Other than that, a positive sign for audit firms' size (*BIG\_N*) for higher audit fees. *BIG\_N* is a dichotomous variable with a value of 1 in the year a firm is audited by Big N, and 0 otherwise. Last, include auditors' specialization (*CPA1spe*), total revenue of clients that are audited by CPA1 in the industry deflated by all listed companies' revenue in the industry, stock exchange (*Exch*) to avoid the interference (Lin et al. 2013) which is a dichotomous variable with a value of 1 in the year a firm is issue stock in Shenzhen, and 0 in Shanghai. The variables are defined in Table 2.



| Variable       | Predict Sign | Definition   |  |  |  |  |
|----------------|--------------|--|--|--|--|--|
| LAF            |              | Natural logarithm of audit fees during the current fiscal year.  |  |  |  |  |
| LC             | +/-          | A dichotomous variable with a value of 1 in the year a firm<br>is the leading company, and 0 otherwise.                                      |  |  |  |  |
| ALNSI          | +            | In the year a firm is not the leading company but having<br>auditors who have clients from leading companies in the<br>same industry.        |  |  |  |  |
| ALNDI          | +            | In the year a firm is not the leading company but having<br>auditors who have clients from leading companies in the<br>different industries. |  |  |  |  |
| LTA            | +            | Natural logarithm of the firm's total assets.  |  |  |  |  |
| Sub            | +            | A dichotomous variable with a value of 1 in the year a firm<br>is within group, and 0 otherwise.   |  |  |  |  |
| CATA           | +            | Current assets to total assets.  |  |  |  |  |
| Liq            | +            | Liquid assets deflated by current and short-term liabilities.  |  |  |  |  |
| Lev            | +            | Total liabilities deflated by total assets.  |  |  |  |  |
| ROA            | +            | Net income before cumulative effect of accounting changes deflated by total assets.  |  |  |  |  |
| Loss           | +/-          | A dichotomous variable with a value of 1 in the year a firm is having loss, and 0 otherwise.   |  |  |  |  |
| BIG_N          | +            | A dichotomous variable with a value of 1 in the year a firm is audited by Big N, and 0 otherwise.  |  |  |  |  |
| Opin           | +            | A dichotomous variable with a value of 1 in the year a firm has unqualified opinion, and 0 otherwise.  |  |  |  |  |
| Exch           | +/-          | A dichotomous variable with a value of 1 in the year a firm<br>is issue stock in Shenzhen, and 0 in Shanghai.                                |  |  |  |  |
| <i>CPA1spe</i> | +            | Auditors' specialization. Total revenue of clients that are audited by CPA1 in the industry/ all listed companies' revenue in the industry.  |  |  |  |  |

| Table 2 | Variables | Definition |
|---------|-----------|------------|
|---------|-----------|------------|

### **3.4 RESEARCH DATA**

This study uses China public company data from China auditing section of Taiwan Economic Journal (TEJ) database excluding the financial industries for the period of 2003-2014. Due to Andersen collapse, this study ignores the period prior to 2003. The observations were selected only for companies who issue "A" shares in Shanghai and Shenzhen Stock Exchange. The beginning observations there are 28,210 available and then 623 observations that are related to financial industries are deleted. 4,324 observations that are not listed or not issuing "A" shares are also excluded. Companies that didn't reveal audit fees in financial statement (13,734 observations) are deleted. Other missing data and observations lost in differencing are also deleted (1,297 observations). And only the observations that are involved in initial engagement are retained to final sample. Of these, 591 observations are classify as large sized company, while remaining 590 observations are small sized company. Table 3 shows the sample selection procedure. The sale revenue of companies is ranked on the top 3 and would become the leading companies among their industry (Lin et al. 2013).



|   | Observations |
|---|--------------|
| "A" shares available on TEJ Shanghai and Shenzhen | 29 210       |
| Stock Exchange for the period 2003-2014           | 28,210       |
| Deleted financial sectors                         | (623)        |
| Deleted not list and H shares                     | (4,324)      |
| Missing data in audit fees <sup>1</sup>           | (13,734)     |
| Other missing data/ Lost in differencing          | (1,298)      |
| Deleted companies that are not initial engagement | (7,051)      |
| Final sample                                      | 1,180        |
| Size over 50%                                     | 590          |
| Size under 50%                                    | 590          |

# **Table 3 Sample Selection**

\*A shares are only available for buy and sell within China. \*\*H shares are companies who are register in China but go public in Hong Kong. \*\*\*The condition of initial engagement is that tenure of CPA1 and CPA2 should be 1 at the current year.



<sup>&</sup>lt;sup>1</sup> Most of companies disclose total amount of expenditure of accounting services instead of audit fees.

# 4. RESEARCH RESULTS

## **4.1 DESCRIPTIVE SATATISTICS**

The Table 4 is the descriptive statistics of full sample. In Panel A, the mean, median, and standard deviation are reported for all variables of full sample. The mean value of LAF is 3.9234 and median value is 3.8067. For the test variables, the results show that the mean value of LC is 0.0508 (total of 60 companies). The mean ALNSI and ALNDI are 0.0059 (7 observations) and 0.0695 (82 observations), respectively. Median values of all three test variables are zero. About 10 percent of the clients were audited by Big N audit firms and almost 14 percent of the companies had a loss during sample periods.

In Panel B and C, there are two subsamples which are separated by size (*LTA*). Panel B represents large companies which *LTA* is over full sample's median value (14.3471). The mean of large companies' *LAF* is 4.2743. Conversely, the mean value of small companies' *LAF* which are reported in Panel C is 3.5724.



|                                  | I dole 1 k | Jumple Dis | indución  |         |         |  |
|----------------------------------|------------|------------|-----------|---------|---------|--|
| Panel A: Full Sample (n = 1,180) |            |            |           |         |         |  |
| Variable                         | Mean       | Median     | Std. Dev. | Maximum | Minimum |  |
| Dependent Variable               |            |            |           |         |         |  |
| LAF                              | 3.9234     | 3.8067     | 0.7138    | 8.5502  | 2.3026  |  |
| Test Variables                   |            |            |           |         |         |  |
| LC                               | 0.05       | 0          | 0.2180    | 1       | 0       |  |
| ALNSI                            | 0.0051     | 0          | 0.0712    | 1       | 0       |  |
| ALNDI                            | 0.0695     | 0          | 0.2544    | 1       | 0       |  |
| Control Variables                |            |            |           |         |         |  |
| LTA                              | 14.5237    | 14.3471    | 1.2957    | 21.5743 | 10.2093 |  |
| Sub                              | 0.9051     | 71:6       | 0.2932    | 1       | 0       |  |
| CATA                             | 0.5480     | 0.5631     | 0.2175    | 1       | 0.0334  |  |
| Liq                              | 1.9833     | 1.2523     | 3.2730    | 53.4540 | 0.0065  |  |
| Lev                              | 0.5973     | 0.5067     | 1.8717    | 61.3349 | 0.0091  |  |
| ROA (%)                          | 3.7239     | 4.24       | 14.1858   | 293.3   | -164.13 |  |
| Loss                             | 0.1364     | 0          | 0.3434    | 1       | 0       |  |
| BIG_N                            | 0.0974     | 0          | 0.2967    | 1       | 0       |  |
| Opin                             | 0.9034     | T          | 0.2956    | 1       | 0       |  |
| Exch                             | 0.4593     | 0          | 0.4986    | 1       | 0       |  |
| CPA1spe                          | 1.9162     | 0.535      | 4.4766    | 50      | 0.01    |  |
|                                  |            | 1          |           |         |         |  |

**Table 4 Sample Distribution** 

Panel B: Subsample of Companies with LTA > median (n = 590)

| Variable | Mean   | Median | Std. Dev. | Maximum | Minimum |
|----------|--------|--------|-----------|---------|---------|
| LAF      | 4.2743 | 4.0943 | 0.7875    | 8.5502  | 2.7081  |

# **Panel C: Subsample of Companies with LTA < median (n = 590)**

| Variable | Mean   | Median | Std. Dev. | Maximum | Minimum |
|----------|--------|--------|-----------|---------|---------|
| LAF      | 3.5724 | 3.5553 | 0.3912    | 5.2204  | 2.3026  |

#### **4.2 REGRESSION RESULTS**

In Table 5, the regression is to analyze the effect of leading companies' on audit fees and their influence to general clients. The model is significant with p-value <0.0001. The adjusted  $R^2$  is 0.6444. *LC*, *ALNSI*, and *ALNDI* are the test variables in the study. In the regression, only coefficient on *LC* is significant which is positively associated with *LAF* (coefficient = 0.3478; t-value = 3.22). This result gives the idea that auditors might charge leading companies higher audit fees due to more costs and time they spend on auditing, which is because clients from leading companies might ask for higher quality financial reports and statements. Also, auditors could face more complex procedure and risks while auditing leading companies than non-leading companies. Therefore, it might cause the audit fees to be increased for the leading companies. Therefore, a significant positive relation of *LC* and *LAF* support H1 that auditors might charge leading clients audit fees premium.

The other two test variables, *ALNSI* and *ALNDI*, are positive (t-value = 0.57 and 1.59) but only ALNDI is statistically significant at the conventional level. Although ALNSI is insignificant, it matches the predicted sign with H2a. It shows that the audit fees will increase for general clients in the same or different industry with clients from leading companies but the effects are negligible. Moreover,  $\beta_2$  is not greater than  $\beta_2$  which fail to support H2c. When auditors audit the same industry as clients from leading companies, they could have knowledge spillovers than clients are in the different industry because they don't share same technology and skill (Simunic 1980; Lin et al. 2013). Thus, auditors will charge them higher audit fees. Firm and auditor-specific control variables like *LTA*, *lev*, *ROA*, *Loss*, *BIG\_N*, *Opin* and *CPA1spe* are significant at 5 percent.

The control variables *LTA* is significant in the full sample. This study believe that *LTA* could be a key factor to influence the outcome because auditors would treat large sized and small sized companies differently in audit fees. Therefore, to control the size effect, this study separates the full sample into two subsamples by median value of *LTA* (14.3471). In Table 6, this study presents the results of the effect of companies' size on audit fees. The mean value and median value of large sized company subsample are 15.4890 and 15.1871. Another subsample is small sized company which mean value is 13.5585 and median value is 13.6740. Table 6 also

reports the difference of regression coefficient and linear combinations of estimators. For the test variable *LC*, it is significantly positive (coefficient = 0.2371; t-value = 2.03) in large sized company subsample but insignificant in small sized company subsample. The *LC* effect in the full sample is reflected by large sized company subsample which supports H1 and indicates that comparing to small sized company, auditors might spend more time and costs on large leading companies which will cause audit fees to increase.

The sign of ALNSI and ALNDI in Table 6 are the same as the full sample with positive sign. However, ALNSI is insignificant in Table 6 which fail to support H2b. For the small and large sized company, both  $\beta_2$  are greater than  $\beta_3$  which match the perdition of H2c. Two subsamples' ALNDI (coefficient = 0.1579; t-value = 2.30 and coefficient = 0.0961; t-value = 1.45) are significantly positive with LAF which support H2b that the auditors who have clients from leading companies can charge premium fees to general clients in other industries. Reputation of clients from leading companies will increase the audit fees for auditors when negotiating audit fees with general clients. The results give the idea that effect of reputation on audit fees will be varies when general clients are in the same and different industries.



| Variables               | Predict<br>Sign  | Coefficient | Robust Std. Err. | t-value  |  |
|-------------------------|------------------|-------------|------------------|----------|--|
| _cons                   | ?                | -1.0778***  | 0.2335           | -4.62    |  |
| LC                      | +/-              | 0.3478***   | 0.1081           | 3.22     |  |
| ALNSI                   | +                | 0.0828      | 0.1457           | 0.57     |  |
| ALNDI                   | +                | 0.0775**    | 0.0487           | 1.59     |  |
| LTA                     | +                | 0.3448***   | 0.0163           | 21.16    |  |
| Sub                     | +                | 0.0415      | 0.0470           | 0.88     |  |
| CATA                    | +                | 0.0523      | 0.0645           | 0.81     |  |
| Liq                     | +                | 0.0012      | 0.0032           | 0.36     |  |
| Lev                     | +                | 0.0241***   | 0.0042           | 5.71     |  |
| ROA                     | +                | 0.0023**    | 0.0011           | 2.11     |  |
| Loss                    | +/-              | 0.0682**    | 0.0394           | 1.73     |  |
| BIG_N                   | +                | 0.6367***   | 0.0631           | 10.09    |  |
| Opin                    | + 1              | -0.1892***  | 0.0521           | -3.63    |  |
| Exch                    | +/-              | -0.0374*    | 0.0255           | -1.47    |  |
| <b>CPA1spe</b>          | +                | -0.0023***  | 0.0045           | -0.50    |  |
| Observations            |                  |             |                  | 1,180    |  |
| Adjusted R <sup>2</sup> |                  | 6%          |                  | 0.6444   |  |
| F-value                 |                  |             | 111125           | 153.62   |  |
| Prob > F                |                  |             | NI               | < 0.0001 |  |
| Variables are def       | ined in Table 2. | 19          | 55               |          |  |

Table 5 Effect of Leading Companies on Audit Fees of General Clients

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

| <b>X</b> 7 <b>-</b> - <b>1</b> - 1 | Predict | Small con  | npany   | Large con  | npany   | Coef.      | t-       |
|------------------------------------|---------|------------|---------|------------|---------|------------|----------|
| variables                          | Sign    | Coef.      | t-value | Coef.      | t-value | Difference | value    |
| _cons                              | ?       | 0.2329     | 0.61    | -2.8072*** | -5.39   | -3.0402*** | -4.69    |
| LC                                 | +/-     | -0.0465    | -0.27   | 0.2371**   | 2.03    | 0.2836*    | 1.35     |
| ALNSI                              | +       | 0.0904     | 0.52    | 0.0630     | 0.28    | -0.0274    | -0.10    |
| ALNDI                              | +       | 0.1579**   | 2.30    | 0.0961*    | 1.45    | -0.0618    | -0.65    |
| LTA                                | +       | 0.2535***  | 9.00    | 0.4579***  | 13.06   | 0.2044***  | 4.55     |
| Sub                                | +       | 0.0347     | 0.68    | 0.0192     | 0.21    | -0.0156    | -0.15    |
| CATA                               | +       | 0.0126     | 0.15    | 0.1800**   | 1.85    | 0.1674*    | 1.32     |
| Liq                                | +       | 0.0022     | 0.72    | -0.0256**  | -1.98   | -0.0278**  | -2.09    |
| Lev                                | +       | 0.0169***  | 5.42    | -0.1187    | -0.78   | -0.1356    | -0.89    |
| ROA                                | -       | 0.0026***  | 3.15    | -0.0019    | -0.46   | -0.0046    | -1.04    |
| Loss                               | +/-     | 0.0412     | 0.92    | 0.0802     | 0.90    | 0.0390     | 0.39     |
| BIG_N                              | +       | 0.3242***  | 2.41    | 0.6353***  | 8.93    | 0.3111**   | 2.05     |
| Opin                               | +       | -0.1941*** | -3.60   | -0.1231    | -1.13   | 0.0710     | 0.59     |
| Exch                               | +/-     | -0.0411*   | -1.33   | -0.0459    | -1.17   | -0.0047    | -0.09    |
| CPA1spe                            | +       | 0.0022     | 0.35    | -0.0075*   | -1.28   | -0.0098    | -1.12    |
| Observation                        | IS      |            |         |            |         |            | 1,180    |
| Adjusted R <sup>2</sup>            |         |            | 97 H    | ハミントン      |         |            | 0.6586   |
| F-value                            |         |            | 0       |            |         |            | 79.43    |
| Prob > F                           |         |            | 19      | 59         |         |            | < 0.0001 |

Table 6 Effect of Companies' Size on Audit Fees of General Clients

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

#### **4.3 ADDITIONAL ANALYSIS**

Big N audit firms have better reputation (Craswell, Francis, and Taylor 1995; Carson 2009). *BIG\_N* is significant in the full sample which means that  $BIG_N$  is an important factor that influences audit fees. Auditors' behavior could be highly associated with audit firms, and thus, having differentiation. Hence, this study use alternative way to separate subsamples by using Big N and Non-Big N audit firms in Table 7. Then, adds the size effect in both subsamples which report in Table 8 and Table 9. This study analyzes the size effect of companies in Table 6. Thus, in the additional analysis section, the study considers the size effect of the audit firms and presents in Table 8 and Table 9 which isolate BIG N and Non-BIG N audit firms to analyze their influences.

In the Table 7, both two subsamples' LC (t-value = 2.54 and 0.93) is positive which agree with the argument that when the auditors need to spend more time and costs on clients from leading companies, they will charge them higher audit fees. However, it is only in Non-Big N audit firms is significant because Big N audit firms might have the advantage of resources and human capital. There is no audit fees discount or premium for Big N audit firms while auditing clients from leading companies. *ALNSI* is positive but insignificant in Non-BIG N subsample. However, *ALNDI* is significant which support H2b.

Next, this study adds size effect of companies in Table 8 and 9. *LC*, in Table 8 and 9, are having the same signs of Table 6. For the large sized company in the Table 8 and 9, *LC* is significantly positive which supports the idea that auditor would enhance their work due to the size of company increase and result of higher audit fees. Previous results support H1 that auditors will increase audit fees to clients that are from leading companies. Nevertheless, for the small sized company that are audited by Big N audit firms in Table 8, *LC* is significantly negative because Big N auditors will have greater advantages such as resources or human capital than Non-Big N auditors, and thus will reduce audit fees. Furthermore, *ALNSI* is omitted in Table 8 due to collinearity. *ALNSI* is insignificantly positive in Table 9 which fail to support H2a. *ALNDI* is significantly positive for both subsamples in Table 8 and small sized company in Table 9. H2b postulates that auditors could charge general clients in other industry premium audit fees due to reputation of clients from leading companies. Big N audit firms only could

get the premium audit fees from large sized company because these clients will have more demand than small sized company such as higher audit quality and complex procedure. Also, large sized company' audit risks will be higher than small sized company.

The results are different from the research of using United States' database. The reason might be might be the audit environment and culture difference. In China, during the sample period, there are a total of 1,180 companies which 1,065 out of those 1,180 companies are audited by Non-Big N audit firms and rest are audited by Big N audit firms. This shows that China companies prefer hiring Non Big N audit firms instead of Big N which means in China, Big N audit firms' market shares are not as much as when they are in United State. From the numeric side, audit market of Non-Big N audit firms will be more competitive than Big N audit firms, especially for small sized firms. When Non-Big N audit firms have reputation from leading companies, they could charge those general clients from the different industry premium audit fees. In addition, in the Table 6, *LC* of small sized company is insignificance (coefficient = -0.0465; t-value = -0.27). However, when adding size effect of audit firms in the model which is shown in Table 8, the result of *LC* becomes significant (coefficient = 0.8201; t-value = -1.98) which indicates that the size of audit firms do affect the audit fees.



| <b>V</b>                | Predict | Non-BI     | GN      | BIG        | N       | Coef.      | t-       |
|-------------------------|---------|------------|---------|------------|---------|------------|----------|
| variables               | Sign    | Coef.      | t-value | Coef.      | t-value | Difference | value    |
| _cons                   | ?       | -0.5120*** | -2.55   | -4.3715*** | -4.11   | -3.8595*** | -3.57    |
| LC                      | +/-     | 0.2612***  | 2.54    | 0.1934     | 0.93    | -0.0678    | -0.29    |
| ALNSI                   | +       | 0.0693     | 0.51    | -0.1307    | -0.57   | -0.2000    | -0.75    |
| ALNDI                   | +       | 0.0772**   | 1.68    | 0.3298**   | 1.94    | 0.2526*    | 1.43     |
| LTA                     | +       | 0.3059***  | 21.23   | 0.5508***  | 8.46    | 0.2449***  | 3.67     |
| Sub                     | +/-     | 0.0182     | 0.42    | 0.2211     | 0.83    | 0.2029     | 0.75     |
| CATA                    | +       | 0.0474     | 0.78    | 0.0531     | 0.19    | 0.0057     | 0.02     |
| Liq                     | +       | 0.0007     | 0.23    | 0.0487     | 0.55    | 0.0480     | 0.55     |
| Lev                     | +       | 0.0208***  | 6.41    | 0.7588**   | 1.96    | 0.7380**   | 1.90     |
| ROA                     | -       | 0.0024***  | 2.46    | 0.0129     | 1.03    | 0.0105     | 0.84     |
| Loss                    | +/-     | 0.0633*    | 1.61    | 0.1402     | 0.45    | 0.0769     | 0.25     |
| Opin                    | +       | -0.1689*** | -3.16   | -0.1111**  | -0.59   | 0.0578     | 0.30     |
| Exch                    | +/-     | -0.0302    | -1.22   | -0.1466    | -1.24   | -0.1164    | -0.97    |
| <b>CPA1spe</b>          | +       | -0.0017    | -0.43   | -0.0117 ** | -0.98   | -0.0100    | -0.79    |
| Observations            |         | S          |         |            |         |            | 1,180    |
| Adjusted R <sup>2</sup> |         |            |         |            |         |            | 0.6664   |
| F-value                 |         |            |         | - 0        |         |            | 88.24    |
| Prob > F                |         |            | 1/ 11   | 1115       |         |            | < 0.0001 |
|                         |         |            |         |            |         |            |          |

Table 7 Effect of Non-Big N/ BIG N Audit Firms on Audit Fees

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

| <b>X</b> 7 • . 1 1      | Predict       | Small con | npany   | Large com  | ipany       | Coef.      | t-     |
|-------------------------|---------------|-----------|---------|------------|-------------|------------|--------|
| Variables               | Sign          | Coef.     | t-value | Coef.      | t-value     | Difference | value  |
| _cons                   | ?             | 1.1627    | 0.79    | -5.5010*** | -3.12       | -6.6637*** | -2.95  |
| LC                      | +/-           | -0.8201** | -1.98   | 0.3523*    | 1.35        | 1.1724***  | 2.39   |
| ALNSI                   | +             | -         | -       | -          | -           | -          | -      |
| ALNDI                   | +             | 0.3319**  | 1.98    | 0.8686**   | 2.26        | 0.5367*    | 1.28   |
| LTA                     | +             | 0.1927**  | 2.08    | 0.6323***  | 6.27        | 0.4396***  | 3.21   |
| Sub                     | +/-           | 0.3962**  | 1.92    | -0.4744    | -0.79       | -0.8706*   | -1.37  |
| CATA                    | +             | 0.4898    | 1.20    | -0.3627    | -0.50       | -0.8525    | -1.02  |
| Liq                     | +             | -0.1084*  | -1.54   | 0.3465     | 1.08        | 0.4549*    | 1.39   |
| Lev                     | +             | 0.2517    | 0.49    | 1.3668*    | 1.39        | 1.1151*    | 1.01   |
| ROA                     | +             | 0.0119    | 0.81    | 0.0067     | 0.35        | -0.0052    | -0.22  |
| Loss                    | +/-           | -0.0759   | -0.15   | 0.1732     | 0.34        | 0.2491     | 0.34   |
| Opin                    | +             |           | -       | - 11       | \- <b>V</b> | -          | -      |
| Exch                    | +/-           | -0.3206** | -2.02_0 | -0.0814    | -0.39       | 0.2392     | 0.91   |
| CPA1spe                 | +             | 0.0535*** | 3.36    | -0.0332**  | -2.21       | -0.0867*** | -3.96  |
| Observation             | S             |           |         |            |             | )          | 115    |
| Adjusted R <sup>2</sup> |               |           |         |            | 5/ K        |            | 0.7374 |
| F-value                 |               | 7 (%      |         |            |             |            | 13.80  |
| Prob > F                |               |           | 4/11    | THES       |             | <          | 0.0001 |
| Variables are o         | lefined in Ta | able 2.   | U       |            |             |            |        |

Table 8 Effect of BIG N Audit Firms on Audit Fees of Large/Small Company

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

ALNSI is omitted because of collinearity.

Opin is omitted because of collinearity.

| <b>X</b> 7 <b>!</b> - <b>h</b> ] | Predict       | Small con  | npany   | pany Large company |          |            | t-       |
|----------------------------------|---------------|------------|---------|--------------------|----------|------------|----------|
| variables                        | Sign          | Coef.      | t-value | Coef.              | t-value  | Difference | value    |
| _cons                            | ?             | 0.3377     | 0.83    | -1.3516***         | -2.97    | -1.6893*** | -2.76    |
| LC                               | +/-           | -0.0305    | -0.19   | 0.2337**           | 2.05     | 0.2642*    | 1.35     |
| ALNSI                            | +             | 0.0945     | 0.55    | 0.0339             | 0.33     | -0.0606    | -0.30    |
| ALNDI                            | +             | 0.1123*    | 1.61    | 0.0750             | 1.27     | -0.0373    | -0.48    |
| LTA                              | +             | 0.2468***  | 8.15    | 0.3652***          | 11.30    | 0.1184***  | 2.67     |
| Sub                              | +             | 0.0050     | 0.09    | 0.0267             | 0.36     | 0.0217     | 0.22     |
| CATA                             | +             | 0.0485     | 0.58    | 0.1404**           | 1.54     | 0.0919     | 0.73     |
| Liq                              | +             | 0.0023     | 0.77    | -0.0256**          | -2.14    | -0.0279**  | -2.27    |
| Lev                              | +             | 0.0167***  | 5.30    | -0.2706**          | -1.86    | -0.2873**  | -1.97    |
| ROA                              | -             | 0.0027***  | 3.24    | -0.0044            | -1.02    | -0.0071*   | -1.61    |
| Loss                             | +/-           | 0.0366     | 0.82    | 0.0834             | 0.90     | 0.0468     | 0.45     |
| Opin                             | +             | -0.2074*** | -3.68   | -0.0570            | -0.48    | 0.1504     | 1.14     |
| Exch                             | +/-           | -0.0382    | -1.17_0 | -0.0282            | -0.75    | 0.0100     | 0.20     |
| CPA1spe                          | +             | 0.0009     | 0.15    | -0.0028            | -0.53    | -0.0037    | -0.46    |
| Observation                      | S             |            |         |                    |          | )          | 1,065    |
| Adjusted R <sup>2</sup>          |               |            |         |                    | <i>.</i> |            | 0.4438   |
| F-value                          |               | 1 (%       |         |                    |          |            | 32.45    |
| Prob > F                         |               |            | 4/11    | THES               |          |            | < 0.0001 |
| Variables are o                  | lefined in Ta | ible 2.    | U       |                    |          |            |          |

 Table 9 Effect of Non-BIG N Audit Firms on Audit Fees of Large/Small Company

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

# **4.4 SENSITIVITY ANALYSIS**

This study winsorizes extreme value at the 1<sup>st</sup> and 99<sup>th</sup> percentiles of all continuous variables to ensure the outcomes are robust and not driven by any model biases. The results are reported in Table 10 and 11. There is no significant difference between regression results and sensitivity results which is consistent with previous finding.

| Variables               | Predict<br>Sign Coefficient |            | Robust Std. Err. | t-value  |
|-------------------------|-----------------------------|------------|------------------|----------|
| _cons                   | ?                           | -0.8228*** | 0.1988           | -4.14    |
| LC                      | +/-                         | 0.2803***  | 0.0961           | 2.92     |
| ALNSI                   | +                           | 0.0851     | 0.1534           | 0.55     |
| ALNDI                   | +                           | 0.0815**   | 0.0478           | 1.70     |
| LTA_w                   | +                           | 0.3173***  | 0.0144           | 22.04    |
| Sub                     | +                           | 0.0425     | 0.0460           | 0.92     |
| CATA_w                  | +                           | 0.0388     | 0.0629           | 0.62     |
| Liq_w                   | +                           | 0.0080     | 0.0081           | 0.98     |
| Lev_w                   | +                           | 0.1831***  | 0.0578           | 3.17     |
| ROA_w                   | -                           | 0.0030     | 0.0025           | 1.23     |
| Loss                    | +/-                         | 0.0498     | 0.0515           | 0.97     |
| BIG_N                   | +                           | 0.6285***  | 0.0595           | 10.56    |
| Opin                    | +                           | -0.1328*** | 0.0532           | -2.50    |
| Exch                    | +/-                         | -0.0461**  | 0.0252           | -1.83    |
| CPA1spe_w               | +                           | 0.0021     | 0.0050           | 0.42     |
| Observations            |                             |            |                  | 1,180    |
| Adjusted R <sup>2</sup> |                             |            |                  | 0.6299   |
| F-value                 |                             |            |                  | 144.34   |
| Prob > F                |                             |            |                  | < 0.0001 |

Table 10 Effect of Leading Companies on Audit Fees of General Clients after Winsorized

Variables are defined in Table 2.

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).



| Vori-hl-                | Predict         | Small con  | npany   | Large co   | mpany   | Coef.      | t-       |
|-------------------------|-----------------|------------|---------|------------|---------|------------|----------|
| Variables               | Sign            | Coef.      | t-value | Coef.      | t-value | Difference | value    |
| _cons                   | ?               | 0.0797     | 0.20    | -2.0790*** | -4.73   | -2.1587*** | -3.64    |
| LC                      | +/-             | -0.0413    | -0.22   | 0.2031**   | 1.90    | 0.2444     | 1.15     |
| ALNSI                   | +               | 0.0999     | 0.54    | 0.0636     | 0.29    | -0.0363    | -0.13    |
| ALNDI                   | +               | 0.1594***  | 2.34    | 0.0891*    | 1.37    | -0.0703    | -0.75    |
| LTA_w                   | +               | 0.2540***  | 8.70    | 0.4076***  | 13.60   | 0.1536***  | 3.67     |
| Sub                     | +               | 0.0304     | 0.59    | 0.0259     | 0.30    | -0.0045    | -0.05    |
| CATA_w                  | +               | -0.0035    | -0.04   | 0.1782**   | 1.94    | 0.1817*    | 1.46     |
| Liq_w                   | +               | 0.0126*    | 1.45    | -0.0256**  | -1.78   | -0.0382**  | -2.28    |
| Lev_w                   | +               | 0.1887***  | 3.17    | -0.0947    | -0.63   | -0.2834**  | -1.75    |
| ROA_w                   | -               | 0.0047**   | 1.77    | -0.0015    | -0.32   | -0.0062    | -1.13    |
| Loss                    | +/-             | 0.0484     | 0.81    | 0.0825     | 0.90    | 0.0341     | 0.31     |
| BIG_N                   | +               | 0.3272***  | 2.48    | 0.6298***  | 9.24    | 0.3026**   | 2.04     |
| Opin                    | +               | -0.1395*** | -2.50   | -0.1076    | -0.99   | 0.0319     | 0.26     |
| Exch                    | +/-             | -0.0478*   | -1.55   | -0.0530*   | -1.37   | -0.0052    | -0.11    |
| CPA1spe_w               | +               | 0.0068     | 0.84    | -0.0026    | -0.45   | -0.0094    | -0.94    |
| Observations            |                 | 2          |         |            |         |            | 1,180    |
| Adjusted R <sup>2</sup> |                 | 7 18       |         |            |         |            | 0.6378   |
| F-value                 |                 |            | 1/ 11   | うして        |         |            | 72.59    |
| Prob > F                |                 |            |         |            |         |            | < 0.0001 |
| Variables are de        | efined in Table | e 2.       | 199     |            |         |            |          |

| Table 11 Effect of Companies' | Size on Audit Fees of General | <b>Clients after Winsorized</b> |
|-------------------------------|-------------------------------|---------------------------------|
|                               |                               |                                 |

Variables are defined in Table 2.\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

This study adds sales revenue to capture the complexity of transactions and ensure the outcomes are robust and not driven by any model biases. *LREV* is the natural logarithm of sales revenue during the current fiscal year. The results are reported in Table 12 and 13. In Table 13, for large company's subsample, *LC* becomes insignificance. Other than that, there is no significant difference between regression results and sensitivity results which is consistent with previous finding.

| Variables               | Predict<br>Sign | Coefficient | Robust Std. Err. | t-value  |
|-------------------------|-----------------|-------------|------------------|----------|
| _cons                   | ?               | -0.9879***  | 0.2359           | -4.19    |
| LC                      | +/-             | 0.3169***   | 0.1087           | 2.92     |
| ALNSI                   | +               | 0.0699      | 0.1496           | 0.47     |
| ALNDI                   | +               | 0.0795***   | 0.0477           | 1.67     |
| LTA                     | +               | 0.2758***   | 0.0243           | 11.37    |
| LREV                    | +               | 0.0706***   | 0.0174           | 4.05     |
| Sub                     | +               | 0.0223      | 0.0473           | 0.47     |
| CATA                    | +               | -0.0052     | 0.0642           | -0.08    |
| Liq                     | +               | 0.0059**    | 0.0035           | 1.68     |
| Lev                     | +               | 0.0254***   | 0.0038           | 6.71     |
| ROA                     | -               | 0.0020**    | 0.0010           | 1.96     |
| Loss                    | +/-             | 0.0740**    | 0.0397           | 1.86     |
| BIG_N                   | +               | 0.6337***   | 0.0624           | 10.16    |
| Opin                    | +               | -0.2169***  | 0.0522           | -4.15    |
| Exch                    | +/-             | -0.0352*    | 0.0253           | -1.39    |
| <b>CPA1spe</b>          | +               | -0.0038     | 0.0044           | -0.87    |
| Observations            |                 |             |                  | 1,180    |
| Adjusted R <sup>2</sup> |                 |             |                  | 0.6495   |
| F-value                 |                 |             |                  | 146.63   |
| Prob > F                |                 |             |                  | < 0.0001 |

 

 Table 12 Effect of Leading Companies on Audit Fees of General Clients under Different Complexity of Transactions

Variables are defined in Table 2.

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).



| <b>X</b> 7 • 1 1        | Predict | Small con  | npany   | Large company |         | Coef.      | t-       |
|-------------------------|---------|------------|---------|---------------|---------|------------|----------|
| Variables               | Sign    | Coef.      | t-value | Coef.         | t-value | Difference | value    |
| _cons                   | ?       | 0.6813     | 1.57    | -2.9600***    | -5.93   | -3.3273*** | -5.12    |
| LC                      | +/-     | -0.0558    | -0.33   | 0.1231        | 1.04    | 0.1789     | 0.87     |
| ALNSI                   | +       | 0.0849     | 0.48    | 0.0491        | 0.19    | -0.0358    | -0.12    |
| ALNDI                   | +       | 0.1603***  | 2.34    | 0.0994*       | 1.61    | -0.0609    | -0.66    |
| LTA                     | +       | 0.2280***  | 6.43    | 0.3067***     | 7.42    | 0.0787*    | 1.45     |
| LREV                    | +       | 0.0233*    | 1.36    | 0.1825***     | 6.41    | 0.1592***  | 4.79     |
| Sub                     | +       | 0.0314     | 0.61    | -0.0729       | -0.82   | -0.1043    | -1.02    |
| CATA                    | +       | -0.0119    | -0.14   | 0.0383        | 0.42    | 0.0502     | 0.40     |
| Liq                     | +       | 0.0036*    | 1.10    | -0.0010       | -0.07   | -0.0046    | -0.34    |
| Lev                     | +       | 0.0172***  | 5.74    | -0.0558       | -0.38   | -0.0730    | -0.50    |
| ROA                     | -       | 0.0026**   | 3.17    | -0.0056*      | -1.29   | -0.0082    | -1.85    |
| Loss                    | +/-     | 0.0450     | -1.01 ( | 0.0313        | 0.35    | -0.0137    | -0.14    |
| BIG_N                   | +       | 0.3160***  | 2.36    | 0.6316***     | 9.25    | 0.3156**   | 2.10     |
| Opin                    | +       | -0.1986*** | -3.60   | -0.2308***    | -2.37   | -0.0322    | -0.29    |
| Exch                    | +/-     | -0.0411*   | -1.32   | -0.0335       | -0.88   | 0.0076     | 0.15     |
| CPA1spe                 | +       | 0.0017     | 0.28    | -0.0126**     | -2.24   | -0.0143**  | -1.68    |
| Observation             | s       |            | 41 TI   | 1115          |         |            | 1,180    |
| Adjusted R <sup>2</sup> |         |            | U.      | NIT           |         |            | 0.6732   |
| F-value                 |         |            | 19      | 55            |         |            | 79.34    |
| Prob > F                |         |            |         |               |         |            | < 0.0001 |

 Table 13 Effect of Companies' Size on Audit Fees of General Clients under Different

 Complexity of Transactions

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

This study uses alternate definitions for the control variable,  $BIG_N$ . Here, define Big N is top 10 audit firms instead of top 4 and replace its' variable name as *Top10*. During the sample period, there are a total of 1,180 companies which 334 out of those 1,180 companies are audited by Top 10 audit firms and rest are audited by Non-Top 10 audit firms. The results are reported in Table 14 - 16. There is slightly difference between regression results and sensitivity results.

In the Table 14, *LC* becomes significance when number of Big N audit firms increase which support H1. *ALNDI* becomes insignificance in Top 10's subsample. In the table 15, *LC* and *ALNSI* are omitted due to collinearity. *ALNDI* remains the same. In the Table 16, there is no significant difference between regression results and sensitivity results which is consistent with previous finding.



|                         | Predict       | Non-To      | р 10    | Top        | 10       | Coef.      | t-       |
|-------------------------|---------------|-------------|---------|------------|----------|------------|----------|
| Variables               | Sign          | Coef.       | t-value | Coef.      | t-value  | Difference | value    |
| _cons                   | ?             | -0.5686***  | -2.37   | -1.7414*** | -3.23    | -1.1728**  | -1.99    |
| LC                      | +/-           | 0.2991***   | 2.63    | 0.2421*    | 1.42     | -0.0570    | -0.28    |
| ALNSI                   | +             | 0.1095      | 0.82    | -0.0450    | -0.13    | -0.1545    | -0.42    |
| ALNDI                   | +             | 0.0963**    | 1.73    | 0.0003     | 0.00     | -0.0960    | -0.99    |
| LTA                     | +             | 0.3085***   | 17.58   | 0.3860***  | 10.95    | 0.0775**   | 1.97     |
| Sub                     | +/-           | 0.0122      | 0.26    | 0.1452     | 0.98     | 0.1330     | 0.86     |
| CATA                    | +             | 0.0547      | 0.80    | 0.0690     | 0.49     | 0.0144     | 0.09     |
| Liq                     | +             | -0.0029     | -0.91   | 0.0178*    | 1.63     | 0.0207**   | 1.82     |
| Lev                     | +             | 0.0218***   | 5.75    | 0.1345     | 1.11     | 0.1127     | 0.93     |
| ROA                     | -             | 0.0026***   | 2.55    | -0.0023    | -0.69    | -0.0049*   | -1.43    |
| Loss                    | +/-           | 0.0669*     | 1.53    | 0.0010     | 0.01     | -0.0659    | -0.70    |
| Opin                    | +             | -0.1691***  | -2.89   | -0.2061**  | -1.88    | -0.0370    | -0.30    |
| Exch                    | +/-           | -0.0234     | -0.84   | -0.0431    | -0.79    | -0.0197    | -0.32    |
| <b>CPA1spe</b>          | +             | -0.0044 *** | -1.10   | 0.0003     | 0.04     | 0.0047     | 0.48     |
| Observations            |               | Ċ           |         |            |          | )          | 1,180    |
| Adjusted R <sup>2</sup> |               | Z           |         |            | $\sum I$ |            | 0.6550   |
| F-value                 |               | 1 (&)       |         |            |          |            | 80.94    |
| Prob > F                |               |             | 1/ 11   | 1111       |          |            | < 0.0001 |
| Variables are def       | ined in Table | e 2.        |         |            |          |            |          |

Table 14 Effect of Non-Top 10/ Top 10 Audit Firms on Audit Fees

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

| Variables                         | Predict | Small com     | npany   | Large company |         | Coef.      | t-       |  |  |
|-----------------------------------|---------|---------------|---------|---------------|---------|------------|----------|--|--|
|                                   | Sign    | Coef.         | t-value | Coef.         | t-value | Difference | value    |  |  |
| _cons                             | ?       | 0.8278        | 1.08    | -4.1297***    | -3.71   | -4.9575*** | -3.69    |  |  |
| LC                                | +/-     | -             | -       | -             | -       | -          | -        |  |  |
| ALNSI                             | +       | -             | -       | -             | -       | -          | -        |  |  |
| ALNDI                             | +       | 0.1909        | 1.27    | 0.1584*       | 1.41    | -0.0325    | -0.18    |  |  |
| LTA                               | +       | 0.2259***     | 3.86    | 0.5955***     | 8.82    | 0.3696***  | 4.13     |  |  |
| Sub                               | +/-     | 0.2166*       | 1.48    | -0.2037       | -0.69   | -0.4203    | -1.27    |  |  |
| CATA                              | +       | -0.1441       | -0.71   | 0.1202        | 0.40    | 0.2643     | 0.73     |  |  |
| Liq                               | +       | 0.0086        | 0.80    | -0.0537       | -0.56   | -0.0623    | -0.64    |  |  |
| Lev                               | +       | -0.0264       | -0.16   | -0.4069       | -0.93   | -0.3805    | -0.81    |  |  |
| ROA                               | +       | 0.0022        | 0.70    | -0.0062       | -0.58   | -0.0084    | -0.76    |  |  |
| Loss                              | +/-     | -0.0162       | -0.15   | -0.1576       | -0.89   | -0.1414    | -0.69    |  |  |
| Opin                              | +       | -0.3636***    | -2.51   | -0.2272       | -1.18   | 0.1364     | 0.56     |  |  |
| Exch                              | +/-     | 0.0020        | 0.03    | -0.0405***    | -0.43   | -0.0425    | -0.35    |  |  |
| CPA1spe                           | +       | 0.0106        | 1.02    | -0.0121 **    | -1.09   | -0.0227*   | -1.50    |  |  |
| Observation                       | IS      |               |         |               |         | )          | 334      |  |  |
| Adjusted R <sup>2</sup>           | 2       |               |         |               |         |            | 0.7511   |  |  |
| F-value                           |         | $\mathcal{A}$ |         |               |         |            | 39.65    |  |  |
| Prob > F                          |         |               | 4/ 11   | THEY          |         | <          | < 0.0001 |  |  |
| Variables are defined in Table 2. |         |               |         |               |         |            |          |  |  |

Table 15 Effect of Top 10 Audit Firms on Audit Fees of Large/Small Company

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

*LC* is omitted because of collinearity.

ALNSI is omitted because of collinearity.

| Variables                         | Predict | Small con  | npany Large com |            | npany    | Coef.      | t-       |  |  |  |
|-----------------------------------|---------|------------|-----------------|------------|----------|------------|----------|--|--|--|
|                                   | Sign    | Coef.      | t-value         | Coef.      | t-value  | Difference | value    |  |  |  |
| _cons                             | ?       | 0.0382     | 0.09            | -1.5696*** | -2.74    | -1.6078**  | -2.23    |  |  |  |
| LC                                | +/-     | 0.0417     | 0.34            | 0.2559**   | 1.87     | 0.2142     | 1.16     |  |  |  |
| ALNSI                             | +       | 0.1342     | 0.79            | 0.0681     | 0.53     | -0.0661    | -0.31    |  |  |  |
| ALNDI                             | +       | 0.1138*    | 1.52            | 0.0847     | 0.98     | -0.0291    | -0.25    |  |  |  |
| LTA                               | +       | 0.2688***  | 8.22            | 0.3788***  | 9.27     | 0.1100**   | 2.10     |  |  |  |
| Sub                               | +       | -0.0216    | -0.35           | 0.0539     | 0.73     | 0.0755     | 0.78     |  |  |  |
| CATA                              | +       | 0.0283     | 0.30            | 0.1653**   | 1.65     | 0.1370     | 1.00     |  |  |  |
| Liq                               | +       | -0.0009    | -0.33           | -0.0355*** | -2.75    | -0.0346*** | -2.62    |  |  |  |
| Lev                               | +       | 0.0188***  | 4.91            | -0.2977**  | -1.81    | -0.3165**  | -1.92    |  |  |  |
| ROA                               | -       | 0.0030***  | 3.24            | -0.0043    | -1.03    | -0.0073**  | -1.71    |  |  |  |
| Loss                              | +/-     | 0.0631     | 1.30            | 0.0404     | 0.40     | -0.0227    | -0.20    |  |  |  |
| Opin                              | +       | -0.1955*** | -3.33           | -0.0738    | -0.51    | 0.1217     | 0.77     |  |  |  |
| Exch                              | +/-     | -0.1565    | -0.43           | -0.0341    | -0.80    | -0.0186    | -0.33    |  |  |  |
| CPA1spe                           | +       | -0.0040    | -0.94           | -0.0028    | -0.42    | 0.0012     | 0.15     |  |  |  |
| Observation                       | IS      |            |                 |            |          |            | 846      |  |  |  |
| Adjusted R <sup>2</sup>           | 2       |            |                 |            | $\sum I$ |            | 0.4214   |  |  |  |
| F-value                           |         | 1 (%       |                 |            |          |            | 23.79    |  |  |  |
| Prob > F                          |         |            | 4/11            | 1111       |          |            | < 0.0001 |  |  |  |
| Variables are defined in Table 2. |         |            |                 |            |          |            |          |  |  |  |

Table 16 Effect of Non-Top 10 Audit Firms on Audit Fees of Large/Small Company

\*, \*\*, \*\*\* Imply significance at 10 percent, 5 percent, and 1 percent levels, respectively (one-sided).

# **5. CONCLUSION**

Prior studies have examined auditors' characteristics such as auditors' ability, specialization, reputation or even audit quality (Palmrose 1986; Craswell, Francis, and Taylor 1995; Casterella, Francis, Lewis, and Walkers 2004; Carson 2009; Cahan, Jeter, and Naiker 2011; Lin et al. 2013; Minutti-Meza 2013). Contrast with previous studies, Asthana and Kalelkar (2014) studied further on clients' standpoint. They examine the effects of S&P 500 index clients' reputation on audit fees and find that, when clients are entered the index, they get discounts on their audit fees, but for those non-S&P clients, their audit fees increase at the same time. However, they all focus on well developed countries such as U.S. This study examines the relationship between audit fees and influence of clients from leading companies in different industries of an emerging country, China.

Using a sample of companies from 2003-2014, this study finds results contract with Asthana and Kalelkar (2014) study. The results show that auditors control audit fees decision based on auditors' cost, reputation and industry specialization in China. The leading companies themselves couldn't get any reputation advantage while negotiating audit fees with auditors. In fact, large sized company will be charged higher audit fees than small sized company due to extra time and costs needed. Still, auditors can be benefited from the leading companies. When auditors are having clients from leading companies, they could charge higher audit fees to other general clients. Yet, this is only applicable in the condition that general clients are from the different industry as clients from leading companies

The empirical research shows that Non-Big N audit firms could only charge premium audit fees to small sized general clients in a different industry. Conversely, Big N audit firms could charge higher audit fees to large sized general clients in different industry. These indicate that both auditors and audit firms have reputation effect and could affect audit fees at the same time. Lastly, Comparing to Non-Big N audit firms, Big N audit firms will have advantage on resources or human capital. Therefore, Big N auditors could give small leading companies audit fees discount and charge other small sized general clients audit fees premium. Auditing field is very competitive, stressful and fierce. Employee turnover rate in audit firms is relatively high because of high working pressure. However, their wages don't compare with their work load. While working pressure is fixed, paying higher wages may be an incentive to auditors for reducing employee turnover rate. Auditors would want to have as many clients as possible by carrying on a vicious competition. It might end up in more work but less return. According to Asthana and Kalelkar (2014), they state that when auditors use lowballing as a strategy, and only offer it to specific clients, they would have a higher return. Although auditors give clients from leading companies discount prices, they still can have rent extraction from other clients because they have the reputation of the leading companies.

The empirical research shows that in China, an emerging economy, auditors determine their audit fees on their cost and time spent, regardless of their Big N or Non-Big N status. If the clients from leading companies don't get audit fees discount means auditors are dominating audit fees decision. Auditors' reputation, brand name or costs on auditing are factors for auditors to evaluate their audit fees. The results are opposite from the idea of Asthana and Kalelkar (2014) study. There is a economic system nature difference between western and eastern countries affecting the audit market and regulations. In China, Big N audit firms have a relatively low concentration and Non-Big N audit firms are competitive and active in local areas. Furthermore, China government and regulators encourage Non-Big N audit firms to develop their industry specialization to achieve competitive advantage over Big N (Wand, O, and Iqbal 2009).

China Securities Regulatory Commission regulated all listed companies so that they have to disclose their audit fees in the annual report since 2001. However, there are still some companies that don't follow the regulation and disclose their audit fees. This will reduce and limit the amount of sample. Expected audit fees will be full disclosed in the future to give more completed view. Moreover, this study focuses more on auditors and clients standpoint rather than governance. Indeed, governance could be a factors to affect China audit market and audit fees since there is a nature difference between capitalism and communism. Future studies may take on political, economic and governmental perspectives to fulfil the research. Audit fees are highly associated with audit risks or time and cost auditors spent. Unfortunately, the information of costs and time of auditors are unavailable to obtain. In addition, since this study separate different industry, their market risks might be different among

1959

industries. Even though this study includes *CATA*, *Liq*, *Lev*, *ROA* and *Loss* to measure audit risk, there are some risks that this study might not be able to capture. Last, this study classifies companies whose sale revenue are at the top 3 in the industry as leading companies, however, leading companies could have several meaning or judgment depend on different classification. Expected future research could develop an indicator or index that can satisfy the demand.



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