Spring 5-1-2009

The Impact of the Sarbanes-Oxley Act on Regional Firms

Hyejoon Yoon

I. INTRODUCTION

There have been major audit failures involving the largest companies such as Enron, WorldCom and Tyco. As a result of these audit failures, Arthur Andersen no longer exists and the audit failures have raised serious concerns about audit quality. In order to prevent future potential audit failures, the Sarbanes-Oxley Act was passed in 2002 to establish enhanced standards for oversight of accounting professionals, including U.S. public company boards, management, and public accounting firms. In addition, the Sarbanes-Oxley Act limits consulting services performed by CPA firms to improve auditor independence.

After the Sarbanes-Oxley Act was passed, there was increased attention on major public accounting firms regarding audit quality, audit pricing, independence, risk assessment, and legal liabilities. Research conducted by Hoitash, Markelevich, and Barragato found that the quality of audits has improved and the price of audits increased following the passage of the Act. Public companies have been restricted from utilizing their own accounting firms for such services as advisory and some tax services. In order to maintain their independence, three of the four major accounting firms sold their consulting practices, even though consulting practices are again growing rapidly. Interestingly, however, there has been little research focusing on the impact of the Sarbanes-Oxley Act on private companies and smaller audit firms. Given the impact of the Sarbanes-Oxley Act, this study examines whether the effects of the Act extend to private companies and their audit firms in the Central New York market.

II. BACKGROUND

The accounting profession has been challenged with independence issues and the quality of audits. Audit quality concerns have been raised dramatically since the increasing number of audit failures from the largest audit firms in the early 2000s. Because public accounting firms play major roles in ascertaining the validity and reliability of financial information, the quality of audits is important to shareholders, stockholders, and internal management teams. The U.S. Securities and Exchange Commission expressed its concern about potential audit independence issues arising from non-audit services. Many researchers have conducted studies of the relation between measures of audit quality and auditor independence.

A. Audit Quality

The term "audit quality" is not easily defined, and audit quality can be defined from different perspectives. Epstein and Geiger (1994) find that auditors are considered to be the highest level of assurance for investors. Over 70% of investors expect no material misstatements or fraud in financial statements examined by independent auditors. On the other hand, auditors strive to provide high quality audits to avoid litigation, limit negative reputation effects, and maximize client satisfaction. Two measures of audit quality are audit firm size and the knowledge and skills of the members of the audit team.

Audit Firm Size

DeAngelo (1981) asserted larger audit firms provided higher quality audits to maintain their reputation. The perception of larger audit firms providing higher quality audits plays a major role in attracting and attaining clients. In order to obtain a great reputation, larger firms invested in developing extensive control systems so that their audit quality performances were the best possible. The better and updated technologies used in Big Four audit firms detect going concern issues more accurately, which results in an aggressive stance in issuing the appropriate opinion (Wooten, 2003). DeAngelo also argued that larger audit firms have higher audit quality because of their greater level of independence, which will be discussed later in the paper.

Another measure of audit quality is litigation outcomes. Palmrose (1988) examined 472 legal cases from 1960 to 1985. She found that the larger accounting firms were less often involved in litigation compared to non-Big Four audit companies. Palmrose concluded that the lower amount of litigation against large audit firms was due to their higher audit quality. Wooten (2003) drew the relationship that less litigation exposure generates more wealth for clients, and also provides justification for Big Four audit firms to charge a premium fee. The premium fee allows larger firms to provide more incentives and benefits to attract skilled employees.

Audit Team

Carcello, Hermanson, and McGarth (1992) emphasized the important role of audit teams in providing high audit quality. Partners and managers focus on supervising staff members, reviewing, and signing off on important workpapers. The attention provided by partners and managers helps ensure high audit quality. For instance, Tommy O'Connell was a senior auditor in charge of a project at the Altamesa Manfacturing facility. When an inexperienced staff auditor, Carl

Wilmeth, handed in his work incomplete, O'Connell had to spend extra hours tracking down missing invoices and late confirmations. The premature signoff became a concern in this case due to the time pressure and the limited budget; however, there was no litigation involved. The Tommy O'Connell case illustrates the important role of managers and partners as reviewers of work completed by inexperienced staff members.

As Houghton and Fogarty found in their research, many inherent errors were detected in the early stage. In order to identify errors before the actual audit starts, auditors' knowledge and experience are critical. Auditors with greater industry knowledge provide more accurate assessments of inherent risk that are critical to designing effective audit plans.

B. Auditor Independence

Even though auditing remains the largest practice unit of audit firms, consulting services and tax services on average contributed 32% and 22%, respectively to firms' revenues in 2008 (Kinney, Palmrose, and Scholz, 2008). A large portion of the auditor fee comes from non-audit services. Some argue that the magnitude of non-audit fees could cause a reduction in auditor independence.

Fee Sources and Independence in Appearance

The large profits generated by non-audit services could negatively impact audit firm independence. In order to enhance the independence of the audit function, keeping auditors independent to all users is important by avoiding any situations that lead outsiders to doubt auditors' independence (Burton, 1980). Because of the auditor independence appearance concerns, in 2002 Walt Disney, Inc. declared that it would refuse to buy any non-audit services from the accounting firm that audits its financial statements (Glater, 2002). The concern is that auditors might go easy on a client that is paying a large amount of consulting fees. For example, when Enron went bankrupt, the question occurred because Enron paid Andersen $25 million for its audit, while the consulting services cost $27 million (Glater, 2002).

As a result of Enron and other alleged audit failures, the Sarbanes-Oxley Act was signed in 2002. Section 201 clearly restricts many non-audit services provided by accounting firms to audit clients. Even though the Sarbanes-Oxley Act prohibits bookkeeping, legal services, or actuarial services, it does not completely prohibit consulting services. In the period leading up to Enron's collapse, Big 4 audit firms started to separate their consulting businesses. For instance, Ernst & Young sold its consulting services to Cap Gemini, and KPMG shed its consulting through a public stock offering.

Since the major role of auditors is providing assurance to investors, the quality of audits helps determine whether a company will be able to avoid litigation, limit negative reputation effects, and maximize client satisfaction. Larger audit companies tend to provide a higher quality of audits to maintain their positive reputation and retain their clients. In addition, if an audit team is knowledgeable of the industry, there are more accurate predictions of inherent risks, which lead to higher quality of audits. Auditor independence is another component to determine the audit quality. The more independent audit companies are, the higher the audit quality. In order to maintain independence, non-audit services provided by audit companies are strongly prohibited.

C. Enron

Between 2000 and 2002, a series of large corporate frauds occurred due to a variety of complex factors that created the conditions and culture for fraud. Enron Creditors Recovery Corporation (Enron) was an American leading energy company based in Houston, Texas. It employed approximately 22,000 (McLean & Elkind, 2003) and *Fortune* magazine named Enron as "America's Most Innovative Company" for six consecutive years in the 1990s. In late 2001, a financial scandal involving Enron and its accounting firm Arthur Andersen was revealed.

In 2000, Enron reported revenue of $101 billion. Enron was able to boost its revenues because the Congress of the United States of America passed legislation deregulating the sale of electricity and natural gas in the early 1990s. By creating special purpose entities, Enron was able to avoid taxes and raise the profitability of the business. Creating special purpose entities such as Bob West Treasure, Jedi, and Hawaii gave Enron the freedom to move currency and anonymity so that losses of the company could be taken off the balance sheet, which made Enron look more profitable than it actually was. As a result, it created a spiral each quarter so that officers needed to create the illusion of billions in profits while the company was actually facing losses. Even though executives and investors knew about the offshore accounts, they continued insider Enron stock trading that was worth millions of dollars.

In November 1999, Enron launched EnronOnline, an Internet-based transaction system, that permitted buyers and sellers to buy, sell, and trade products globally. In order to create a user-friendly website, EnronOnline operated just like a stock ticker that allowed participants to see prices on their screen. Natural gas and electricity were the most common commodities traded in EnronOnline. Because Enron was not involved with buying, selling, or trading in every transaction, it used the mark-to-mark accounting method, which calculates the value of financial instruments held based on the current market price. With the technology boom, Enron was able to manipulate the price of its stock on Wall Street and recorded gains from what could have been losses.

The concerns of the company started to rise on August 14, 2001, when Jeffrey Skilling, the chief executive of Enron, announced his resignation after only six months with the firm. Skilling sold 450,000 Enron shares worth $33 million. Kenneth Lay, the chairman at Enron, announced there was "absolutely no accounting issue, no trading issue, no reserve issue, no previously unknown problem issues" involved in Skilling's departure. Furthermore, Lay reassured investors that there would be "no changes in the performance or outlook of the company going forward" (Lay, 2001). In the *New York Times*, Paul Krugman attacked Enron as an illustration of the consequences of the deregulation and commoditization of energy.

With the falling stock prices, Enron announced a loss in the third-quarter in 2001. The executives explained the losses were caused by investment losses and other losses in their core energy businesses. When the U.S. Securities and Exchange Commission announced its investigation of Enron's suspicious deals, the share price of Enron fell from $20.65 to $5.40 in one day, on October 22, 2001. The Enron executives announced their full participation in the investigation to clear up any concerns of their transactions.

In November 2001, Enron executives started looking for new investment or a buyout. Enron management was able to find Dynergy, another energy company based in Houston, TX. On November 8, 2001, Dynergy and Enron made a deal for Dynergy to provide Enron $2.5 billion in cash. A couple of days after the deal, Enron announced its plan to sell $8 billion worth of underperforming assets.

Even with these optimistic plans, Dynergy disengaged from the acquisition. In addition to the disengagement, Enron's credit rating was slightly above the lowest level and the company had $23 billion in liabilities. On December 1, 2001, Enron filed for Chapter 11 bankruptcy. As a result of the bankruptcy, Arthur Andersen's audits were receiving attention.

On June 15, 2002, Arthur Andersen was convicted of shredding Enron related documents as an obstruction of justice. As a result of this conviction, Arthur Andersen agreed to surrender its Certified Public Accountant licenses. It was questioned whether Arthur Andersen maintained its integrity and independence from its audit client, which paid $25 million for its audit but $27 million in consulting service fees (Glater 2002). Although the Supreme Court of the United States overturned Andersen's conviction, Arthur Andersen was not able to recover from the negative impact on its reputation. With Arthur Andersen's downfall, there are only four big accounting firms.

D. Sarbanes-Oxley Act

In response to a number of major corporate and accounting scandals, the Sarbanes-Oxley Act, also known as the Public Company Accounting Reform and Investor Protection Act, was signed on July 30, 2002. The Sarbanes-Oxley Act combined the accounting reform bills of Senator Sarbanes and Representative Oxley. The Sarbanes-Oxley Act contains 11 titles, which specify mandatory requirements in reporting financial statements. A key provision of the Sarbanes-Oxley Act is the establishment of the Public Company Accounting Oversight Board (PCAOB) in Title I. In order to provide independent oversight of public accounting firms that offer audit services, the Sarbanes-Oxley Act established the PCAOB. The PCAOB establishes standards for auditing, ethics, independence, and quality control for public company audits, and it inspects the quality of audit firms.

Title II emphasizes independence of external auditors to limit conflicts of interest. It requires audit partner rotation every five years, auditor reporting requirements, and new auditor approval requirements. Title II restricts public accounting firms from providing non-audit services to their clients, including bookkeeping services, financial information systems design and implementation, valuation services, investment advising, legal services, and any other services that the Board determines are impermissible.

Corporate responsibility is listed in Title III to enhance the accuracy and completeness of corporate financial reports. The company's principal officers, such as the Chief Executive Officer or Chief Financial Officer, are obligated to certify and review the annual reports to ensure the integrity of the company's financial matters. Furthermore, it specifies the limits of the specific forfeitures of benefits, civil penalties for non-compliance, and the interaction of external auditors and corporate audit committees.

Title IV focuses more on enhancing reporting requirements for financial transactions, especially an emphasis on the importance of periodic reports and disclosures. It requires the financial statement issuers to disclose the adoption of a code of ethics for senior financial officers and adequate reasons if the code of ethics has been omitted. Furthermore, the rule requires that the company disclose if its audit committee does not have at least one financial expert to ensure the quality of financial statements. Section 404 of Title IV requires auditors to report on management's assessment of the effectiveness of internal controls. According to many previous research studies, this requirement resulted in a substantial increase in audit fees.

Unlike other titles, Title V only consists of one section, which defines the codes of conduct for securities analysis and requires disclosure of conflicts of interest. In order to restore investor confidence in securities analysis, Title VI emphasizes authorization of appropriations and appearance and practice before the commission. Identifying inappropriate professional conduct made clear what results in a violation of professional standards.

Title VII narrates the various studies conducted and their findings. The study fields include credit rating agencies, report violations, investment banking and enforcement actions. These findings prove the importance of consolidation of public accounting firms and the role of credit rating agencies in the operation of securities markets.

Title VIII explains the accountability in corporate and criminal frauds. It describes punishments and penalties due to criminal manipulation, destruction and alternation of financial records. In addition to Title VIII, Title IX describes the possible consequences of white collar crimes. It suggests enhanced sentencing guidelines such as a fine up to $5,000,000 and imprisonment up to 20 years.

Title X simply requires the Chief Executive Officer to sign the company's tax returns. Lastly, Title XI describes corporate fraud accountability. It gives the power to the Securities and Exchange Commission (SEC) to freeze large or unusual payments made by companies temporarily. In addition, the SEC can prohibit certain people from serving as an officer of a public company due to previous fraud attempts. As a result, Title XI increases criminal penalties under the Securities Exchange Act of 1934.

The Sarbanes-Oxley Act and its enhanced new procedures changed the relations between many U.S. companies and their investors. The Sarbanes-Oxley Act has been praised for improving investor confidence and providing more accurate and reliable financial statements. By prohibiting auditors from having a consulting agreement with the audit client, Section 201 addresses potential auditor conflicts of interest. SEC Chairman Christopher Cox believes, "Sarbanes-Oxley helped restore confidence in U.S. markets by increasing accountability, speeding up reporting, and making audits more independent" (Cox, 2007). Due to the law's restrictions, there were 1,295 restatements of financial earnings in 2005 among companies listed on

U.S. securities markets, which was double the amount from 2004. These restatements show that previous audit reports were inaccurate or materially misstated. Therefore, the SEC subcommittee believes the restatement should include facts such as how it was discovered, why it occurred, and corrective actions that were taken by the company to prevent the error in the future (SEC, 2007). After announcing restatements, 60 percent of restating firms face a turnover of a top executive within 24 months, which leads to a negative reputation and lowering the total earnings of the firm (Desai, Hogan and Wilkins, 2006). Despite a few praises regarding the Sarbanes-Oxley Act, there are many criticisms as well. Congressman Ron Paul believes the Sarbanes-Oxley Act "damaged American capital markets by providing an incentive for small U.S. firms and foreign firms to deregister from U.S. stock exchanges" (Paul, 2004). According to Wharton Business School research, there were only 10 new foreign listings on the New York Stock Exchange in 2004, and many companies decided to deregister after the Sarbanes-Oxley Act. On December 21, 2008, the Wall Street Journal criticized "the new laws and regulations have neither prevented frauds nor instituted fairness. But they have managed to kill the creation of new public companies in the U.S., cripple the venture capital business, and damage entrepreneurship" (Wall Street Journal, 2008).

F. Post Sarbanes-Oxley Act

While the Sarbanes-Oxley Act not only provides for confidence in financial statements, it increases legal liability of accountants. In the pre-Sarbanes-Oxley Act era, auditors faced liability only when a client company collapsed. Nevertheless, after the Sarbanes-Oxley Act, auditors can potentially face legal consequences for a failure in a PCAOB inspection. The regulation by the PCAOB changed the audit regulatory system. As a result, auditors can be suspended, terminated or sentenced to 20 years in prison for purposefully destroying documents. Furthermore, an auditor's wrongful actions prohibit the auditor from performing audits of public companies (Wegman, 2005).

The major finding in the post Sarbanes-Oxley Act era is the increase in audit fees. Among the S&P 500 companies, the audit fee increased 27% from 2001 to 2002, 24% from 2002 to 2003 (Foley and Lardner, 2004), and 55% from 2003 to 2004 (Foley and Lardner, 2005). In addition, between 2001 and 2004, total audit and audit-related fees increased 103% for 496 companies from the S&P 500 companies. One of the causes for the fee increase is internal control reporting under Section 404. The report on internal controls requires a new set of procedures and related costs to the standard audit. According to the CEO of Deloitte USA, the firm's clients experienced audit fee increases of approximately 40 percent from 2003 to 2004 (Whitehouse, 2005). These dramatic increases in costs are mainly due to additional work imposed upon clients.

Despite the increase in audit fees, some local and regional audit firms discontinued performing SEC audits after the Sarbanes-Oxley Act was passed. In 2002 and 2003, 25 out of the 47 audit firms that participated in a research study ceased SEC audit work. In total, about 7 percent of small audit firms ceased SEC audits. The primary reason for leaving the public company audit market was the oversight process of the PCAOB. The second primary factor given for leaving the market was availability and cost of liability insurance in the post Sarbanes-Oxley

Act era. After ceasing the SEC audits, ten responders are not expecting any decline in their revenue because they are planning to offer other services to their clients. On the other hand, eighteen firms are expecting to experience a 5 to 20 percent loss in their revenue (Read, Rama, and Raghunandan, 2004).

Regardless of ceasing SEC audits and expecting to provide more "other services," from 2001 to 2004, accounting firms experienced a major decrease in "all other fees," which include fees for financial systems design and implementation. One of the major reasons, however, is due to the selling off of consulting services. Starting from 2003, auditing became a major source of revenue for accounting firms due to the additional responsibility of signing off on internal control systems. Accounting firms reported eighty-two percent of their audit-firm billings are generated by auditing. Despite the fact that the Sarbanes-Oxley Act banned accounting firms from providing non-auditing services, these firms can still offer these services to non-audit clients (Ciesielski, 2006).

Due to these impacts of the Sarbanes-Oxley Act, I am interested in finding the consequences of the Sarbanes-Oxley Act on private and local firms. In particular, I investigate perceived changes in fees and quality in the local audit market after the Sarbanes-Oxley Act.

III. METHOD

A. Survey Instrument

The first phase of the study involved developing specific questions that relate to audit quality, the Sarbanes-Oxley Act and audit pricing. Audit quality and pricing were two key elements identified from reviewing the articles and literature, especially DeAngelo. In order to obtain information related to the Sarbanes-Oxley Act, current articles and newspapers were used to broaden my understanding.

Questions were developed to determine the impact of the Sarbanes-Oxley Act on regional companies, concentrated in the Central New York area. Questions were aimed at determining whether the company used Big Four or local accounting firms to audit their financial statements. If their financial statements are not audited by auditors, another question followed asking whether financial statements were reviewed by an accounting firm. A review provides less assurance than an audit on the fairness of the financial statements. Some questions were designed to determine the changes in perceived audit quality, audit fees, and auditor independence due to the Sarbanes-Oxley Act. Additional questions addressed the level of satisfaction with the audit services to assess whether the Sarbanes-Oxley Act has positively affected audit quality in the local audit market.

There have been numerous research studies done to determine how public companies and major accounting firms have reacted to the change in accounting rules. Nevertheless, due to limited access to information, the impact of the Sarbanes-Oxley Act on private companies has not been widely studied. Therefore, the main intention from the questionnaire is to gather the impact of the Sarbanes-Oxley Act on private companies in one local market.

The questionnaire contains 19 attributes, which rate client satisfaction with the auditor, as well as the auditor's knowledge. Survey participants were asked to evaluate the degree of impact of the Sarbanes-Oxley Act on their company. If there was a change in accounting firm within the last 5 years, the questionnaire asked about the reason for the change in auditors. In addition, questions addressed the level of audit quality, audit and other fees, and the knowledge of the accounting firms to determine the impact of the Sarbanes-Oxley Act. The audit quality attributes included in the questionnaire, and the scale responses format, are presented in the Appendix. Out of these 19 questions, 15 questions are qualitative while only four questions focused on quantitative data such as audit and non-audit services fees. Qualitative questions were designed to find the changes in audit quality, service satisfaction, and independence. Quantitative questions were designed to measure how much these local companies spent on audit and non-audit services for fiscal year 2007.

The second phase of the survey involved sending out the actual survey questionnaires. A total of 112 surveys were sent to advertising agencies, architectural firms, banks, building supply companies, and commercial builders industries on September 26, 2008. Surveys were sent to 168 commercial builders, commercial printing companies, credit unions, cultural and performing art organizations, durable medical equipment suppliers, and employment benefit consultant industries on October 3, 2008. The first response was received on September 30, 2008 and the last response was received on January 6, 2009.

Responses to 126 out of 429 questionnaires were received over a 15-week period. The response rate of approximately 29% is typical of survey research.

B. Participants

Questionnaires were sent to the Chief Executive Officers, Chief Financial Officers, or the president of companies. The names and addresses of these officers were obtained from *Business Journal: Central New York, Book of List 2008*. Among the 52 industries included in this publication, 17 industries were selected based on the size of the industry. These industries are: advertising agencies, architectural firms, banks, building supply companies, commercial builders, commercial printing companies, credit unions, cultural and performing art organizations, durable medical equipment suppliers, employment benefit consultants, employment placement agencies, engineering firms, environmental consulting firms, law firms, residential builders, software developers, and web-design and development firms.

IV. HYPOTHESIS

A. Level of Audit Fees

Due to increases in effort and resource constraints, there was a significant increase in audit fees after the passage of the Sarbanes-Oxley Act in 2002. In the post the Sarbanes-Oxley era, it is mandatory for publicly traded companies to have their financial statements and effectiveness of internal control audited by public accounting firms (Ettredge, Li and Scholz, 2007).

In order to keep the audit fee stable, clients who used a Big 4 auditor may substitute smaller or lower cost auditors. These clients that change their auditors appear to be small enough to feasibly hire a non-Big 4 auditor to continuously audit their financial statements. This dismissal is in favor of either a national or a regional auditor. In 2006, PricewaterhouseCoopers announce that it experienced fee increases; however, there will be cost savings, efficiencies and assessment requirements because auditors and clients gained experience with post-Sarbanes-Oxley Act audits.

Although the Sarbanes-Oxley Act does not apply to private companies, it created a large increase in audit demand that likely affected the entire industry. As a result, even private companies likely experienced increased audit fees. The first hypothesis addresses the effect of the Act on audit fees.

H_{1A}: Private companies experienced an increase in audit fees due to the Sarbanes-Oxley Act.

DeAngelo found that audit fees are lower for initial audit engagements to attract clients, but auditors may reduce the extent of audit procedures commensurate with the lower audit fee. Changing auditors for the client is costly, so the lower fee compensates clients for switching auditors. In addition, DeAngelo argues that the auditors earn a quasi-rent stream in later years for lowering their initial audit bids. Even though clients can maintain low audit fees by constantly changing auditors, it might affect their reputation and cost in a start-up investment relationships.

On the basis of the preceding discussion, I state the following hypothesis:

H_{1B}: The increase in audit fees will be lower for companies that changed auditors over the past five years compared to companies that did not change auditors.

B. Level of Audit Quality

Integrity and objectivity are a part of the profession's ability to enhance auditor independence. The American Institute of Certified Public Accountants (AICPA) requires auditors to "retain their integrity and objectivity in all phases of their practices and, when expressing opinions on financial statements, avoid involvement in situations that would impair the credibility of their independence" (28) and it is discussed in the Professional Ethics Executive Committee Meetings. DeAngelo (1981) argued larger audit firms have greater independence because each client is immaterial to the company. Immateriality makes the audit firms resist client pressure. On the other hand, DeFond, Raghunandan, and Subramanyam (2002) indicated one of regulators' concerns is that auditors may be willing to sacrifice independence to retain clients that pay large auditor fees. These researchers were able to examine the association between non-audit services and auditor independence. Contrary to DeAngelo's argument, DeFond's research suggested that fees could potentially influence the auditor's independence by creating an economic bond.

The lower fees for initial audit engagements are a possible result from lowballing. Deis and Giroux (1992, 1996) found that there was higher audit quality on initial audit engagements in the government sector. Even though these research studies related to the governmental sector found evidence of higher audit quality for initial audit engagements, I believe lower costs are the result of less audit hours spent by audit teams, which could possibly lower the audit quality.

Hoitash, Hoitash, and Bedard provided a reason for audit fee increases regardless of whether internal control problems were disclosed by public companies under the Sarbanes-Oxley Act. They concluded that auditors increased testing to address control problems. Auditors are assessing the possibilities of risks that were not previously disclosed under control problems. Hoitash, Markelevich and Barragato conducted the research during the period 2000-2003 to find the relationship between total fees and audit quality over years. The research time period is very interesting because there were sweeping changes in the accounting professional environment. They claimed that increases in total fees will enhance auditor independence, which will lead to an increase in audit quality. Therefore, I state the following hypothesis.

> $\mathbf{H_2}$: The level of audit quality will increase as the level of audit fees increases.

C. Client Satisfaction

I am also interested in finding whether the client's satisfaction with the audit quality provided by the audit firm depends on the accounting firm's industry knowledge, familiarity with the client's internal control, client's industry, and the valuable suggestions provided to management.

Daugherty and Tervo used S&P 500 companies to find the relationship between auditor changes and client satisfaction. They found that a recent change in auditors reduces the respondent's satisfaction level with the professional services provided by the auditor compared to respondents not experiencing a change. In addition, they found there are no differences in client satisfaction regardless of the level of audit fees. One the other hand, some studies found that the audit fee is one of the significant drivers of client satisfaction. As the result of the loss of Arthur Andersen, the number of 'Big' audit firms has declined, while the number of publicly traded companies stayed constant. Therefore, clients have lost the leverage to select their audit firms. Due to higher audit fees and reduction in the number of large audit firms, client satisfaction is a daunting task (Daugherty and Tervo, 2005).

Carcello et al. (1992) used 653 sample responses from Fortune 1000 companies to examine important factors in determining audit quality. Their research reported the four most critical factors for high audit quality: the experience of the audit team, auditor experience and knowledge in the industry, responsiveness to client needs and compliance with the general audit standards. Industry specialization on audit engagements enhances the quality of audit. They found that the audit team and firm experience with the client is the most important factor in determining audit quality.

Some researchers argue that "the price of the service can greatly influence perceptions of quality, satisfaction, and value. Because services are intangible and are often difficult to judge before purchase, price is frequently relied on as a surrogate indicator that will influence quality expectations and perceptions" (Zeithaml and Bitner, 2000). Behn, Carcello and Hermmanson (1997) examined the relationship between audit quality attributes and client satisfaction. They found that client satisfaction with the audit team has a positive relationship with the audit fee paid by Fortune 1000 clients. Based on previous studies, I state the following hypotheses.

> **H_{3A}**: The client's satisfaction with the accounting firm will increase with the accounting firm's knowledge of the client's internal control and ability to provide valuable suggestions.

> **H_{3B}**: The client's satisfaction with the accounting firm will decrease with the level of audit fees.

These research hypotheses will be examined using both univariate tests and multivariate models that control for other factors that impact audit quality, client satisfaction, and audit fees.

V. Model Development

To test the hypotheses, three regression models are used to examine the impact of the Sarbanes-Oxley Act on regional firms. In order to measure different effects of qualitative data, a logistic model is used in this research. It is a regression model for ordinal dependent variables measuring categorical variables. The following dependent variables are examined: (1) the change in the level of audit fees, (2) the level of audit quality, and (3) client satisfaction.

A. Fee Model

The first model is designed to find the relationship between the change in the level of audit fees and certain audit attributes. The control variables that are used in this model are based on previous research related to audit fees, quality, and satisfaction. The model for the perceived change in the level of audit fees is as follows (variables are defined in table 1):

$$\text{LEVELAFEE} = b_0 + b_1\ \text{FSAPUB} + b_2\ \text{FSREV} + b_3\ \text{INTAUD} + b_4\ \text{CHANGE5YR} + b_5\ \text{AMTHRS} + b_6\ \text{QUALITYA} + b_7\ \text{SATWQUAL} + b_8\ \text{0NONE} + b_9\ \text{1TAX} + b_{10}\ \text{2CONS} + b_{11}\ \text{3BOOK} + b_{12}\ \text{4OTHER} + \varepsilon$$

B. Quality Model

The second model represents the change in audit quality provided by independent accounting firms. This model used the same variables except QUALITYA is the dependent variable instead of LEVELAFEE. The following is the estimated logistical regression:

$$\text{QUALITYA} = b_0 + b_1\ \text{FSAPUB} + b_2\ \text{FSREV} + b_3\ \text{INTAUD} + b_4\ \text{CHANGE5YR} + b_5\ \text{AMTHRS} + b_6\ \text{LEVELAFEE} + b_7\ \text{SATWQUAL} + b_8\ \text{0NONE} + b_9\ \text{1TAX} + b_{10}\ \text{2CONS} + b_{11}\ \text{3BOOK} + b_{12}\ \text{4OTHER} + \varepsilon$$

C. Perceived Satisfaction Model

The third model reflects client satisfaction with the audit services provided by the accounting firm. QUALITYA, AMTHRS and LEVELAFEE are not used in this model because these three variables measure changes. Instead, INTCONTRL, INDUST, and VALUSUGGEST are used to enhance the relationship of the regression model. For the measure of satisfaction, I estimated the following logistical regression:

$$\begin{aligned} \text{SATWQUAL} = {} & b_0 + b_1 \text{ FSAPUB} + b_2 \text{ FSREV} + b_3 \text{ INTAUD} + b_4 \\ & \text{YEARSACCFIRM} + b_5 \text{ CHANGE5YR} + b_6 \text{ 0NONE} + b_7 \\ & \text{1TAX} + b_8 \text{ 2CONS} + b_9 \text{ 3BOOK} + b_{10}\text{4OTHER} + b_{11} \\ & \text{INTCONTRL} + b_{12} \text{ INDUST} + b_{13}\text{VALUSUGGEST} + \varepsilon \end{aligned}$$

Model variables are summarized in Table 1.

Table 1
Summary of variables

Dependent variable, measured on a 5-point scale	
Name	Construct or Concept measured
LEVELAFEE	The level of audit fees change
QUALITYA	The change in audit quality provided by the accounting firm
Dependent variable, measured on a 10-point scale	
Name	Construct or Concept measured
SATWQUHL	Client satisfaction with the quality of audit firm
Independent variables, measured dichotomously	
Name	Construct or Concept measured
FSAPUB	Financial statements audited by a public accounting firm
FSREV	Financial statements reviewed by an accounting firm
INTAU	Internal audit function in the company
0NONE	Not utilizing any other services provided by the accounting firm
1TAX	Utilizing tax service provided by the accounting firm
2CONS	Utilizing consulting service provided by the accounting firm
3BOOK	Utilizing bookkeeping service provided by the accounting firm
4OTHER	Utilizing other service provided by the accounting firm
Independent variables, measured on a 5-point scale	
Name	Construct or Concept measured
AMTHRS	The amount of audit hours spent by the accounting firm

Independent variables, measured on a 10-point scale

Name	Construct or Concept measured
INTCONTRL	Accounting firm's knowledge and familiarity with client's internal control
INDUST	Accounting firm's knowledge of the client's industry
VALUSUGGES	Valuable suggestions provided by the accounting firm

Other independent variables

Name	Construct or Concept measured
CHANGE5YR	Change of an accounting firm within last 5 years
OSERV	Other services utilizing from the accounting firm

D. Dependent Variables

In this research, three different variables measure the impact of the Sarbanes-Oxley Act on regional firms. These are the level of change in audit fee, quality of audit, and client satisfaction.

The first dependent variable, LEVELAFEE, measures changes in audit fees over the period. Given the nature of the study, the judgment of individuals with knowledge and in a position to observe the changes in the audit fee is required. Since 2002, S&P 500 companies experienced a major increase in the audit fee due to additional work required such as the Section 404 report on internal control (Foley and Lardner, 2005). Since private companies are not required to follow the Sarbanes-Oxley Act and its procedures, LEVELAFEE will provide measure of how the market changes triggered by the Sarbanes-Oxley Act have impacted local firms.

The second dependent variable, QUALITYA, is based on respondents' perceptions of the change in audit quality provided by accounting firms after the Sarbanes-Oxley Act. If the level of audit fee has increased after the Sarbanes-Oxley Act, the quality of audits provided by accounting firms should also have increased. An increase in total fees leads to an increase in audit quality because the fee enhances auditor effort and audit independence (Hoitash, Markelevich and Baragato, 2005). If clients have experienced a decrease in audit fee, it might be a result from lowballiing, which lowers the level of audit quality (Deis and Giroux, 1992, 1996).

The last dependent variable, SATWQUHL, is also based on audit clients' judgment and it captures client satisfaction with the audit quality that is provided by an accounting firm on a level from one to ten. Zeithaml and Bitner (2000) suggest that the audit fee will be the most influential factor of determining client satisfaction because the audit service is intangible and is difficult to measure.

These dependent variables measure clients' perceptions and capture perceived audit fees, quality and satisfaction after the Sarbanes-Oxley Act. These variables are subject to respondents' opinion. Therefore, it moves beyond the effect of the audit firm's reputation on audit fees, quality and satisfaction.

E. Control Variables

The majority of the control variables used in this study are factors that were identified as affecting audit fees, quality and satisfaction. These include FSAPUB, FSREV, INTAUD, CHANG5YR, AMTHRS, 1TAX, 2CONS, 3BOOK, 4OTHER, INTCONTRL, INDUST and VALUSUGGE.

FSAPUB, FSREV and INTAUD are components determining whether a company is audited or not. FSAPUB measures whether a company is audited by a public accounting firm. If a company is not audited by a public accounting firm, FSREV captures whether the company's financial statements are reviewed by any accounting firm. Having its own internal audit function (INTAUD) can help a firm build a professional relationship with external auditors and investors. The internal audit function can provide assurance to third parties as well. Hiring an external auditor increases transparency for external investors and the management team. External investors or third parties lack relevant information about the value, performance, financial position, risk, and investment opportunities of firms. A lack of reliable information creates asymmetry, which can result in not maximizing investment policies and motivating employees (Bushman and Smith, 2005).

CHANG5YR captures whether the client changed accounting firms after the Sarbanes-Oxley Act. While local and regional audit firms are dropping SEC clients, companies are also changing their auditors in order to reduce the audit fee (Ettredge, 2007). After the Sarbanes-Oxley Act, one of the main reasons for the fee increase is due to Section 404, which requires auditors to spend more time evaluating the internal control of a company (Whitehouse, 2002). Although private companies are not subject to the Sarbanes-Oxley Act and Section 404, overall changes in the audit environment after passage of the Act likely affected the extent of audit testing on all engagements. AMTHRS measures the change of audit hours spent by a client's accounting firm.

Publicly traded companies are prohibited from using non-audit services from their audit companies. Non-audit services are strongly forbidden in order to maintain auditor independence (Burton, 1999). However, there is no such a restriction on private companies. 1TAX, 2CONS, 3BOOK and 4OTHER captures any non-audit services provided by external accounting firms to measure the independence of audit firms and impact on the quality of audit provided.

The three control variables, INTCONTRL, INDUST and VALUSUGGE are components of audit quality tested by Carcello et al. (1992). These variables are main elements that enhance the quality of audit. Carcello et al. found that the audit team's familiarity with the client's internal control, knowledge of the industry, and responsiveness to the client are major factors determining the quality of audit.

VI. RESULTS

A. Response Rate

The survey questionnaires were sent to 429 companies located around the Central New York area, regardless of whether the company was private or public. As shown in Table 2, among the 429 companies, 126 responses were received, a 29.4% response rate. Given the nature of the research, and the nature of the companies contacted, the response rate is considered satisfactory.

TABLE 2
Sample Characteristics

Industry	Sample Size	Usable Responses	Response Rate
Advertising agencies	32	9	28%
Architectural firms	29	11	38%
Banks	28	13	46%
Building supply companies	19	5	26%
Commercial builders	25	12	48%
Commercial printing companies	25	11	44%
Credit unions	25	14	56%
Cultural & performing art organizations	26	8	31%

Durable medical equipment suppliers	18	9	50%
Employment benefit consultant	29	5	17%
Employment placement agencies	20	5	25%
Engineering firms	31	9	29%
Environmental consulting firms	21	1	5%
Law firms	26	6	23%
Residential builders	19	1	5%
Software developers	19	4	21%
Web-design & development firms	37	3	8%
Total	429	126	29%

B. Market Share

Among the accounting firms listed in the survey questionnaire, the Firley, Moran, Freer and Eassa, P.C. accounting firm has the greatest market share at 12%. Firley, Moran, Freer and Eassa, P.C. focuses on construction and real estate, credit unions, energy, manufacturing, professional and business services, and wholesale distribution/retail industries. Since the company was established in 1980, Firley, Moran, Freer and Eassa, P.C. concentrates on audit, tax, and management consulting services in the Central New York region. Because of the accountant's provincial focus and closeness to their clientele, Firley, Moran, Freer and Eassa captured a great portion of the market share. In addition, there is substantial overlap in the industries surveyed and the industries on which Firley, Moran, Freer, and Eassa focuses. This is another reason that Firley, Moran, Freer and Eassa, P.C. has a great market share in the sample.

There is only a 7% total market share captured by Big 4 accounting firms combined. Among the 7% market share, KPMG is the leading Big 4 accounting company with a 5% market share. One of the major changes in the market share of these Big 4 Accounting firms is due to the recent office relocation by

PricewaterhouseCoopers in March of 2007. Seven of the survey participants used PricewaterhouseCoopers as their auditing firm; however, due to the closing of the Syracuse office, these companies changed accounting firms. In contrast, even though Ernst & Young has an office located in Mony Tower in downtown Syracuse, only one survey participant utilized its services. The possible explanation is due to the premium charged by Big 4 auditors. Craswell, Francis and Taylor examined 1484 Australian public companies to estimate audit premium earned by Big 8 auditors. They found, on average, industry specialist Big 8 auditors charge a 34% premium compared to nonspecialist Big 8 auditors due to industry specialization and brand recognition. In addition, they also found, on average, Big 8 audit firms receive 30% brand premiums over non-Big 8 auditors.

Another possible reason for low market share obtained by Big 4 firms is the scalability of Central New York companies. Many regional companies are looking for regional firms that are familiar with the district's business characteristics or trends. Because these clients are mostly small to mid-size companies and locally run, they do not see the necessity of paying the premium due to an accounting firm's reputation. Besides the 14 accounting firms listed, Bonadio & Co. LLP, Evans & Bennett, Gustafson & Co., Kane, Bowles & Moor PC, Sciarabba Walker & Co., and Vieria and Associates, CPA were other accounting firms that provided services to more than two participants in this survey. Table 3 shows the number of accounting firms used by survey participants and their market share.

TABLE 3
Market Share

	Name of Accounting Firms	Number of Companies Utilizing the Accounting Firm	Market Share
1	Beard Miller & Company	6	5%
2	Bowers & Company	5	4%
3	Dannible & McKee	4	3%
4	Deloitte & Touche	1	1%
5	Dermody, Burke & Brown	5	4%
6	Ernst & Young	1	1%
7	Fust Charles Chambers	4	3%
8	Green & Seifter	4	3%
9	Firley, Moran, Freer & Eassa	15	12%
10	KPMG	6	5%
11	Piaker & Lyons	3	2%
12	PricewaterhouseCoopers	0	0%
13	Sirchia & Cuomo, LLP	0	0%
14	Testone Marshall & Discenza	4	3%
15	Other:	63	52%
	Bonadio & Co. LLP	2	
	EFP Group	2	
	Evans & Bennett	2	
	Gustafson & Co.	2	
	Kane, Bowles & Moore PC	4	
	Mengel, Metzger, Barr & Co.	3	
	Rinemard Fitzgerald	2	
	Sciarabba Walker & Co.	5	
	Vieira and Associates, CPA	2	

C. Descriptive Statistics

Table 4 presents descriptive statistics for the overall sample. The table shows more than half of respondents are utilizing a public accounting firm to audit their financial statements.

TABLE 4
Descriptive statistics – overall sample (N=126)

	Dichotomous Variables	
Variable	Mean	SD
FS audited	0.59	0.49
FS reviewed	0.94	0.24
Internal audit	0.56	0.50

	Measured on a 5-point scale	
Variable	Mean	SD
Level audit fee	2.43	0.77
Amount audit hours	2.50	0.84
Quality of audit	2.58	0.81

	Measured on a 10-point scale		
Variable	Mean	SD	Range
Quality satisfaction	8.31	1.73	1-10
Knowledgeable	8.43	1.76	1-10
Company industry	7.88	2.02	1-10
Suggestions	7.92	2.07	1-10

	Continuous and discrete variables		
Variable	Mean	SD	Range
Years with accounting firm	13.07	10.21	1-60
Total audit	$98,640	$604,494	$400-5,000,000
Total tax	$8,817	$13,047	$400-68,000
Total consulting	$4,674	$6,336	$300-23,179
Other	$10,407	$17,879	$750-70,000
Total other	$60,351	$446,206	$300-5,010,000

Of the companies that did not have an audit by a public accounting firm, 52 survey respondents, 94% of the companies' financial statements were reviewed by an accounting firm based on the second questionnaire that was asked. Among the total of 126 respondents, only half of these companies maintain an internal audit function.

In terms of changes in level of audit fee, amount of audit hours spent by auditors and quality of audit provided by accounting firm, clients responded that they experienced slight increases in all three of these elements after the Sarbanes-Oxley Act. Based on the 5-scale measurement, the results were 2.43, 2.50, and 2.58 respectively.

After measuring the audit quality satisfaction, accounting firm knowledge of the company's internal control, industry, and suggestions, respondents are satisfied with services that their accounting firms are providing. In the Central New York region, the average accounting firm tenure with the client is about 13 years. The total audit fee ranged from $400 to $5,000,000 because of the different size of companies; however, the average company spends $98,640 per year for audit services. Total audit fees were significantly greater than other non-audit services.

VII. REGRESSION ANALYSIS

I initially included the FSREV variable (if financial statements are not audited by a public accounting firm, they are reviewed by an accounting firm) when I developed the model. After running the regression analysis based on the initial model, only 37 cases were used out of the 126 observations due to 89 missing cases for the FSREV variable. FSREV questionnaire does not apply to participants whose financial statements are audited by a public accounting firm. Participants who responded for the FSREV variable imply their financial statements are not audited by a public accounting firm. Therefore, participants accordingly responded to the FSREV questionnaire based on whether their financial statements are reviewed by an accounting firm or not.

Table 5 below shows the relationship between each Y-variable and X-variables. Among the clients audited by a public accounting firms, FSAPUB (Financial statements audited by a public accounting firm), FSREV (financial statements reviewed by an accounting firm), and 3BOOK (utilizing bookkeeping service) are not included in the regression analysis because all values are 0 or constant.

A. The Level of Audit Fee

As stated in hypothesis 1, the level of audit fee increased after the Sarbanes-Oxley Act. Survey participants responded that they experienced slight increases of their audit fees for the last 5 years. The mean of the level of audit fees category was 2.43 with the standard deviation of 0.77, which indicates a slight increase in the level of audit fees. S&P 500 companies have experienced a 24% audit fee increase from 2002 to 2003 due to the enforcement of Section 404 in the Sarbanes-Oxley Act (Foley and Lardner, 2005). Just like public companies, these local private companies also experienced a small increase in the level of audit fees. According to George Victor, chair of the NYSSCPA's SEC Practice Committee, accounting firms increase the bill because they realize the value of the services that they provide to their clients.

Before the Sarbanes-Oxley Act, the accounting firms could not increase the fee because they were outbidding each other. Therefore, the competition maintained or brought down the price of the audit. Nevertheless, the true value of audit services is valued and private companies are under pressure to develop internal controls similar to public companies. Companies need to accommodate resources to enhance the internal controls. Therefore, private sectors experience the spillover from the Sarbanes-Oxley Act in public companies (Victor, 2005).

This research also found that among companies that are audited by public accounting firms, as the level of fee increased, the quality of audit was enhanced. Higher audit fees are related to the audit firms' desire to maintain their reputation (DeAngelo, 1981). Palmrose (1988) found that the larger accounting firms are involved in less litigation compared to smaller audit firms. In addition, the increase in audit fee is a result of better and updated technologies that lead to more accurate audits (Wooten, 2003). Since private sector companies are pressured to improve internal controls similar to public companies, it requires auditors to spend more time and resources to test internal controls (Victor, 2005).

Unlike these companies with their financial statements audited by public accounting firms, private companies that are not audited by a public accounting firm show a negative relationship between LEVELAFEE (the level of audit fee) and QUALITYA (the quality of audit). The decreases in audit fees bring the concern of lower audit quality in response. Deis and Giroux (1992, 1996) found from the governmental sector that the audit quality is higher for initial audit engagement teams. In addition, as the number of bidders for the audit engagement is higher, the audit quality increases (Copley and Doucet, 1993).

Finally, the research regression model found that LEVELAFEE and CHANGE5YR (auditor changes within 5 years) have a negative relationship for both participants that are audited and not audited by a public accounting firm. Changing auditors is costly for clients. In order to compensate the costs in an auditor change, audit firms lower the initial biddings. The companies are able to maintain a lower audit fee by constantly changing auditors (Ettredge and Greenberg, 1990). Clients that are small enough to hire a non-Big 4 auditors tend to switch from Big 4 auditors to non-Big 4 firms (Ettredge, Li, Scholz, 2007). As a result, the increases in audit fees are lower for companies that changed auditors over the past five years compared to companies that did not change auditors.

Table 5 describes each variable that has an impact on the level of audit fee changes and its relationship. Even though there were 74 companies audited by a public accounting firm and 52 companies that are reviewed by an accounting firm, only 70 and 37 samples are used respectively due to missing variables in the responses.

TABLE 5
Level Audit Fee and Variables

	Audited by a public acc firm	*Reviewed by an accounting firm*
Predictor	Coef	Coef
# of Observ	70	37
R-Sq	43.00%	59.40%
Constant	1.3388	1.365
FSAPUB	*	-0.6598
FSREV	*	1.0743
INTAUD	-0.0702	-0.5338
CHANGE5YR	-0.0810	-1.0236
AMTHRS	0.42552	0.3880
QUALITYA	0.1072	-0.3807
SATWQUAL	0.07634	0.1684
0NONE	-1.0839	-0.9987
1TAX	-0.8510	-0.8527
2CONS	0.1061	-0.2810
3BKKP	*	0.2555

4OTHER	-0.9852	0.2658

B. Audit Quality

In this study, among the companies whose financial statements are audited by a public accounting firms, the quality of the audit is positively associated with the LEVELAFEE and CHANGE5YR. DeAngelo (1981) proved that larger audit firms have greater independence from their clients because each individual client is immaterial. In addition to DeAngelo's argument, independent research conducted by Hoitash, Markelevich and Barragato (2005) studied companies that have changed their auditors after the Sarbanes-Oxley. These researchers concluded that the increase in auditor independence resulted in an increase in audit quality after the Sarbanes-Oxley Act. Just as these studies found in publicly traded companies, private sector companies also experienced the same consequences of Sarbanes-Oxley: the level of audit fees increase the audit quality.

In addition to the audit fee, a change of audit firms within five years has a positive relationship with audit quality. Myers and Omer (2003) researched the relationship between auditors and clients in the post Sarbanes-Oxley Act era. The study addressed whether mandatory partner rotation of audit firms led to the increase in audit quality and auditor tenure. Furthermore, it has been often found that private companies tend to hire larger audit firms when they are at the stage of an initial public offering (IPO). The private companies going public hire larger accounting firms because larger audit firms are able to bear the risk, which provides assurance to investors (Antle, 1982). Regardless of IPO concerns, in this research, the changes in the audit firms within five years enhanced audit quality.

Contrary to DeAngelo's argument that audit fee increases the level of audit quality, DeFond, Raghunandan, and Subramanyam (2002) argued that auditors sacrifice their independence in order to retain the client with a large audit fees. Thus, audit fees become a potential influence on the auditor independence because they create an economic bond. In this research, Defond, Raghunandan, and Subramanyam's finding was found among a group of companies that are not audited by a public accounting firm. The responses indicated a negative relationship between the quality of services and level of fees. Considering the size of these private firms, their audit fees are not large enough to create an economic bond with accounting firms. Therefore, as the fee goes down, the quality of services increases among smaller companies.

Interesting research conducted by Detling (2004) found that changing the auditor will lower the level of assurance because successor auditors need to gather essential evidence. Detling found that the greater level of assurance needs a higher level of evidence or a qualified auditor. Based on the fact that the successor charges a lower fee than the predecessor, there is a potential that the audit is not as complete or of as high a quality as the predecessor's. In addition, lowering audit fee will increase the risk in the client's portfolio due to the fact that the auditor will not test more or run a complete qualified audit in order to fit into the low budget.

Due to the increase in audit fees as the consequence of the Section 404, many clients that are feasible enough to be audited by Big 4 accounting firms tend to change their auditors. These clients often hire a regional auditor to avoid an additional premium charge (Ettredge, 2007). Among the survey participants, about 24 participants, or 20% of the total participants, switched their accounting firms within the last five years. One of the most common reasons was the recent office relocation of PricewaterhouseCoopers in the Syracuse downtown area. Eleven participants used to utilize the service provided by one of Big Four companies, while thirteen of them hired non-Big Four audit firm. Among the 16 reasons provided for switching, three of these participants reduced the size of the accounting firm, while four of them switched accounting firms to obtain greater expertise or to expand the business. Even in the post Sarbanes-Oxley era, there are some companies that changed to larger accounting firms due to the complexity of the business. Nevertheless, it is difficult to determine whether clients downsized the accounting firms or not because the direction of change was not asked in the questionnaire. A change of audit firm due to political or service issues is difficult to measure in the direction of whether these participants hired larger accounting firm or not.

Table 6 describes the change in audit quality and its relative variables. An interesting observation in this case is the R-square of audited by a public accounting firm is 25.6%, while the R-square of companies whose financial statements are reviewed by an accounting firm is 62.10%. There is a significant difference between the two samples. Since audit quality is subjective, the difference between the two categories of respondents is not necessarily surprising.

TABLE 6
Audit Quality and Variables

	Audited by	*Reviewed by*

	a public acc firm	*an accounting firm*
Predictor	Coef	Coef
# of Observ	70	37
R-Sq	25.60%	62.10%
Constant	3.0816	3.455
FSAPUB	*	-0.6119
FSREV	*	0.8068
INTAUD	-0.1173	-0.2427
CHANGE5YR	0.1077	-1.4979
AMTHRS	0.2059	0.3690
LEVELAFEE	0.1416	-0.4861
SATWQUAL	-0.1959	-0.0159
0NONE	0.5115	-0.8647
1TAX	0.2868	-0.6510
2CONS	-0.0195	-0.3199
3BKKP	*	-1.0662
4OTHER	0.1250	0.0238

C. Client Satisfaction

The client satisfaction is positively associated with the audit firm's knowledge of the client's internal control and valuable suggestions given to the management team. As Carcello, Hermanson and McGrath (1992) found in their research with Fortune 1000 companies, audit team and firm experience with the client is one of the most important components that determines the quality of audit and satisfaction. Other factors are industry expertise, audit firm responsiveness to client needs such as responding in a timely manner and compliance with general audit standards. Higher audit quality leads to a higher client satisfaction. The research proves that client satisfaction with the audit team is a positive attribute (Behn, Carcello, and Hermmanson, 1997). Service quality is measured in five dimensions by Parasuraman (1988). These are responsiveness, assurance, empathy, tangibles, and reliability. In addition to Parasuraman's measurement, a quality service includes the audit firm's knowledge of the client's internal control and valuable suggestions to management (Carcello, 1992). Therefore, a quality service provided by an accounting firm will enhance client satisfaction.

In this research, the industry expertise and satisfaction have a negative relationship, which is contrary to Carcello's argument. Industry experts are important for publicly traded companies because these experts not only provide proficient knowledge, but also emphasize the reputation and firm's image that is important to external investors for a security purpose. The firm's image is influential to customer perception on the firm's service and operations (Zeithaml and Bitner, 2000). Nevertheless, these small local private companies have fewer external investors and the accounting firm reputation is not as important so that the industry expert is not valued as much.

Another interesting finding in this research is that client satisfaction and audit firm tenure have a negative association. On average, the local companies located in the Central New York region used the same accounting firm for 13.07 years. The number of years with an accounting firm ranged from 1 to 60 among 126 participants. The research finds that as the accounting firm's tenure decreases, client satisfaction goes up. Nevertheless, only 19% of these participants changed their auditors within the five years after the Sarbanes-Oxley Act.

Client satisfaction and audit fee are highly interrelated, although previous studies find differing results. Monroe and Grewal (1991) and Teas and Agarwal (2000) found a negative relation between client satisfaction and audit fees, while

Peterson and Wilson (1985) concluded there is no relationship between the two variables. However, in this research, regional companies have a positive association between client satisfaction and the audit fee. Zeithaml and Bitner (2000) stated that one of the most important aspects of service is the price of the service. Higher price sets greater expectation of the audit quality so that clients assume/expect a higher fee with higher audit quality.

Table 7 describes the relationship between client satisfaction and variables that determines the factor. A high R-square shows that there is a strong relationship in this data. This also means that 63.5% and 81.4% of the variations in the data is explained by the model.

TABLE 7
Satisfaction and Variables

	Audited by a public acc firm	*Reviewed by an accounting firm*
Predictor	Coef	Coef
# of Observ	70	37
R-Sq	63.50%	81.40%
Constant	1.4998	4.110
FSAPUB	*	-0.1254
FSREV	*	-0.470
INTAUD	-0.4312	-0.6096
YEARSACCFIRM	-0.00090	-0.02703
CHANGE5YR	-0.2872	-0.1028
0NONE	0.5078	-0.1114
1TAX	0.7763	0.0430
2CONS	0.4238	-0.3210
3BKKP	*	-0.2968
4OTHER	-0.7051	-0.4955
INTCONTRL	0.6029	0.4790
INDUST	-0.0305	-0.0464
VALUSUGGEST	0.2017	0.2597

VIII. Conclusion

Since there are few studies that investigate the influence of the Sarbanes-Oxley Act on regional firms, I decided to focus on finding associations between (1) audit fees and the Sarbanes-Oxley Act, (2) audit fees, changes in auditors, and the audit quality, and (3) the client satisfaction and the accounting firm's audit fee, knowledge of the client's internal control and suggestions.

It is widely presumed that audit fees have increased for publicly traded companies in the post-Sarbanes-Oxley Act era (Foley and Lardner, 2005). Just like these public companies, small regional firms also experienced increases in audit fees due to increases in the value of services. In addition to the increased value of audit services, development of internal controls similar to public companies contributed to the increase in the level of audit fees.

There are interrelated findings in audit fees, changes in auditors and the audit quality. Among the survey participants, those who are audited by a public accounting firm experienced an enhancement in audit quality with auditor changes and increases in the level of audit fees. However, companies that use an accounting firm to review their financial statements experienced the opposite result. They experience an increase in audit quality as the level of audit fees decreases.

A client's satisfaction increases as the audit firm is more knowledgeable in the client's internal control and provides valuable suggestions to the management team. Even though previous research proved that the industry specialists boost client satisfaction (Carcello et al. 1992), in this research, there was a negative relationship between industry specialists and client satisfaction. This may be due to the fact that utilizing industry specialists requires a premium, and private companies may not benefit from the higher cost of a specialist auditor.

One of the limitations of the current study is that the size of the participant companies is not incorporated in the models. Many previous research studies emphasize the importance of client size in terms of audit fees, etc. However, in order to keep the confidentiality of survey participants, the size of client was not asked in the questionnaire. Excluding the size of the client from the models may limit the generalizability of the study.

Among the participants who terminated their auditors within the last five years, if the direction of the auditor change were asked, the result could have been more useful. Previous studies prove that many mid-size companies changed from Big 4 accounting firm to local accounting firms in order to save the premium charges (Antle, 1982). However, if smaller companies are planning an initial public offering, they tend to switch their auditors from smaller accounting firms to one of the Big Four firms for the reputation and risk bearing (Zeithaml and Bitner, 2000). In this survey, there was a limitation of only asking the changes of the auditors, not the direction.

Among the participants whose financial statements are reviewed by an accounting firm, they have a negative relationship between client satisfaction and the number of years spent with an accounting firm. It can be interpreted that the frequent changes in an auditor will lead to a greater audit satisfaction. In future research, looking into how often these clients change accounting firms might be helpful in understanding how auditors changes help maintain audit satisfaction.

References

"Firley, Moran, Freer & Eassa, P.C." Firley, Moran, Freer & Eassa, P.C. 25 Feb. 2009 <http://www.fmfecpa.com/index.html>.

"Public Accounting Firms: Required study on the potential effects of mandatory audit firm rotation." United States General Accounting Office (2003).

"Sarbanes-Oxley law pushes up corporate audit fees, study says." Herald Tribune 2 Aug. 2007.

Arel, Barbara, Richard Brody, and Kurt Pany. "Audit Firm Rotation and Audity Quality." The CPA Journal.

Bae, Gil, Joohwa Rho, and Byung Ro. "The Effect of Mandatory Audit Firm Retention on Audit Quality: Evidence from the Korean Audit Market."

Behn, Bruce K., Joseph V. Carcello, Dana R. Hermmanson, and Roger H. Hermanson (1997), "The Determinants of Audit Client Satisfaction Among Clients of Big 6 Firms," *Accounting Horizons*, 11(1), 7-24.

Bellovary, Jodi, and Karla Johnstone. "Descriptive Evidence from Audit Practice on SAS No.99 Brainstorming Activities." Current Issues in Auditing 1 (2007): A1-A11.

Bushman, Robert, and Abbie Smith. "Transparency, Financial Accounting Information, and Corporate Governance."

Carcello, Joseph, Roger Hermanson, and Neal McGrath. "Audit Qaulity Attributes: The Perceptions of Audit Partners, Preparers, and Financial Statement Users." Auditing: A Journal of Practice and Theory 11 (1992): 1-14.

Ciesielski, Jack T., and Thomas R. Weirich. "Ups and Downs of Audit Fees Since the Sarbanes-Oxley Act." *The CPA Journal* (2006). Oct. 2006.

Ciesielski, Jack, and Thomas Weirich. "Ups and Downs of Audit Fees Since the Sarbanes-Oxley Act." The CPA Journal.

Craswell, A., J. Francis and S. Taylor, "Auditor Brand Name Reputations and Industry Specializations", *Journal of Accounting and Economics* (December 1995): 297-322

Daugherty, Brian, and Wayne Tervo. "Auditor Changes and Audit Satisfaction: Client Perceptions in the Sarbanes-Oxley Era of Legislative Restrictions and Involuntary Auditor Change." Critical Perspectives on Accounting 19 (2008): 931-51.

Ettredge, Michael, Chan Li, and Susan Scholz. *Audit Fees and Auditor Dismissals in the Sarbanes-Oxley Era*. Thesis. University of Kansas, 2007.

Hemang Desai, Chris Hogan, and Michael Wilkins

Hoitash, Rani, Ariel Markelevich, and Charles Barragato. "Auditor Fees and Audit Quality."

Hoitash, Rani, Udi Hoitash, and Jean Bedard. "Internal Control Quality and Audit Pricing Under the Sarbanes-Oxley Act."

Kenney, William, Zoe Palmrose, and Susan Scholz. "Auditor Independence, Non-Audit Services, and Restatements: Was the U.S. Government Right?" Journal of Accounting Research 42 (2004).

Knechel, W. Robert, Lasse Niemi, and Stefan Sundgren. "Determinants of Auditor Choice: Evidence from a Small Client Market." International Journal of Auditing 12 (2008): 65-88.

Lennox, Clive. "Non-audit Fees, Disclosure and Audit Quality." The European Accounting Review (1999): 239-52.

Lim, Chee-Yeow, and Hun-tong Tan. "Non-audit Service Fees and Audit Quality: The Impact of Auditor Specialization." Journal of Accounting Research 46 (2008): 199-246.

Lowensohn, Suzanne, Laurence Johnson, and Randal Elder. "Auditor Specialization and Perceived Audity Quality, Auditee Satisfaction and Audit Fees in the Local Government Audit Market."

Lowensohn, Suzanne, Laurence Johnson, Randal Elder, and Stephen Davies. "Auditor specialization, perceived audit quality, and audit fees in the local government audit market." Journal of Accounting and Public Policy (2007): 705-32.

Lyon, John, and Michael Maher. "The Importance of Business Risk in Setting Audit Fees: Evidence from Cases of Client Misconduct."

PricewaterhouseCoopers. 2006. *DataLine 2006-13:Highlights of the 2006 SEC/PCAOB roundtable on second-year experiences with Section 404*. CFODirect Network, May 12.

Read, William, Dasaratha Rama, and Raghunandan. "Local and Regional Audit Firms and the Market for SEC Audits." Accounting Horizons 18 (2004): 241-54.

SEC Advisory Committee on Improvements to Financial Reporting. Rep. SEC.

Wegman, J. 2005. “The Sarbanes-Oxley Act and Accountant Liability.” *Proceedings of the Academy of Legal, Ethical and Regulatory Issues* 9 (2): 47-51.

Whitehouse, T. 2005. Audit pricing played a part in increased 2004 audit costs. *Compliance Week* (May 17, 2005).

Yue, Lorene. "Audit Fees for Sarbanes-Oxley Compliance Keep Rising." Chicago Business News 19 June 2006.

Zeithaml and Bitner (2000), *Service Marketing*, New York: McGraw-Hill.

Appendix

1. Are your financial statements audited by a public accounting firm? Yes No
(If yes, please skip to question #3)

2. If not, are your financial statements reviewed by an accounting firm? Yes No

3. Do you have an internal audit function? Yes No

4. Please choose the firm that serves your company:

_____ Beard Miller & Company
_____ Bowers & Company
______ Dannible & McKee
______ Deloitte & Touche
______ Dermody, Burke & Brown
_____ Ernst & Young
_____ Fust Charles Chambers
______ Green & Seifter
_____ Firley, Moran, Freer & Eassa
_____ KPMG
_____ Piaker & Lyons
_____ PricewaterhouseCoopers
_____ Sirchia & Cuomo, LLP
_____ Testone Marshall & Discenza
Other: ____________________

5. For how many years has the accounting firm audited your company? ________

6. If you changed an accounting firm within last 5 years:

a. Name of previous accounting firm _______________

b. Reason for change:

7. Considering the services provided by your accounting firm for the last 5 years,

a. The level of audit fees has:

Significantly Increased	Slightly Increased	Consistent with inflation	Slightly Decreased	Significantly Decreased

b. The amount of audit hours spent by the firm:

Significantly	Slightly	Consistent	Slightly	Significantly

Increased	Increased		Decreased	Decreased

c. The quality of the audit provided by the accounting firm:

Significantly Increased	Slightly Increased	Remained about the same	Slightly Decreased	Significantly Decreased

8. Please indicate your satisfaction with the quality of the audit firm

Extremely Dissatisfied					Neutral				Extremely Satisfied
1	2	3	4	5	6	7	8	9	10

9. Is your company utilizing any other services from the accounting firm (circle all that apply)?

None Tax Consulting Bookkeeping Other ______

10. Total fees for fiscal 2007 Audit $_______________
Total fees for fiscal 2007 Tax $_______________
Total fees for fiscal 2007 Consulting $_______________
Total fees for fiscal 2007 Other $_______________

11. The accounting firm is knowledgeable and familiar with your firm's internal control.

Strongly Disagree				Neutral					Strongly Agree
1	2	3	4	5	6	7	8	9	10

12. The accounting firm is knowledgeable in your company's industry.

Strongly Disagree				Neutral					Strongly Agree
1	2	3	4	5	6	7	8	9	10

13. The accounting firm provided valuable suggestions to management.

Strongly Disagree				Neutral					Strongly Agree
1	2	3	4	5	6	7	8	9	10