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Risk Management in the Post-SOX Era: Do Audit Firms Effectively Retain Clients?

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Abstract

Since the initial disclosure of accounting irregularities at Enron in late 2001, the landscape of public company audits has undergone substantial change. These changes include the conviction of Arthur Andersen in June of 2002 and the enactment of the Sarbanes-Oxley Act of 2002. These two changes have had a significant impact on the amount of work required to issue an audit report and the number of clients that can be serviced by the remaining Big Four audit firms. While the existing literature provides us some insight on how audit firms make client acceptance/continuance decisions, almost all this literature predates SOX. I extend this literature by investigating how audit firms make client continuance decisions in the post-SOX era, whether these decisions are effective at identifying better clients, and why audit firms retain some risky clients while dismissing others. It is interesting to note that Big Four audit firms use the same basic set of criteria when making a client continuance decision in the post-SOX era, even though the processes at the firms are slightly different. My findings also indicate that the client continuance process is much more formal and rigorous post-SOX. Additionally, I find that clients who are retained by their audit firms have better subsequent financial performance than those clients who are not retained. Finally, I find that audit firms appear to overweight client size when making the client continuance decision. Specifically, it appears audit firms retain large clients who have risk profiles consistent with smaller clients they dismiss.

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Introduction

Since the initial disclosure of accounting irregularities at Enron in late 2001, the landscape of public company audits has undergone substantial change. These changes include the conviction of Arthur Andersen (Andersen) in June of 2002 and the enactment of the Sarbanes-Oxley Act of 2002 (SOX). These two changes have had a significant impact on the amount of work required to issue an audit report and the number of clients that can be serviced by the remaining Big Four audit firms.

The first change came in June of 2002 when Andersen was convicted of obstruction of justice for shredding documents relating to its work for Enron.¹ This conviction meant that Andersen would have to discontinue the audit of all public companies on August 31, 2002 and over 1,000 public companies would be looking for a new auditor (GAO, 2003; Barton, 2005). In addition to changes spurred by the demise of Andersen, SOX required external auditors to document, test, and issue a report on the internal controls of each of their public clients.² This requirement alone substantially increased the number of audit hours for each public company and put substantial strain on the audit firms' resources.

In testimony before the Senate Banking Committee in September 2004, James Turley, the CEO of Ernst & Young, indicated that "The Sarbanes-Oxley Act's requirements and pressures put a great strain on our ability to retain sufficient personnel" (Turley, 2004). Additionally, according to an Inc. Magazine report,

¹ The conviction of Andersen for obstruction of justice was overturned by the Supreme Court on May 31, 2005.

² Currently, the internal control requirements of SOX only relate to companies with a public float of greater than \$75 million. Companies with a public float of less than \$75 million will not have to comply with the internal control requirements of SOX until 2007.

PricewaterhouseCoopers had to import 1,000 auditors from abroad in 2005 to help with the strain on its personnel (Gunderson, 2005). In apparent response to the influx of former Andersen clients, the additional audit requirements of SOX and the strain these requirements have put on audit personnel, audit firms have reacted by resigning from over 1,000 clients in the three year period post-SOX as compared to only 250 clients in the two year period pre-SOX and by dramatically increasing their audit fees (Ettredge et al., 2005).³

Based on recent news releases, it appears the SEC is very concerned about the dramatic increase in the number of auditor changes in the post-SOX era. In an interview, former SEC Chief Accountant Donald Nicolaisen said the SOX requirements “should not be a convenient tool for them [Big Four auditing firms] to manage their business. They do have a responsibility in the public trust.” He went on to indicate that “I’ve expressed my view to the CEOs of the big firms that I think it is their responsibility not to run away from the marketplace” (Taub, 2004).

In combination, the demise of Andersen and the additional audit requirements of SOX have ushered in a period of unprecedented auditor changes. Given the concerns of the SEC and the large number of audit clients affected by these auditor changes, it is important to understand why audit firms are not retaining clients in the post-SOX era. While the previous literature on auditor acceptance/continuance provides some insight as to the firm factors/characteristics associated with resignations and how audit firms make client acceptance/continuance decisions, almost all of this literature predates SOX. I

³ Auditor resignation data comes from Audit Analytics. Audit Analytics reports all auditor changes post January 1, 2000. Thus, I only report resignations for two years prior to SOX.

extend this literature by investigating how audit firms make client continuance decisions in the post-SOX era, whether these decisions are effective at retaining better clients, and why audit firms retain some risky clients while dismissing others.

Specifically, in the first part of my analysis I interview audit partners to understand how audit firms make client continuance decisions in the post-SOX environment. It is interesting to note that Big Four audit firms use the same basic set of criteria when making a client continuance decision, even though the processes at the firms are slightly different. Based on my interviews, it appears the client continuance process has become more formal and rigorous post-SOX. Specifically, the partners cited an increase in the required documentation and the level of internal review as the key drivers of this change. They also indicated that management's integrity and attitude toward financial reporting were two of the key determinants of client continuance. In addition, the partners also cited several financial and governance characteristics that were important to the client continuance decision. Finally, they identified the quality of a company's internal controls, the audit committee, and the strain a client has on audit staff as the factors that had received increased importance in the post-SOX environment.

In addition to gaining an understanding of the client continuance process, I also examine the effectiveness of the client continuance decision. My findings indicate that audit firms retain better clients. Specifically, I find that clients who are retained by their audit firm subsequently have better subsequent financial performance than those clients who are not retained. In contrast, in my final analysis, I find that audit firms appear to overweight client size when making the client continuance decision for "risky" clients. Specifically, it appears audit firms retain large clients who have risk profiles consistent

with smaller clients they dismiss. This result seems in sharp contrast to the interviews where the partners indicated that the goal of the client continuance process was to eliminate undue risk. Several partners went so far as to say that no audit fee was sufficient to cover the litigation costs of retaining a risky client.

The remainder of this paper is organized as follows. The next section discusses the regulatory background and previous research on the audit market structure, audit quality, and auditor resignation/continuance. I then examine the client retention process in the post-SOX environment. Subsequent sections examine whether audit firms are retaining better clients and why audit firms retain some risky clients while dismissing others. The last section concludes.

Regulatory Background and Previous Research

Audit Market Structure

Accounting and auditing evolved as part of the corporate governance system developed to combat the agency problem that exists between managers and owners. Auditors not only provide assurance that financial statements are fairly presented, but also provide implicit insurance on the quality of the financial statements (Menon and Williams, 1994). Starting with the Securities and Exchange Act of 1933 all publicly-held corporations were required to have their financial statements certified by independent outside auditors. This early period of the auditing profession was characterized by little competition among the audit firms. However, in a 1977 U.S. Supreme Court ruling, the ban on advertising by professional service firms was overturned. This ruling ushered in a period of intense competition between audit firms (Sunder, 2003).

Companies were free to solicit new bids from audit firms, year after year, to get a better price from their auditors. In this new environment, profit margins for audit services disappeared leaving audit partners to focus on providing more lucrative non-audit services to their clients. This decision to focus on non-audit services led to a new set of concerns about auditor independence (Sunder, 2003). These concerns continued to escalate until they reached a crisis state with the high profile failures of Enron and WorldCom. In association with the Enron failure, Andersen was convicted of obstruction of justice for shredding documents. This conviction prevented Andersen from performing audits for publicly traded companies and effectively dissolved the firm, leaving only four major participants in the audit market. In combination, the high profile failures of Enron and WorldCom and the demise of Andersen ushered in a period of regulatory reform for the accounting and auditing industries.

Sarbanes Oxley Act

In July of 2002, Congress and President Bush enacted the Sarbanes-Oxley Act (SOX), in response to what at the time appeared to be a never-ending list of corporate scandals. President Bush called SOX “the most far-reaching reforms of American business practice since the time of Franklin Delano Roosevelt.” The preamble of SOX indicates its purpose is “to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to securities laws, and for other purposes” (Hamilton and Trautmann, 2002). A major emphasis of SOX relates to increasing investor confidence in companies’ financial reporting quality via additional disclosures. SOX called for many significant accounting reforms. A few examples include requiring

companies to disclose if they have a financial expert on their audit committee, requiring companies to obtain an opinion on the assessment of internal control environment, requiring CEO and CFO certification of financial statements with the possibility of criminal penalties for failure to comply with SOX, prohibiting audit firms from performing some non-audit services for audit clients, mandatory audit partner rotation every five years, and the creation of the Public Company Accounting Oversight Board (PCAOB) (SOX, 2002).

In March of 2004 the PCAOB issued Auditing Standard No. 2 – An Audit of Internal Control Over Financial Reporting Performed in Conjunction with An Audit of Financial Statements, which proscribes the standards a public accounting firm must follow to issue the attestation report required by Section 404 of SOX. Under this standard, the public accounting firm must issue two opinions related to the audit of internal control over financial reporting: one on management's assessment and one on the effectiveness of internal control over financial reporting (PCAOB, 2004).

Auditor Resignation/Continuance

The prior research on auditor resignations has generally taken one of three approaches: modeling the market for audit services and the change decision (e.g. Johnson and Lys, 1990; Bockus and Gigler, 1998; Schloetzer, 2005), examination of the stock market reaction to the resignation (e.g. Wells and Loudder, 1997; DeFond et al., 1997; Dunn et al. 1999; Shu, 2000; Whisenant et al, 2003; Beneish et al. 2005), and examination of auditor and/or client characteristics that are associated with the auditor resignation/continuance decision (e.g. Krishnan and Krishnan, 1997; Raghunandan and

Rama, 1999; Shu 2000; Lee et al. 2004; Johnstone and Bedard, 2004; Schloetzer, 2005).⁴

My approach most closely resembles the last of these three approaches.

Under the first approach, authors analytically model the market for audit services and the auditor change decision. Johnson and Lys (1990) argue that audit clients purchase audit services from the least cost supplier and that auditor realignment can be attributed to changes in client characteristics and differences in the audit firm cost structures. Building on the work of Johnson and Lys (1991), as well as others who model the auditor change decision (e.g. Fried and Schiff, 1981; Nichols and Smith, 1983; Menon and Schwartz, 1985; Healy and Lys, 1986; Francis and Wilson, 1988; DeFond, 1992), Bockus and Gigler (1998) model a theory of auditor resignation. Their model predicts that auditors resign from engagements when the incumbent auditor assesses a client as having a sufficiently high litigation risk. The model goes on to show that the incumbent auditor resigns, as opposed to risk-adjusting their audit fee, because a risk-adjusted audit fee would only be accepted by “bad” clients. Finally, Schloetzer (2005) models the response of the audit services market to the demise of Andersen and the additional audit requirements of SOX. His model predicts that the number of audits completed by the remaining Big Four will decrease and audit fees will increase after each event.

Another group of studies examines the stock market reaction to the resignation decision. In general, these studies have found a negative stock market reaction to an auditor resignation (Wells and Loudder, 1997; DeFond et al, 1997; Dunn et al. 1999; Shu,

⁴ Prior to issuance of FRR No. 31, companies were not required to disclose whether auditor changes were the result of a resignation or a dismissal. Thus, most of the studies prior to 1988 examine auditor changes and do not distinguish between resignation and dismissals.

2000; Whisenant et al, 2003; Beneish et al., 2005). In addition, Beneish et al. (2005) go one step further and examine the stock market reaction to continuing clients when an auditor resigns from another client. Their results show a positive reaction for continuing clients when the resignation is disclosed in the media.

Finally, the last group of studies examines the auditor and/or client characteristics that are associated with the auditor resignation/continuance decision. These studies indicate that auditor resignation is associated with client-auditor disagreements (Krishnan and Krishnan, 1997; Lee et al., 2004), discretionary accruals (DeFond and Subramanyam, 1998), financial distress (Krishnan and Krishnan, 1997; Schwartz and Soo, 1995), issuance of a going concern opinion (Krishnan and Krishnan, 1997; Lee et al., 2004) internal control deficiencies (Lee et al., 2004; Hertz, 2005; Ettredge et al. 2005), lower audit fees (Ettredge et al., 2005), litigation risk (Krishnan and Krishnan, 1997; Shu, 2000; Lee et al., 2004), client mismatch (Shu, 2000), board and audit committee independence (Lee et al., 2004), reporting lags (Schwartz and Soo, 1996; Schloetzer, 2005), reportable events (Whisenant et al., 2003) and smaller clients (Lee et al., 2004).

Additionally, another set of studies examine the client continuance decision. Huss and Jacobs (1991) review the client acceptance/continuance policies of the Big Six accounting firms. They note that the overall risk containment and client acceptance/continuance procedures differ substantially across the Big Six. In addition, Bell et al. (2002) examine the use of a computerized client acceptance/continuance decision aid by KPMG LLP. In this study, the authors discuss the intricacies of implementing a computerized decision aid as part of auditor business risk assessment. The authors argue that the computerized system can provide significantly improved

information to those charged with practice-wide risk management and audit quality control responsibilities. Finally, Johnstone and Bedard (2004) examine the portfolio management process of one of the large auditing firms. Consistent with risk avoidance, the authors note that the audit firm is shedding riskier clients and that audit risk factors are more important in portfolio management decisions than are financial risk factors.

Audit Quality

Starting with DeAngelo (1981), previous accounting literature has found some indications of audit quality differences between the Big N and the non-Big N.⁵ Specifically, previous literature has noted Big N audit firms are associated with higher audit premiums (Simunic, 1980), higher earning response coefficients (Teoh and Wong, 1993), higher litigation rates (St. Pierre and Anderson, 1984; Palmrose, 1988), lower earnings management (Becker et al., 1998; Francis et al., 1999), lower going concern error rates (Geiger and Rama, 2006), better predictive ability of future IPO performance (Weber and Willenborg, 2003), and are less likely to serve as a successor auditor when the predecessor auditor resigned (Raghunandan and Rama, 1999).

In addition to the studies examining audit quality differences between the Big N and the non-Big N, another group of studies have examined audit quality around auditor changes. DeFond and Subramanyam (1998) find that discretionary accruals are income decreasing in the year before the change and insignificant in the year of change. However, their study examines auditor changes during the period 1990 to 1993. In

⁵ Big N refers to the current Big Four accounting firms and their predecessors including Arthur Anderson.

contrast, Nagy (2005) finds that discretionary accruals are actually lower for smaller companies who were forced to change auditors by the demise of Andersen.

Client Retention in the Post-SOX Environment

As noted earlier the auditing profession has undergone significant change since the collapse of Enron and the subsequent demise of Andersen. Thus, the first step in my analysis is to gain an understanding of the client continuance process in the post-SOX environment.

Methodology

To gain insight to the client continuance process, I interview 10 Big Four audit partners.⁶ These partners are a cross section of their respective audit firms, representing a broad spectrum of industries including retail, manufacturing, healthcare, technology and financial services. The interviewees included one national risk management partner, two regional risk management partners, two office managing partners and five partners without regional or national leadership positions. Each of the partners has been involved in client retention decisions in the past year and all but one partner has been associated with at least one resignation in the past two years. All interviews took place in person

⁶ While 10 is not an excessively large number of audit partners, the number is consistent with previous studies that employ interviews as a basis for understanding auditor decisions. Mutchler (1984) notes that it is not necessary to use a large number of subjects during the discovery stage of a project. In her paper, Mutchler (1984) interviews 16 audit partners, two from each of the Big Eight accounting firms, to examine auditors' perception of the going-concern opinion decision. Additionally, Huss and Jacobs (1991) interview eight audit partners during their exploration of auditors' risk containment programs.

with five of the interviews being taped.⁷ Handwritten notes were taken for those interviewees not wishing to be taped.

These interviews consisted of two parts. In the first part, I asked a series of open ended questions to determine what client factors are most important to the client continuance decision (i.e. what are the red flags that they look for?). During this discussion, the partners were asked to not only identify what factors are most important, but to also discuss how these factors may be observable in publicly available disclosures. Additionally, I questioned the partners on how the Andersen demise and SOX had altered the client continuance process. Appendix A contains the interview protocol used with each partner. In the second part of the interview, I asked the audit partners to rate the importance of the items discussed using a five point Likert scale. This analysis allows me to assess the relative importance of each of the items discussed. See Appendix B for the Likert scale that was provided to each partner.

Results

The presentation and discussion of the results are presented in three sections. The first section discusses the interview responses, while the second section discusses the results of the Likert scale ratings instrument. Finally the third section presents the univariate analyses and results from the multivariate analyses.

⁷ Eight of the interviews occurred in the respective partner's office. The remaining two interviews occurred at meetings where we were both in attendance.

Interview Responses

Due to the open-ended nature of the interviews and complexity of the client continuation process, questions often commingled and there were no simple answers to most questions. Thus, I make no attempt to provide exact responses for each question discussed. To facilitate discussion of the interviews, I group interview responses into general categories. These categories are general groupings of the questions asked. I start with a general description of each firm's client continuance process and then move on to discuss specific client and engagement characteristics the partners identified as being important. I conclude with a discussion of how the process has changed post-SOX.

The Process

In general, partners at three of the four firms described a very similar process driven by their national offices. Specifically, they described a process where shortly after the completion of the prior year engagement the engagement team is prompted to initiate the client continuance process. The first step in the process is to populate a web-based database with information about the client.⁸ Based on the information entered into the database each firm generates a risk rating for each client. Interestingly, while the audit partner is not allowed to lower the risk score received by a client they are allowed to increase the score if they believe it is too low. This risk rating determines the level of internal review required to continue servicing a client and allows comparison of clients across the firm. At each of the three firms, the minimum required review for a public client is by a regional risk management partner. During the review process, the

⁸ The information entered into the database includes information on the client's industry, financial performance, management, governance and the profitability of the engagement.

reviewing partner(s) can request additional information about the client and, depending on the circumstances, may require a teleconference or meeting to discuss a specific client.

While three of the four firms have very similar processes driven by their national offices, the fourth firm's process is more regionalized and examines not only the particular client but also the partner's portfolio as a whole. At this firm, each partner meets once a year with the office managing partner and a regional risk partner to review the partner's client portfolio.⁹ During these reviews, the partners discuss the specific risks of the client and whether they believe the firm should continue servicing that client. If during this meeting the partners identify a client they wish to continue servicing but which has a sufficiently high level of risk, they can put the client into their national risk management program. This program involves the appointment of a third partner to provide additional guidance and the performance of additional procedures to help mitigate the risks identified.¹⁰

In addition to the information noted above, there were some other interesting responses that deserve attention. First, as part of the documentation to complete sign off on the current year audit opinion at one firm, the engagement partner is required to answer a question as to whether or not the audit firm should continue servicing the audit client. Additionally, it was interesting to note that several partners indicated that the decision to not continue servicing a client is usually made prior to starting the continuance process for the client. That is, the partner knew at the end of the engagement whether or not the client met the profile of a client the audit firm wanted to continue

⁹ While the partners at this firm do populate the database with financial information on each of their clients, this firm does not generate a risk rating based on that information.

¹⁰ Due to my agreement with the audit partners prior to the interview process, I am not able to identify specific partners or separately analyze data related to any individual firm.

servicing. They indicated that the process primarily provided the documentation of the decision and a system of checks to ensure that partners across the firm were using similar metrics to determine which clients to service. Finally, I asked the partners what type of risk they were most concerned about when making client continuance decisions. All except two partners stated that their biggest concern was the litigation or perception risk associated with restatements. The remaining two partners considered management integrity to be their biggest concern.

Client Characteristics

During the second part of the interview, the partners were asked to identify the key factors/characteristics that they/their firm find important when deciding whether or not to continue servicing a client. All interviewees identified the same basic items as important to the decision to continue servicing the client. These items can be broken down into four basic groupings: (1) management, (2) financial health, (3) general company characteristics and (4) governance.

The first group of characteristics identified are those related to the management of the client. The partners consistently listed management's integrity, attitude toward financial reporting and competence as the key determinants of the decision to continue servicing the client. They went on to indicate that determining the integrity and competence of management was the most difficult task they had to perform. Finally, several partners noted that turnover in the key management personnel creates significant uncertainty for the audit firm. They went on to indicate, that in many circumstances,

turnover of key management personnel led to the client being treated as if they were a new client and not a continuing client.

The second group of characteristics identified were those related to the financial health of the client. The partners consistently identified high distress, high leverage, low profitability and poor cash flow companies as clients they would consider resigning from.

In addition to the financial health of the company, the partners also found several general company characteristics as important determinants of the decision to continue servicing a client. First, the partners identified the existence of a sufficient number of competent personnel as a significant issue. During the interviews, the partners indicated that the independence provisions of SOX have prevented the audit firms from providing accounting assistance and guidance to their clients. Thus, the quality of the client's personnel has become a significant issue post-SOX. Additionally, the partners identified the existence of poor internal controls as another key indicator that they would consider resigning. A third factor identified by the partners was litigation risk. Interestingly, the partners indicated that the litigation risk could result from actual audit risk or reputation risk. Partners at two of the firms stated that their firm had decided to stop performing work for sub-prime lenders and internet gambling companies because the firm believed association with companies in these industries could be detrimental to the firm's reputation. The partners also indicated that the existence of significant related party transactions was another key indicator that they should consider resigning. Finally, the partners indicated that they had to evaluate the strain the client puts on the audit firm's staff. The partners all indicated that retention of audit personnel had become a significant

issue for the audit firms post-SOX and that they could no longer tolerate clients who were difficult to deal with or who put unnecessary strain on their audit firm's staff.

The final group of characteristics identified related to the client's governance. Several audit partners identified the competence, diligence and objectivity of the company's audit committee to be very important to the decision to continue servicing. Interestingly, two audit partners indicated that they did not consider the audit committee to be a very important part of the process. These partners indicated that a "good" audit committee would be great, but that the existence of a "bad" audit committee would not be a reason to stop servicing a client. In contrast, another audit partner indicated that he was aware of a situation where an audit partner in his firm actually spoke with the board about the lack of involvement by the audit committee and indicated that if the audit committee did not take a more active role the firm would consider resigning from the client.

Engagement Characteristics

In addition to the client characteristics noted above, the partners also identified several engagement characteristics that were important to the client continuance decision. First, the partners indicated that they must have personnel with sufficient expertise. Specifically, one partner indicated that from a risk management standpoint it was not effective to retain a client for which you don't have sufficient expertise to mitigate the client's risk. Additionally, the partners indicated that you must have an audit fee that is appropriate for the level of audit risk. Several partners indicated that their firm had general expectations for audit profitability post-SOX and that this had required audit fees to increase for several clients.

Changes Post-SOX

In general, all the partners indicated that the client continuance process had become more formal and rigorous post-SOX. One partner indicated that the events surrounding the collapse of Andersen had opened a lot of partners' eyes as to the effect one "bad" client can have on the entire partnership. Thus, leading to a process where the continuance decision is viewed with a more critical eye by both the engagement partner and the risk partners reviewing the continuance decisions. The partners also indicated that the level of sign-off required for a continuing client had increased post-SOX and that everything was scrutinized to eliminate undue risk. Specifically, the partners indicated that the minimum required review for a public client is by a regional risk partner as compared to pre-SOX when the minimum review may have been as low as an office managing partner. Additionally, they indicated that the importance of internal controls and the audit committee had increased dramatically post-SOX. Interestingly, one partner indicated that he believed the PCAOB inspections had been a significant factor in the increase in documentation of the continuance decision. Finally, the partners all agreed that the inability of the audit firms to retain sufficient personnel had led audit firms to examine how much strain a particular client puts on the staff of the firm.

Likert Scale Results

While the interviews with the partners allowed me to understand what factors/characteristics the partners considered important to the client continuance decision, it does not provide me with a ranking of factors/characteristics. As noted earlier, to address the relative importance of the items discussed I ask each partner to rank

the importance of each item. Table 1 presents the frequencies and mean response for each factor/characteristic related to the client continuance decision.

As can be seen from Table 1, only one item had a mean response of greater than 2.5 indicating that they were all considered on average important or very important to the client continuance decision. Not surprisingly, management characteristics were some of the most important items with management integrity being rated very important by every partner. Interestingly, the availability of appropriate audit personnel rated on average as high as the internal controls and financial health of the company. Finally, the importance of the audit committee was rated on average higher than the profitability of the engagement.

Univariate and Multivariate Analyses

Variable and Hypotheses Development

In the first part of the paper, I ask audit partners to identify the factors/characteristics of clients that would be indicators that the audit firm should consider resignation. Based on the responses from the audit partners, I develop a model of auditor resignation. To develop this model, I identify proxies for the factors/characteristics that the partners indicated were important to the client continuance decision. As noted earlier, the partners identified four main groupings of factors/characteristics that are important to the client continuance decision. I use these grouping to identify the variables I use as proxies for the factors/characteristics identified.

The first group the partners identified related to the management of the company. One of the key indicators they identified was the integrity and attitude of management

toward financial reporting. While the integrity and attitude of management is not a simple characteristic to capture, I use the company's level of earnings management to proxy for the aggressiveness of management toward financial reporting. Specifically, I classify companies in the top three earnings management deciles as having a high level of earnings management. Consistent with my discussion with the partners and previous literature which finds that resignation companies are more likely to have high earnings management (DeFond and Subramanyam, 1998), I expect that if a company is in the top three deciles of earning management the probability of resignation increases. This leads to my first hypothesis (expressed in alternate form):

H1a: There is a significant positive relation between the presence of high levels of earnings management and the probability of resignation.

In addition to the decile of earnings management, the partners also indicated that the existence of an adverse internal control opinion would be a good proxy for a lack of commitment by management toward accurate financial statements. Previous literature has noted that resignation companies are more likely to have internal control deficiencies (Lee et al. 2004; Hertz, 2005; Ettredge et al. 2005). Building on the previous literature and my interviews, I expect that audit firms are more likely to resign from companies with internal control deficiencies. This leads to my second hypothesis (expressed in alternate form):

H1b: There is a significant positive relation between the existence of an adverse internal control opinion and the probability of resignation.¹¹

¹¹ My sample period is 2003 to 2005. During this period, some companies are not subject to the internal control reporting requirements of section 404 of SOX. For these companies, I use the existence of an adverse 302 report as evidence of poor internal controls.

Finally, I also identify companies who have added a new member to the management team in the past year. As noted during the interview process, turnover in key management personnel creates significant uncertainty for the audit firm. Thus, one could expect a company with turnover in its key management personnel to have a higher probability of resignation. This leads to my third hypothesis (expressed in alternate form):

H1c: There is a significant positive relation between the existence of a new member of management and the probability of resignation.¹²

The second group of items identified by the partners relates to the financial health of the company. As noted earlier, the partners consistently identified high distress, high leverage, low profitability and poor cash flow companies as clients they would examine carefully. This leads to my fourth and fifth hypotheses: (expressed in alternate form):

H2a: There is a significant positive relation between distress and the probability of resignation;

H2b: There is a significant positive relation between leverage and the probability of resignation.

In addition to these variables, I also include variables to capture whether or not the company is profitable and whether it has negative cash flow from operations. This leads to my next two hypotheses (expressed in alternate form):

H2c: There is a significant positive relation between existence of a loss and the probability of resignation;

H2d: There is a significant positive relation between the existence of negative cash flow from operations and the probability of resignation.

¹² In untabulated results, I recode this variable as a dichotomous variable which is coded 1 if the company has a new chief executive officer and 0 otherwise. Results in Tables 4 and 13 are unchanged.

Finally, I include a variable to capture the overall financial health of the company. Specifically, I include a variable to identify companies who receive a going-concern opinion. Previous literature on resignations has indicated that the probability of resignation increases for firms with a prior going concern opinion (Krishnan and Krishnan, 1997; Lee et al. 2004). This leads to my next hypothesis (expressed in alternate form):

H2e: There is a significant positive relation between the existence of a prior year going-concern opinion and the probability of resignation;

The third group of factors/characteristics identified by the partners relates to the competence of company personnel, internal controls, the litigation risk associated with the company's industry, related party transactions and the strain the client puts on the audit staff. During my interviews with the partners, several partners indicated that a restatement would be a good proxy for a company who did not have competent personnel. This leads to my next hypothesis (expressed in alternate form):

H3a: There is a significant positive relation between restatement and the probability of resignation.

As noted in H1b, I use the presence of an internal control deficiency to proxy for the commitment of management toward accurate financial reporting. I also use this variable as a second proxy for a lack of sufficient competent personnel. I predict the same relation for this variable as in H1b.

In addition to these variables related to the competency of client personnel, I also include a variable to capture a company's litigation risk. Specifically, I calculate each company's probability of litigation based on Stice's (1991) litigation score and classify a

company with a probability greater than 50 percent as having high litigation risk. The previous literature on resignations has found that resignation firms are more likely to be in high litigation industries (Krishnan and Krishnan, 1997; Shu, 2000; Lee et al., 2004).

This leads to my next hypothesis (expressed in alternate form):

H3b: There is a significant positive relation between a company with high litigation risk and the probability of resignation.

Additionally, the partners identified the existence of significant related party transactions as another indicator of possible resignation. As such, I include the number of related party transactions in the model. This leads to my next hypothesis (expressed in alternate form):

H3c: There is a significant positive relation between the number of related party transactions and the probability of resignation.

Finally, I use the audit lag as a proxy for the strain the client puts on the audit staff. This is consistent with prior literature which documents that resignation firms are more likely to have a longer audit lag (Schwartz and Soo, 1996; Schloetzer, 2005). This leads to my next hypothesis (expressed in alternate form):

H3d: There is a significant positive relation between the audit lag and the probability of resignation.

The final group of items identified by management relate to the governance of the company. These items primarily focus on the audit committee. Based on the results of my interviews, I include variables related to the objectivity, diligence and expertise of the audit committee. Consistent with prior literature, I expect resignation firms to be less likely to have a fully independent audit committee (Lee et al. 2004), less likely to have a diligent audit committee (Lee et al. 2004) and less likely to have a financial expert on

their audit committee (Lee et al. 2004). This leads to my next three hypotheses (expressed in alternate form):

H4a: There is a significant negative relation between the existence of a fully independent audit committee and the probability of resignation;

H4b: There is a significant positive relation between the existence of an audit committee that meets less than four times per year and the probability of resignation;

H4c: There is a significant negative relation between the existence of a financial expert on the audit committee and the probability of resignation.

In addition to the company characteristics identified by the partners, they also identified the profitability of the engagement as an additional factor affecting the decision to continue servicing a client. I use two variables to capture the profitability of an engagement. The first variable is the unexpected portion of audit fees. Consistent with prior literature, I expect that resignation firms will have lower unexpected audit fees (Ettredge et al. 2005). This leads to my next hypothesis (expressed in alternate form):

H5a: There is a significant negative relation between unexpected audit fees and the probability of resignation.¹³

In addition to the unexpected portion of audit fees, I also use a variable to capture the level of non-audit work performed by the audit firm. Even though the level of non-audit work has been greatly reduced post-SOX one could expect that an audit firm would

¹³ The unexpected component of audit fees is calculated using the following model: $LAF = b_0 + b_1LTA + b_2RECINV + b_3CATA + b_4QUICK + b_5DE + b_6ROI + b_7FOREIGN + b_8GC + b_9YE + b_{10}LOSS + b_{11}BIG4 + b_{12}SIC49 + b_{13}LNTENURE$, where LAF = natural log of audit fees, LTA = natural log of assets, RECINV = percentage of total assets in receivables and inventories, CATA = ratio of current assets to total assets, QUICK = ratio of current assets (less inventories) to current liabilities, DE = ratio of long-term debt to total assets, ROI = earnings before interest and taxes divided by total assets, FOREIGN = 1 if the company has foreign operations, GC = 1 if the company received a going-concern opinion, YE = 1 if the company has a non December 31 year end, LOSS = 1 if loss in current fiscal year, BIG4 = 1 if auditor is one of the Big Four audit firms, SIC49 = 1 if observation is in the utilities industry and LNTENURE = natural log of the number of years with the same auditor. This model is consistent with the model reported in Francis et al. (2005) and Casterella et al. (2004).

have more economic ties to a client for which it still performs non-audit work than a client for which it does not. This leads to my next hypothesis (expressed in alternate form):

H5b: There is a significant negative relation between non-audit fees and the probability of resignation.¹⁴

Finally, I control for the size of the company as previous literature has noted that resignation companies are smaller (Lee et al., 2004).

Univariate Analysis

It is important to test whether audit firms are systematically making resignation decisions based on the factors their audit partners considered most important. To conduct this analysis, I use Audit Analytics to select a sample of 200 auditor resignations from all Big Four and National audit firm resignations between January 1, 2003 and December 31, 2005.¹⁵ To provide a baseline for comparison, I employ a matched control sample selected from all companies who did not change auditors during the sample time period. The control sample is matched to the test sample based on year, audit firm, industry and performance.¹⁶

Table 2 presents descriptive statistics for the company characteristics. As expected, resignation companies are smaller ($p < 0.01$), have a longer audit lag ($p < 0.01$), are less likely to have a financial expert on their audit committee ($p < 0.10$) and

¹⁴ In untabulated results, I replace the natural log of non-audit fees with the ratio of non-audit fees to audit fees. Results are quantitatively similar.

¹⁵ There are approximately 420 audit firm resignations (350 Big Four and 70 National) between January 1, 2003 and December 31, 2005. I limit my analysis to Big Four and National audit firms since smaller audit firms are less likely to have similar processes.

¹⁶ For matching purposes, performance is defined as return on assets. After eliminating all control companies from different years, audit firms and industries, the test company is matched with the control firm which has the closest return on assets to the test firm. In all cases, the control company's return on assets is within $\pm 30\%$ of the test company's return on assets.

more likely to have high levels of earnings management ($p < 0.10$) than companies who are retained by their audit firms.¹⁷ Additionally, resignation firms were almost three times more likely to have an internal control deficiency ($p < 0.01$), restate their financial statements ($p < 0.01$) and receive a going-concern opinion ($p < 0.01$) than the retained companies. Finally, it is interesting to note that resignation firms have significantly lower non-audit fees ($p < 0.01$) than retained companies. This seems to indicate the possibility that auditors give some client retention preferences to clients for which they provide a greater amount of non-audit services. These results provide initial evidence that the partners are systematically using many of the factors/characteristics they identified to make client continuance decisions.

Table 3 presents the correlations among the independent variables. All except nine of the correlations fall between ± 0.40 , which appears to suggest that the variables measure distinct features. Five of the correlations greater than ± 0.40 are between SIZE and another independent variable. The only other variables with a correlation greater than ± 0.40 are those between DISTRESS and LEVERAGE (0.4140) LOSS and NEG_CF (0.5410), NEG_CF and HIGH_EM (0.4150) and LOSS and HIGH_PROB_LIT (0.5484). These relationships are not unexpected, considering that the debt to assets ratio is a component of DISTRESS and having a loss increases the chance of litigation. Given these relatively high correlations, I calculate variance inflation factors (VIF) for all

¹⁷ I do not discuss the results for LEVERAGE or ABN_AUDITFEES, since there is not consistent evidence that it is significant.

models and find that the highest VIF is 1.97, which is within acceptable limits.¹⁸ Thus, multicollinearity does not appear to be a problem in any of my models.

Model

To determine if client factors identified by the partners are diagnostic of auditor resignations, I use the following matched-pairs logit regression model¹⁹:

$$\text{RESIGN} = b_0 + b_1\text{IC_DEF} + b_2\text{NEW} + b_3\text{NEG_CF} + b_4\text{DISTRESS} + b_5\text{GC} + b_6\text{LEVERAGE} + b_7\text{LOSS} + b_8\text{RESTATE} + b_9\text{RELATED_PARTY} + b_{10}\text{AUDIT_LAG} + b_{11}\text{AC_IND} + b_{12}\text{AC_MEET} + b_{13}\text{FE} + b_{14}\text{ABN_AUDITFEES} + b_{15}\text{NONAUDITFEES} + b_{16}\text{SIZE} + b_{17}\text{HIGH_EM} + b_{18}\text{HIGH_PROB_LIT} + e$$

RESIGN = 1 if the audit firm resigned from the engagement, 0 otherwise;

IC_DEF = 1 if the company reports a deficiency in its internal controls, 0 otherwise;

NEW = 1 if any of the disclosed members of management was new to the company, 0 otherwise;

NEG_CF = 1 if the company had negative cash flow from operation, 0 otherwise;

DISTRESS = the probability of bankruptcy calculated using Zmijewski's (1984) financial distress score;

GC = 1 if the company received a going-concern opinion, 0 otherwise;

LEVERAGE = the ratio of total liabilities to total assets.

LOSS = 1 if the company reports negative income, 0 otherwise;

RESTATE = 1 if the company restated their financial statements in the year prior to the resignation, 0 otherwise;

RELATED_PARTY = the number of related party transactions reported in the proxy;

AUDIT_LAG = the natural log of the number of calendar days from the fiscal year-end to the date of the auditor's report;

AC_IND = 1 if the audit committee is 100 percent independent, 0 otherwise;

AC_MEET = 1 if the audit committee met less than four times, 0 otherwise;

FE = 1 if at least one member of the audit committee is disclosed by the company as a financial expert or has experience as a CFO, Accountant, VP of Finance, CPA, or Controller, 0 otherwise;

ABN_AUDITFEES = the natural log of the unexpected component of audit fees;

¹⁸ According to Gujarati (1995, 339), multicollinearity is unlikely to be a problem as long as VIF are less than 10.0.

¹⁹ All variables are measured in the year prior to the resignation decision.

NONAUDITFEES = the natural log of non-audit fees;
 SIZE = the natural log of assets;
 HIGH_EM = 1 if the decile of the company's absolute value of performance
 adjusted discretionary accruals from the modified Jones model
 as compared to all firms on Compustat is greater than 7, 0
 otherwise²⁰;
 HIGH_PROB_LIT = 1 if the probability of litigation calculated using Stice (1991)
 litigation score is greater than 0.50, 0 otherwise;

The model above is the complete model. However the HIGH_EM variable is not
 appropriate for companies in the financial services and insurance industries. There are 20
 matched pairs (40 companies) from the financial services and insurance industries in my
 initial sample. Additionally, 59 of the matched pairs (118 companies) in my sample do
 not have the data to compute Stice's litigation score (HIGH_PROB_LIT). Based on this
 information, I run four models. The first model excludes the HIGH_EM and
 HIGH_PROB_LIT variable, but includes the complete sample of 400 companies. The
 second model adds the HIGH_EM model to the first model and drops observations in the
 financial services and insurance industries. The third model adds the HIGH_PROB_LIT
 to the first model and excludes observations that do not have data to calculate Stice's
 litigation score. The final model adds both HIGH_EM and HIGH_PROB_LIT, but is
 limited to observations that are not in the financial services and insurance industries
 which have the data to calculate Stice's litigation score.

Matched-Pairs Logistic Analysis

Table 4 includes the results from the four logistic regressions. As noted earlier,
 Model 1 excludes the HIGH_EM and HIGH_PROB_LIT variables. The overall model is

²⁰ In untabulated results, I recode HIGH_EM to be equal to 1 if the company's decile of accruals is greater
 than 5. Results are unchanged.

significant ($p < 0.01$) and the pseudo R^2 is 35.76%. As expected, resignation firms are less likely to have management who are committed to accurate financial reporting, as evidenced by resignation firms being more likely to have an internal control deficiency ($p < 0.05$) and to have restated their financial statements ($p < 0.10$). Resignation clients also put more strain on the audit firms and are less profitable than are retained clients, as exhibited by the significantly longer audit lag ($p < 0.01$) and lower non-audit fees ($p < 0.05$). Additionally, resignation clients are in poor financial health. Specifically, resignation clients are more likely to have a going concern opinion ($p < 0.01$) and higher leverage ($p < 0.05$) than retained companies. Finally, resignation firms are smaller ($p < 0.01$) than companies who are retained.

Next, I add HIGH_EM to Model 1. Model 2 is significant ($p < 0.01$) with a pseudo R^2 of 37.82%. As expected, HIGH_EM is positive and significant ($p < 0.10$) indicating resignation companies have more aggressive financial reporting behavior than retained firms. All other variables are consistent with the results reported in Model 1.

In Model 3, I add HIGH_PROB_LIT to Model 1. The overall model is significant ($p < 0.01$) and the pseudo R^2 is 37.33%. The new variable HIGH_PROB_LIT is not significant at any conventional level. All other variables are consistent with the results reported in Model 1 with the exception of NONAUDITFEES, which is no longer significant at any conventional level.

Finally, I add both HIGH_EM and HIGH_PROB_LIT to Model 1. Model 4 is significant ($p < 0.01$) and has a pseudo R^2 of 40.15%, which is higher than any other model. Results from this model are consistent with those previously reported.

Overall, these results appear to indicate that resignation companies have less accurate financial reporting (H1a, H1b, and H3a) put significant strain on audit firms (H3d), are less profitable (H2c) and have weaker financial performance (H2b and H2e) than retained companies. Additionally, these results suggest that the audit partners are consistently using many of the factors identified to make client continuance decisions. In the post-SOX period, auditor independence has been a key concern of regulators. It is interesting to note that I find a significant negative relation between non-audit fees and the resignation decision in the univariate results and in models 1 and 2 of the multivariate results. However, this result does not hold in models 3 and 4 of the multivariate analyses. To attempt to understand the contrasting non-audit fee results, I run models 1 and 2 on the reduced sample used in model 4. Non-audit fees are not significant at any conventional level in these models. This result appears to indicate that the positive relation between non-audit fees and client retention is limited to 146 observations which do not have sufficient data to calculate the probability of litigation.²¹

Do Audit Firms Retain Better Clients?

In the first part of this paper, I examine which of the factors identified by the audit partners are most important in predicting auditor resignations. However, this analysis only identifies the actual factors used by auditors when making the client retention decision, it does not examine whether or not the audit firm made the appropriate decision. As noted earlier, previous literature has examined the characteristics of companies whose

²¹ It is also interesting to note that the 146 companies which do not have the data to calculate the probability of litigation have mean non-audit fees which are approximately \$70,000 higher than the 254 companies that have the data to calculate the probability of litigation.

auditor resigns. However, little research has examined the subsequent performance of these companies to determine if audit firms are effective at disassociating themselves from clients with elevated risk.

Methodology

To determine if auditors are effective at resigning from clients with elevated risk, I examine the differences between resignation and retained companies based on a multitude of future financial performance and risk measures. These measures include return on assets, abnormal accruals, financial distress, delisting, restatement, going concern status, and litigation risk.²² This analysis is first performed using one year of future performance, with subsequent analysis examining two years of future performance. I employ two samples to perform this analysis. First, I compare all resignation firms to all non-resignation firms, hereafter referred to as the full sample.²³ Specifically, I employ univariate analysis to examine whether non-resignation companies have better future performance than resignation companies. For the second part of this analysis, I use a multivariate t-test to examine the relation between the future performance measures and the retention decision holding all else equal. Specifically, I employ a matched sample of 200 Big Four and National audit firm resignations between January 1, 2003 and December 31, 2005. Each sample resignation firm is matched with a non-resignation

²² I had originally intended to include bankruptcy data, however none of the companies in the matched sample filed for bankruptcy in either of the two years of future performance I examined. Additionally, I did not collect the bankruptcy measure for the entire population due to time required to hand collect this measure for a large sample of companies.

²³ I use Compustat to identify all companies, audited by Big Four and National audit firms, who do not change auditors between January 1, 2003 and December 31, 2005.

firm based on year, audit firm, industry and performance.²⁴ Using this sample, I employ matched-pairs logistic regression to compare the retained companies to the resignation companies based on future performance measures and size using the following model:

$$\text{RETAIN} = b_0 + b_1\text{SIZE_AFTER} + b_2\text{ROA_AFTER} + b_3\text{DISTRESS_AFTER} + b_4\text{DELIST_AFTER} + b_5\text{RESTATE_AFTER} + b_6\text{GC_AFTER} + b_7\text{LOSS_AFTER} + b_8\text{IC_DEF_AFTER} + b_9\text{EM_AFTER} + b_{10}\text{PROB_LIT_AFTER} + e$$

- RETAIN = 1 if the company is retained by the audit firm, 0 otherwise;
- SIZE_AFTER = the natural log of assets;
- ROA_AFTER = return on assets;
- DISTRESS_AFTER = the probability of bankruptcy calculated using Zmijewski's (1984) financial distress score;
- DELIST_AFTER = 1 if company delisted in the year after resignation, 0 otherwise;
- RESTATE_AFTER = 1 if company restated their financial statements in the year after resignation, 0 otherwise;
- GC_AFTER = 1 if company received a going-concern opinion in the year after the resignation;
- LOSS_AFTER = 1 if the company reports negative income, 0 otherwise;
- IC_DEF_AFTER = 1 if the company reports a deficiency in its internal controls, 0 otherwise;
- EM_AFTER = the decile of the company's absolute value of performance adjusted discretionary accruals from the modified Jones model as compared to all firms on Compustat;
- PROB_LIT_AFTER = the probability of litigation calculated using Stice's (1991) litigation score.

All variables are measured in the year after resignation. In subsequent analysis, I limit the sample to firms with two years of future performance to see if the results are sensitive to using one year of subsequent performance.²⁵

²⁴ This sample is the same as the sample used for the first analysis of this paper.

²⁵ For the two year model, return on assets, abnormal accruals, financial distress, and litigation risk are calculated as the average of each measure for the two years following the resignation. In contrast, delisting, restatement, going concern status, net loss, and internal control deficiency are dichotomous variables that indicate if the company exhibited the respective condition in either of the two years following the resignation.

If audit firms are doing a good job at making client retention decisions, one would expect the retained client to have better future performance than the dismissed clients.

This leads me to my research question:

R1: Do audit firms retain better performing clients?

Results First Year After

Panel A of Table 5 presents the results of the univariate analysis for the full sample. As can be seen in Table 5, the resignation clients are significantly smaller ($p < 0.01$) than the retained clients. The resignation clients also perform significantly worse than the retained companies on all characteristic analyzed. Specifically, resignation companies have almost a -90% ROA as compared to retained firm who have only a -5% ROA ($p < 0.01$). Resignation companies are more than twice as likely to receive a going concern opinion ($p < 0.01$), delist ($p < 0.01$), have a loss ($p < 0.01$), restate their financial statements ($p < 0.01$) and have an internal control deficiency ($p < 0.01$) as retained firms. Additionally, resignation firms have more than two times the probability of bankruptcy, DISTRESS_AFTER, ($p < 0.01$) and litigation ($p < 0.01$) as retained firms. Finally, resignation companies have higher levels of earnings management ($p < 0.01$) as compared to the retained firms. Panel B of Table 5 provides the univariate results for the matched sample. Results from the matched sample are consistent with those from the full sample with the exception of DELIST_AFTER and PROB_LIT_AFTER which are not significant at any conventional level in the matched sample.

Table 6 presents the correlations among the independent variables. All except six of the correlations fall between +/- 0.40 and only one is greater than +/- 0.50, which

appears to suggest that the variables measure distinct features. The only variable with a correlation greater than ± 0.50 is between LOSS_AFTER and ROA_AFTER (-0.8351). This relationship is not surprising given that companies with a loss must have negative ROA. Given these relatively high correlations, I calculate variance inflation factors (VIF) for all models and find that the highest VIF is 1.96, which is within acceptable limits. Thus, multicollinearity does not appear to be a problem in any of my models.

Table 7 presents the results from the matched-pairs logistic regressions. Consistent with the analysis performed in Table 4, Model 1 excludes the EM_AFTER and PROB_LIT_AFTER variables. The overall model is significant ($p < 0.01$) and has a pseudo R^2 of 26.97%. Consistent with the notion that audit firms retain better clients, the results indicate that retained clients are larger ($p < 0.01$), less likely to have a going concern opinion ($p < 0.05$) and less likely to have an internal control deficiency ($p < 0.01$). In Model 2 and 3, I add the EM_AFTER and PROB_LIT_AFTER variables to Model 1, respectively. Neither the EM_AFTER nor the PROB_LIT_AFTER variable is significant at any conventional level. All other results are consistent with those reported in Model 1, with the exception of GC_AFTER in Model 3 which is no longer significant at the 10% level. In Model 4, I add both the EM_AFTER and PROB_LIT_AFTER variables to Model 1. Results are consistent with those previously reported. Overall, the results from both the full sample and the matched sample indicate that audit firms retain better clients.

Results Second Year After

Requiring companies to have two years of future data reduces the sample size from 200 matched pairs to 97 matched pairs. Panel A of Table 8 presents the results of the univariate analysis for the full sample. Consistent with the results presented in Table 5, resignation clients performed significantly worse than the retained companies on all characteristic analyzed. Specifically, resignation companies have a -122% ROA as compared to retained firm who have only a -9% ROA ($p < 0.01$). Resignation companies are more than twice as likely to receive a going concern opinion ($p < 0.01$), delist ($p < 0.01$), have a loss ($p < 0.01$), restate their financial statements ($p < 0.01$) and have an internal control deficiency ($p < 0.01$) as retained firms. Additionally, resignation firms have more than three times the probability of bankruptcy, DISTRESS_AFTER, ($p < 0.01$) and almost two times the probability of litigation ($p < 0.01$) as retained firms. Finally, resignation companies have higher levels of earnings management ($p < 0.01$) and are smaller ($p < 0.01$) than retained clients. Panel B of Table 8 provides the univariate results for the matched sample. Results from the matched sample are consistent with those from the full sample with the exception of LOSS_AVG and PROB_LIT_AVG which are not significant at any conventional level in the matched sample.

Table 9 presents the correlations among the independent variables. All except nine of the correlations fall between +/- 0.40 and only four of those are greater than +/- 0.50. The correlations greater than +/- 0.50 are between SIZE_AVG and PROB_LIT_AVG (-0.5014), LOSS_AVG and ROA_AVG (-0.7652), DISTRESS_AVG and ROA_AVG (-0.6064) and LOSS_AVG and PROB_LIT_AVG (0.5252). Given these

relatively high correlations, I calculate variance inflation factors (VIF) for all models and find that the highest VIF is 2.09, which is within acceptable limits. Thus, multicollinearity does not appear to be a problem in any of my models.

Table 10 presents the results from the matched-pairs logistic analysis. Consistent with the analysis performed in Table 4 and Table 7, Model 1 excludes the EM_AVG and PROB_LIT_AVG variables. The overall model is significant ($p < 0.01$) and has a pseudo R^2 of 55.58%. Consistent with the notion that audit firms retain better clients, the results indicate that retained clients are larger ($p < 0.01$), less likely to have a going concern opinion ($p < 0.05$) and less likely to have an internal control deficiency ($p < 0.01$). In Model 2, I add EM_AVG variable to Model 1. While EM_AVG is not significant, DISTRESS_AVG and DELIST_AVG become marginally significant ($p < 0.10$). All other results are consistent with those reported in Model 1. In Model 3, I add PROB_LIT_AVG to Model 1. PROB_LIT_AVG is not significant. All other results are consistent with those in Model 1 with the exception of GC_AVG, which is no longer significant at any conventional level. Results from Model 4 are consistent with those already discussed. Overall, the results from the first year after and second year after analyses appear to provide consistent results that retained clients have better subsequent financial performance than resignation clients.

Why Do Audit Firms Retain Some Risky Clients While Dismissing Others?

While my second analysis identifies whether large accounting firms are retaining “better” clients, it does not help to explain why audit firms fail to resign from clients that

later are shown to be more risky. Previous accounting research has identified financial restatements as being significantly related to audit firm litigation (Kinney and McDaniel, 1989; Palmrose and Scholz, 2004). Thus, one example of a “risky” client from which an audit firm might wish to resign is one who subsequently has to restate their financial statements. Based on this information, I use a sample of firms with subsequent restatements, some of which the auditors had retained and some who were let go, to examine why audit firms fail to resign from some clients that later are shown to have increased litigation risk.

Methodology

To accomplish this analysis I use a matched sample of companies that have restated their financial statements.²⁶ The sample consists of all Big Four and National audit clients that were dismissed by their auditors between January 1, 2003 and December 31, 2005 and which subsequent to the dismissal restated their financial statements. This sample is matched based on year, auditor type (Big Four or National), industry, and performance with a restatement company whose auditor did not resign.²⁷

Using this matched sample, I use matched pairs logistic regression to explore why the factors identified by audit partners as being associated with resignation during the interviews are effective at identifying some firms who restate their financial statements,

²⁶ Consistent with prior literature (e.g. Palmrose and Scholz, 2004), I limit my sample of restatements to those restatements that relate to published financial statements items. Thus, restatements related to earnings announcements, subsequent events, retroactive restatements in accordance with GAAP and similar items are excluded from the sample. Additionally, I exclude restatements related to lease expenses due to recent concerns that these restatements may not be of equal severity as other financial restatements (Taub, 2005).

²⁷ For companies with multiple restatements during the sample period, I limit my analysis to the first occurrence of restatement during the sample period.

but not others. In addition to the factors identified by the audit partners during the interviews, the model includes factors which prior accounting literature has found to be associated with financial restatements. Previous literature has documented that restatement companies are younger (Abbott et al., 2004), smaller (Turner and Sennetti, 2001), have more leverage (DeFond and Jiambalvo, 1991), have more diffuse ownership (DeFond and Jiambalvo, 1991; Abbott et al. 2004), are less likely to have an independent and active audit committee (Abbott et al., 2004), are less likely to have an audit committee with at least one member with financial expertise (Abbott et al., 2004), and are slower growing (DeFond and Jiambalvo, 1991) than industry or control counterparts.

Given that the probability of restatement at the time of the resignation decision may be highly correlated with the other independent variables in this model, I control for the probability of restatement at the time of the resignation decision. To estimate the probability of restatement, I use the model developed by Turner and Sennetti (2001).²⁸ Using the coefficients from their model, I calculate the probability of restatement for each sample company.

I use the following matched-pairs logistic regression model to examine the differences between restatement firms who are dismissed and restatement firms who are retained:

$$\begin{aligned} \text{MISSED} = & b_0 + b_1\text{IC_DEF} + b_2\text{NEW} + b_3\text{NEG_CF} + b_4\text{DISTRESS} + b_5\text{GC} + \\ & b_6\text{LEVERAGE} + b_7\text{LOSS} + b_8\text{RELATED_PARTY} + b_9\text{AUDIT_LAG} + \\ & b_{10}\text{AC_IND} + b_{11}\text{AC_MEET} + b_{12}\text{FE} + b_{13}\text{ABN_AUDITFEES} + \\ & b_{14}\text{NONAUDITFEES} + b_{15}\text{SIZE} + b_{16}\text{AGE} + b_{17}\text{BLOCK} + b_{18}\text{GROWTH} + \\ & b_{19}\text{PROB_RESTATE} + b_{20}\text{HIGH_EM} + b_{21}\text{HIGH_PROB_LIT} + e \end{aligned}$$

²⁸ Turner and Sennetti (2001) model restatement using the following model: $\text{RESTATE} = -0.0213 + 12.1542 \cdot \text{NIAT} + -11.4571 \cdot \text{NIEQ} + 54.4958 \cdot \text{NI}^2 / (\text{AT} \cdot \text{EQ})$, where $\text{RESTATE} = 1$ if the company restated, $\text{NIAT} = \text{net income} / \text{total assets}$, $\text{NIEQ} = \text{net income} / \text{equity}$, $\text{NI} = \text{net income}$, $\text{AT} = \text{total assets}$ and $\text{EQ} = \text{total equity}$.

MISSED = 1 if the company restated their financial statements and the audit firm did not resign in the period prior to the restatement, 0 otherwise;
 IC_DEF = 1 if the company reports a deficiency in its internal controls, 0 otherwise;
 NEW = 1 if any of the disclosed members of management was new to the company, 0 otherwise;
 NEG_CF = 1 if the company had negative cash flow from operation, 0 otherwise;
 DISTRESS = the probability of bankruptcy calculated using Zmijewski's (1984) financial distress score;
 GC = 1 if the company received a going-concern opinion, 0 otherwise;
 LEVERAGE = the ratio of total liabilities to total assets.
 LOSS = 1 if the company reports a negative income, 0 otherwise;
 RELATED_PARTY = the number of related party transactions reported in the proxy;
 AUDIT_LAG = the natural log of the number of calendar days from the fiscal year-end to the date of the auditor's report;
 AC_IND = 1 if the audit committee is 100 percent independent, 0 otherwise;
 AC_MEET = 1 if the audit committee met less than four times, 0 otherwise;
 FE = 1 if at least one member of the audit committee is disclosed by the company as a financial expert or has experience as a CFO, Accountant, VP of Finance, CPA, or Controller, 0 otherwise;
 ABN_AUDITFEES = the natural log of the unexpected component of audit fees;
 NONAUDITFEES = the natural log of non-audit fees²⁹;
 SIZE = the natural log of assets;
 AGE = the natural log of the number of years the company has had positive assets on Compustat;
 BLOCK = the cumulative percentage of outstanding common stock shares held by 5 percent plus blockholders not affiliated with management (Compact D);
 GROWTH = the growth rate of total assets;
 PROB_RESTATE = the estimated probability of restatement at the resignation decision calculated using the model developed by Turner and Sennetti (2001);
 HIGH_EM = 1 if the decile of the company's absolute value of performance adjusted discretionary accruals from the modified Jones model as compared to all firms on Compustat is greater than 7, 0 otherwise;
 HIGH_PROB_LIT = 1 if the probability of litigation calculated using Stice (1991) litigation score is greater than 0.50, 0 otherwise.

²⁹ In untabulated results, I replace the natural log of non-audit fees with the ratio of non-audit fees to audit fees. Results are quantitatively similar.

Items b1 thru b15, b20 and b21 are from Table 4 and represent factors which were identified by the audit partners during the interview process as being important to the client retention decision.³⁰ In contrast, items b16 thru b18 represent additional factors which prior literature has found to be associated with financial restatements and which were not identified by the audit partners. All variables are measured in the year prior to the resignation. Given that this is an exploratory analysis to determine which factors are effective at identifying restatement companies which are retained, I do not make any predictions as to which factors will be effective.

Results

Table 11 presents descriptive statistics for the company characteristics. Interestingly, companies who are missed are larger ($p < 0.10$), have higher non-audit fees ($p < 0.05$), have shorter audit lags ($p < 0.05$), have nearly half the probability of having an internal control deficiency ($p < 0.10$), and are approximately one-third less likely to have a going concern opinion ($p < 0.01$) as compared to those companies who are dismissed.³¹

Table 12 presents the correlations between the dependent variables. All except twelve of the correlations fall between ± 0.40 , which appears to suggest that the variables measure distinct features. Six of the correlations greater than ± 0.40 are

³⁰ In constructing this sample, I only use a company's first restatement during the time period under examination. As such no companies have restatement in the prior period and that variable, b8 from Table 4, is excluded from this analysis.

³¹ I do not discuss the result for DISTRESS, since there is not consistent evidence that it is significant. Additionally, the results for SIZE and NONAUDITFEES are stronger when examining the medians instead of the means.

between SIZE and another independent variable. The only other variables with correlations greater than +/- 0.40 are those between DISTRESS and GC (0.4448), NEG_CF and LOSS (0.5220), NEG_CF and HIGH_PROB_LIT (0.4200), LOSS and GROWTH (-0.4496), LOSS and PROB_RESTATE (0.4486) and LOSS and HIGH_PROB_LIT (0.4175). These relationships are not unexpected. Given these relatively high correlations, I calculate variance inflation factors (VIF) for all models and find that the highest VIF is 2.81, which is within acceptable limits. Thus, multicollinearity does not appear to be a problem in any of my models.

Table 13 presents the results from the matched-pairs logistic regression. Consistent with Table 4, the first model excludes both HIGH_EM and HIGH_PROB_LIT. Model 1 is significant ($p < 0.01$) and has a pseudo R^2 of 30.33%. Companies who are missed are larger ($p < 0.01$), have lower unexpected audit fees ($p < 0.10$) and are less likely to have a going concern opinion ($p < 0.05$) than companies who are dismissed. Additionally, there is marginal evidence that companies who are missed are less likely to have an internal control deficiency ($p = 0.13$, two-tailed). While one might have anticipated that audit firms retain clients with high abnormal fees regardless of their risk, it is interesting to note that the audit firms failed to realize the risk in the missed clients and as such did not charge them a risk premium.

Next, I add HIGH_EM to Model 1. Model 2 is significant ($p < 0.01$) with a pseudo R^2 of 33.43%. HIGH_EM is positive, but not significant at any conventional level. All other variables are consistent with the results reported in Model 1, except for ABN_AUDITFEES ($p = 0.13$) which is no longer significant at the 10% level.

In Model 3, I add HIGH_PROB_LIT to Model 1. The overall model is significant ($p < 0.01$) and the pseudo R^2 is 48.35%. The new variable HIGH_PROB_LIT is negative and significant ($p < 0.05$) indicating that companies that are missed have a lower probability of litigation than those who are dismissed. Additionally, this reduced sample yields two other factors which are significantly associated with companies being missed. Specifically, missed companies are younger ($p < 0.05$) and more likely to have turnover among top management ($p < 0.05$). All other variables are consistent with the results reported in Model 1, except for ABN_AUDITFEES and GC which are no longer significant at the 10% level and IC_DEF which is now significant at the 10% level.

Finally, I add both HIGH_EM and HIGH_PROB_LIT to Model 1. Model 4 is significant ($p < 0.01$) and has a pseudo R^2 of 58.80%, which is higher than any other model.³² Results from this model are consistent with those previously reported with the exception of AC_IND, NONAUDITFEES and PROB_RESTATE, which are now significant at the 10% level.

Overall, the results from this analysis consistently indicate that missed firms are larger, less likely to have an internal control deficiency and have a lower probability of litigation than dismissed firms. It is interesting to note that missed firms exhibit many of the same characteristics of dismissed firms. Specifically, they are not significantly more distressed nor are they significantly more likely to have a loss than firms who are dismissed. Additionally, missed firms have a similar level of leverage and earnings

³² Given the large increase in R^2 from model 1 to 4, I rerun model 1 on the reduced sample in model 4 to determine if the increase in R^2 is related to the inclusion of the probability of litigation variable or due to sample specific considerations. When I rerun model 1 on the reduced sample the R^2 increases from 30% to 44%. This indicates that half the increase in the R^2 from model 1 to model 4 is related to sample specific results and half the increase is related to the inclusion of the probability of litigation variable.

management as dismissed firms. This appears to indicate that audit firms are keeping large clients that they would not keep if it weren't for the company's size. This seems to indicate that certain larger clients are very important to specific partners or offices and they are able to convince the reviewing partners to keep a client that otherwise they would dismiss. While only speculation, it could be these clients provide a significant amount of fees to a particular partner or office or that these clients allow an office or firm to be classified as industry expert. I leave this question for future research. Based on the results discussed above, audit firms could reduce their litigation exposure by examining their existing clients looking for clients that exhibit financial and governance characteristics which are similar to those of the companies they dismiss.

Conclusion

The post-SOX era has ushered in unprecedented change in the audit profession. While the existing literature provides us some insight on how audit firms make client acceptance/continuance decisions, almost all this literature predates SOX. I extend this literature by investigating how audit firms make client continuance decisions in the post-SOX era, whether these decisions are effective at identifying better clients, and why audit firms retain some risky clients while dismissing others.

Specifically, my findings indicate that the client continuance process is much more formal and rigorous post-SOX. Audit partners cited an increase in the required documentation and the level of review as the key drivers of this change. Additionally, it is interesting to note that Big Four audit firms use the same basic set of criteria when

deciding to make a client continuance decision, even though the processes at the firms are slightly different.

Additionally, I find that clients who are retained by their audit firms have better subsequent financial performance than those clients who are not retained. Finally, I find that audit firms appear to overweight client size when making the client continuance decision. Specifically, it appears audit firms retain large clients who have risk profiles consistent with smaller clients they dismiss. Future research should further examine the influence of these larger clients on their respective audit partner, office and/or firm.

A limitation of this study is its use of proxies for factors/characteristics identified during the interview process. The proxies I use in this paper to measure many of the factors/characteristics are not perfect. I have taken care to select the best possible proxies; however, it is possible that the proxies used in this paper may measure the underlying factors/characteristics they represent with error. Additionally, it is important to realize that during my examination of “risky” clients, I only examine one type of “risky” client, restatement companies. While I believe that restatement companies are one of if not the most important type of “risky” clients, it is possible that examination of other types of “risky” clients could lead to different conclusions.

Subject to the limitations discussed above, the results of this study help to further develop our understanding of how audit firms make client continuance decisions in the post-SOX era. Additionally, this study provides evidence that audit firms retain better performing clients. Finally, I provide audit firms with client factors that may allow the audit firms to better identify risky clients. The results of this study should be of interest to the investing public, the SEC, and the auditing firms.

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Appendix

Appendix A: Interview Protocol

Introduction: The period post-SOX has seen a dramatic rise in the number of auditor changes. In my study, I am attempting to understand the auditor continuance decision in the post-SOX environment from the professional's perspective. To accomplish this goal, I have a series of questions to help me better understand how you/your firm evaluate clients.

1. What is the process at your firm for evaluating client continuance? Who performs the initial evaluation and what approvals are needed?
2. Can you walk me through the factors/characteristics you/your firm find important when deciding whether or not to continue servicing a client?
3. Specifically, what are the indicators that you may not want to continue servicing a client? How are these indicators observable in publicly available information?
4. Of the factors/characteristics noted in questions #1 and #2, could you identify which items are most important to the decision to stop servicing a client?

After allowing the interviewee to expound on the questions above, I will ask the interviewee about the role of the client/auditor characteristics below, which were not already identified by the interviewee, as being important to the client continuance decision.

- Client characteristics
 - Financial indicators
 - Liquidity
 - Profitability
 - Distress
 - Stock volatility
 - Internal control
 - Management integrity
 - Audit committee
 - Other corporate governance characteristics
 - Litigation risk
- Auditor characteristics
 - Profitability of engagement
 - Availability of appropriate personnel
 - Do they possess industry expertise and at what level (office or national)?

Appendix A (Continued)

5. Finally, could you rate the importance of the items you identified as being important to the client continuance process? At this time I will provide them a document with a Likert scale and ask them to rank the items we discussed plus any items they identified.
6. How has SOX/Andersen impacted client continuance decisions?
7. When making the client continuance decision what type of risk concerns you/your firm the most?
 - Possible answers
 - restatement
 - bankruptcy
 - stock volatility
 - litigation risk
 - fraud
8. How does the client acceptance process differ from the client continuance process?
9. What is (are) the primary industry(ies) you service. Additionally, have you been the lead or concurring partner on any clients who the firm has resigned from in the past three years? If so approximately how many?
10. In addition to large increase in resignations in the past few years, there has been a large increase in the number of auditor dismissals. Are these quasi-resignations or were these clients whom the firms wanted to keep that decided to pursue other options?

Appendix B: Likert Scale

	Very <u>Important</u>	<u>Important</u>	Moderately <u>Important</u>	Of Little <u>Importance</u>	<u>Unimportant</u>
Client Characteristics					
Financial health of company	1	2	3	4	5
Profitability of company	1	2	3	4	5
Complexity of company	1	2	3	4	5
Rapid growth or downsizing of business	1	2	3	4	5
Stock volatility	1	2	3	4	5
Quality of internal controls	1	2	3	4	5
Management integrity	1	2	3	4	5
Management competence	1	2	3	4	5
Management tone toward financial reporting	1	2	3	4	5
Acct/Finance department competence	1	2	3	4	5
Audit committee competence	1	2	3	4	5
Audit committee financial expertise	1	2	3	4	5
Significant related party transactions	1	2	3	4	5
Prior restatement	1	2	3	4	5
Auditor Characteristics					
Profitability of engagement	1	2	3	4	5
Availability of appropriate personnel	1	2	3	4	5
Industry expertise of office/personnel	1	2	3	4	5

TABLE 1: Likert Scale - Characteristic Rankings

	Rating Scale Frequencies					Mean Ranking
	Very Important 1	Important 2	Moderately Important 3	Of Little Importance 4	Unimportant 5	
Client Characteristics						
Management integrity	10	0	0	0	0	1.00
Management tone toward financial reporting	9	1	0	0	0	1.10
Management competence	7	3	0	0	0	1.30
Quality of internal controls	5	5	0	0	0	1.50
Accounting and Finance Dept competence	5	5	0	0	0	1.50
Financial health of company	5	4	1	0	0	1.60
Audit committee competence	5	4	1	0	0	1.60
Audit committee financial expertise	2	7	1	0	0	1.90
Complexity of company	3	4	3	0	0	2.00
Prior restatement	4	2	3	1	0	2.10
Significant related party transactions	1	5	4	0	0	2.30
Profitability of company	1	5	3	1	0	2.40
Rapid growth or downsizing of business	1	4	5	0	0	2.40
Stock volatility	0	5	3	2	0	2.70
Auditor Characteristics						
Availability of appropriate personnel	7	2	1	0	0	1.40
Industry expertise of office/personnel	5	5	0	0	0	1.50
Profitability of engagement	0	7	3	0	0	2.30

TABLE 2: Descriptive Statistics – Client Retention Sample ^a
Mean (Median) [Std. Dev.]

Variable ^b	Predicted Sign	Resignation Sample	Retained Sample	(Resignation - Retained) ^c
IC_DEF	+	0.170 (0.000) [0.377]	0.070 (0.000) [0.256]	0.100 *** 0.000 ***
NEW	+	0.570 (1.000) [0.496]	0.610 (1.000) [0.489]	-0.040 0.000
NEG_CF	+	0.460 (0.000) [0.500]	0.440 (0.000) [0.498]	-0.020 0.000
DISTRESS	+	0.115 (0.000) [0.276]	0.096 (0.000) [0.239]	0.019 0.000
GC	+	0.220 (0.000) [0.415]	0.065 (0.000) [0.247]	0.155 *** 0.000 ***
LEVERAGE	+	0.851 (0.616) [1.545]	0.633 (0.581) [0.485]	0.218 ** 0.035
LOSS	+	0.630 (1.000) [0.484]	0.625 (1.000) [0.485]	-0.003 0.000
RESTATE	+	0.200 (0.000) [0.401]	0.075 (0.000) [0.264]	0.125 *** 0.000 ***
RELATED_PARTY	+	2.780 (2.000) [3.072]	2.950 (2.000) [3.969]	-0.170 0.000

TABLE 2 (continued)

Variable ^b	Predicted Sign	Resignation Sample	Retained Sample	(Resignation - Retained) ^c
AUDIT_LAG	+	75.825 (74.500) [33.927]	58.625 (60.000) [22.618]	17.200 *** 14.500 ***
AC_IND	-	0.860 (1.000) [0.348]	0.835 (1.000) [0.372]	0.025 0.000
AC_MEET	+	0.110 (0.000) [0.314]	0.100 (0.000) [0.301]	0.010 0.000
FE	-	0.755 (1.000) [0.431]	0.815 (1.000) [0.389]	-0.060 * 0.000 *
ABN_AUDITFEES	-	0.129 (0.000) [0.593]	0.312 (-0.017) [1.717]	-0.241 * -0.113
NONAUDITFEES	-	0.222 (0.063) [0.706]	0.518 (0.119) [1.820]	-0.296 *** -0.056 ***
SIZE	-	666.456 (66.292) [2,731.881]	4,283.070 (142.213) [23,334.410]	-3,616.61 *** -75.921 ***
HIGH_EM	+	0.394 (0.000) [0.490]	0.328 (0.000) [0.471]	0.066 * 0.000 *
HIGH_PROB_LIT	+	0.433 (0.000) [0.497]	0.404 (0.000) [0.492]	0.029 0.000

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on one-tailed tests.

TABLE 2 (continued)

^a The sample consists of 400 observations (200 matched pairs) for each of the variables except HIGH_EM and HIGH_PROB_LIT which have 360 observations (180 matched pairs) and 282 observations (141 matched pairs), respectively.

^b Variable definitions:

- IC_DEF = 1 if the company reports a deficiency in its internal controls, 0 otherwise;
- NEW = 1 if any of the disclosed members of management was new to the company, 0 otherwise;
- NEG_CF = 1 if the company had negative cash flow from operation, 0 otherwise;
- DISTRESS = the probability of bankruptcy calculated using Zmijewski's (1984) financial distress score;
- GC = 1 if the company received a going-concern opinion, 0 otherwise;
- LEVERAGE = the ratio of total liabilities to total assets.
- LOSS = 1 if the company reports negative income, 0 otherwise;
- RESTATE = 1 if the company restated their financial statements in the year prior to the resignation, 0 otherwise;
- RELATED_PARTY = the number of related party transactions reported in the proxy;
- AUDIT_LAG = the number of calendar days from the fiscal year-end to the date of the auditor's report;
- AC_IND = 1 if the audit committee is 100 percent independent, 0 otherwise;
- AC_MEET = 1 if the audit committee met less than four times, 0 otherwise;
- FE = 1 if at least one member of the audit committee is disclosed by the company as a financial expert or has experience as a CFO, Accountant, VP of Finance, CPA, or Controller, 0 otherwise;
- ABN_AUDITFEES = unexpected audit fees in millions of dollars;
- NONAUDITFEES = non-audit fees in millions of dollars;
- SIZE = assets in millions of dollars;
- HIGH_EM = 1 if the decile of the company's absolute value of performance adjusted discretionary accruals from the modified Jones model as compared to all firms on Compustat is greater than 7, 0 otherwise;
- HIGH_PROB_LIT = 1 if the probability of litigation calculated using Stice (1991) litigation score is greater than 0.50, 0 otherwise;

^c Tests for differences in the means are based on t-statistics (z-statistics) for continuous (dichotomous) variables. Nonparametric tests for differences in location are based on the Wilcoxon rank-sum test.

TABLE 3: Correlation Matrix – Client Retention Sample ^a

Variable ^b	IC_DEF	NEW	NEG_CF	DISTRESS	GC	LEVERAGE
NEW	-0.0050					
NEG_CF	-0.0250	0.1610 ***				
DISTRESS	-0.0110	0.0925 *	0.2270 ***			
GC	-0.0185	0.0635	0.2490 ***	0.3594 ***		
LEVERAGE	0.0861 *	0.0796	-0.1460 ***	0.4140 ***	0.1868 ***	
LOSS	-0.0178	0.2514 ***	0.5410 ***	0.3926 ***	0.2549 ***	-0.0040
RESTATE	0.3217 ***	-0.0214	-0.0400	0.0698	0.0864 *	0.0835 *
RELATED_PARTY	-0.0033	0.1821 ***	0.0510	0.2287 ***	0.1806 ***	0.0594
AUDIT_LAG	0.2976 ***	0.0919 ***	0.1520 ***	0.1179 **	0.2607 ***	0.0758
AC_IND	0.0496	0.0140	-0.0920 *	-0.0152	-0.1056 **	0.0202
AC_MEET	-0.0763	-0.0793	0.0510	0.0269	0.0937 *	-0.0026
FE	0.1184 **	0.0215	-0.0400	-0.1372 ***	-0.1871 ***	-0.1065 **
ABN_AUDITFEES	0.3291 ***	0.1114 **	0.0200	-0.0332	0.0074	0.0506
NONAUDITFEES	0.0493	-0.0098	-0.2350 ***	-0.1232 **	-0.2448 ***	-0.0027
SIZE	0.1136 **	-0.0843 *	-0.4450 ***	-0.2859 ***	-0.4193 ***	-0.0924 *
HIGH_EM	-0.0210	0.1612 ***	0.4150 ***	0.1969 ***	0.1791 ***	0.2589 ***
HIGH_PROB_LIT	-0.1108 *	0.1862 ***	0.3300 ***	0.3768 ***	0.2977 ***	0.0963

TABLE 3 (Continued)

Variable ^b	LOSS	RESTATE	RELATED_PARTY	AUDIT_LAG	AC_IND	AC_MEET
LOSS						
RESTATE	0.0073					
RELATED_PARTY	0.0638	0.0486				
AUDIT_LAG	0.1690***	0.2434***	0.0800			
AC_IND	-0.0392	-0.0124	-0.1423***	0.0446		
AC_MEET	0.0109	-0.0657	-0.0080	0.0334	-0.1950***	
FE	-0.0634	-0.0208	-0.0951*	0.0032	0.1843***	-0.0788
ABN_AUDITFEES	0.0030	0.1730***	0.0528	0.2630***	0.0369	-0.0476
NONAUDITFEES	-0.2047***	0.1243**	0.0031	-0.1420***	0.0686	0.2278***
SIZE	-0.4058***	0.1269**	0.0775	-0.1881***	0.1037**	-0.1899***
HIGH_EM	0.2786***	-0.0177	0.0683	0.1212**	-0.0362	0.0543
HIGH_PROB_LIT	0.5484***	-0.0066	0.1826***	0.1456**	-0.0962	-0.0729

TABLE 3 (Continued)

Variable ^b	FE	ABN_AUDITFEES	NONAUDITFEES	SIZE	HIGH_EM
FE					
ABN_AUDITFEES	0.0748				
NONAUDITFEES	0.0251	0.1626 ***			
SIZE	0.0574	0.0000	0.4624 ***		
HIGH_EM	-0.0519	0.0255	-0.1923 ***	-0.3094 ***	
HIGH_PROB_LIT	-0.1807 ***	0.0687	-0.1526 **	-0.4423 ***	0.2995 ***

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a I report Spearman rank correlation coefficients for IC_DEF, NEW, NEG_CF, GC, LOSS, RESTATE, AUDIT_LAG, AC_MEET, FE, HIGH_EM, LOSS and HIGH_PROB_LIT and Pearson correlations otherwise.

^b All variables are defined in Table 2.

TABLE 4: Matched-Pairs Logistic Regression Analysis – Client Retention Sample

$$\text{RESIGN}^a = b_0 + b_1\text{IC_DEF} + b_2\text{NEW} + b_3\text{NEG_CF} + b_4\text{DISTRESS} + b_5\text{GC} + b_6\text{LEVERAGE} + b_7\text{LOSS} + b_8\text{RESTATE} + b_9\text{RELATED_PARTY} + b_{10}\text{AUDIT_LAG} + b_{11}\text{AC_IND} + b_{12}\text{AC_MEET} + b_{13}\text{FE} + b_{14}\text{ABN_AUDITFEES} + b_{15}\text{NONAUDITFEES} + b_{16}\text{SIZE} + b_{17}\text{HIGH_EM} + b_{18}\text{HIGH_PROB_LIT} + e$$

Variable ^b	Predicted				
	Sign	Model 1	Model 2	Model 3	Model 4
IC_DEF	+	1.1088 **	0.8720 *	1.5792 ***	1.6352 **
NEW	+	-0.0438	0.1590	-0.0244	0.2817
NEG_CF	+	0.0185	-0.0044	-0.5457	-0.5714
DISTRESS	+	-0.4800	-0.6042	-0.9862	-0.4495
GC	+	1.8995 ***	2.3707 ***	2.3143 **	2.6087 **
LEVERAGE	+	0.7583 **	0.6982 **	0.7812 *	0.7433 *
LOSS	+	0.3965	0.1824	0.6216	0.7017
RESTATE	+	0.7714 *	0.6514 *	1.1619 **	0.9510 *
RELATED_PARTY	+	-0.0033	0.0432	-0.0183	-0.0054
AUDIT_LAG	+	1.2550 ***	1.3730 ***	1.0904 **	1.2490 ***
AC_IND	-	0.0578	0.1335	0.2147	0.5047
AC_MEET	+	-0.5884	-0.6769	-1.1180	-1.0479
FE	-	-0.1758	-0.0048	-0.4476	-0.1592
ABN_AUDITFEES	-	-0.0884	0.0908	-0.2922	-0.1716
NONAUDITFEES	-	-0.0985 **	-0.0933 **	-0.0019	0.0249
SIZE	-	-0.3250 ***	-0.3098 ***	-0.4913 ***	-0.4723 ***
HIGH_EM	+		0.4839 *		1.1778 **
HIGH_PROB_LIT	+			-0.6018	-0.4589
<i>N</i>		400	360	282	254
χ^2		99.14	94.37	72.97	70.68
p-value		0.0000	0.0000	0.0000	0.0000
Pseudo R ²		35.76%	37.82%	37.33%	40.15%

TABLE 4 (Continued)

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on one-tailed tests.

^a The dependent variable for this analysis is RESIGN, which equals 1 if the audit firm resigned from the engagement and 0 otherwise.

^b All variables are defined in Table 2. For the regression analyses, AUDIT_LAG, ABN_AUDITFEES, NONAUDITFEES and SIZE are transformed using the natural log.

**TABLE 5: Descriptive Statistics – First Year After
Mean (Median) [Std. Dev.]**

Panel A – Full Sample ^a

Variable ^c	Resignation Sample	Retained Sample	(Resignation - Retained) ^d
SIZE_AFTER	599.696 (46.260) [2,578.586]	7,223.424 (484.694) [51,093.020]	-6,623.728 *** -438.434 ***
ROA_AFTER	-0.889 (-0.072) [9.694]	-0.053 (0.031) [1.380]	-0.836 *** -0.103 ***
DISTRESS_AFTER	0.185 (0.000) [0.355]	0.052 (0.000) [0.181]	0.133 *** 0.000 ***
DELIST_AFTER	0.045 (0.000) [0.207]	0.007 (0.000) [0.084]	0.038 *** 0.000 ***
RESTATE_AFTER	0.166 (0.000) [0.373]	0.082 (0.000) [0.275]	0.084 *** 0.000 ***
GC_AFTER	0.221 (0.000) [0.415]	0.040 (0.000) [0.197]	0.180 *** 0.000 ***
LOSS_AFTER	0.625 (1.000) [0.485]	0.315 (0.000) [0.465]	0.310 *** 1.000 ***
IC_DEF_AFTER	0.203 (0.000) [0.403]	0.073 (0.000) [0.261]	0.130 *** 0.000 ***
EM_AFTER	6.229 (7.000) [2.779]	4.973 (5.000) [2.705]	1.256 *** 2.000 ***
PROB_LIT_AFTER	0.381 (0.060) [0.444]	0.180 (0.003) [0.340]	0.202 *** 0.057 ***

TABLE 5 (Continued)

Panel B – Matched Sample ^b

Variable ^c	Resignation Sample	Retained Sample	(Resignation - Retained) ^d
SIZE_AFTER	696.808 (64.436) [2,762.693]	4,461.065 (154.925) [26,255.800]	-3,764.257 ** -90.489 ***
ROA_AFTER	-0.326 (-0.071) [1.281]	-0.181 (-0.005) [0.706]	-0.145 -0.065 ***
DISTRESS_AFTER	0.141 (0.000) [0.307]	0.074 (0.000) [0.204]	0.066 ** 0.000 ***
DELIST_AFTER	0.050 (0.000) [0.218]	0.025 (0.000) [0.157]	0.025 0.000
RESTATE_AFTER	0.170 (0.000) [0.377]	0.080 (0.000) [0.272]	0.090 *** 0.000 ***
GC_AFTER	0.205 (0.000) [0.405]	0.060 (0.000) [0.238]	0.145 *** 0.000 ***
LOSS_AFTER	0.620 (1.000) [0.487]	0.520 (1.000) [0.501]	0.100 ** 0.000 **
IC_DEF_AFTER	0.205 (0.000) [0.405]	0.080 (0.000) [0.272]	0.125 *** 0.000 ***
EM_AFTER	6.077 (7.000) [2.808]	5.514 (6.000) [2.926]	0.563 * 1.000 *
PROB_LIT_AFTER	0.340 (0.021) [0.434]	0.269 (0.014) [0.385]	0.071 0.007

TABLE 5 (Continued)

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^c The sample size for the full sample ranges from a low of 10,247 observations for PROB_LIT_AFTER to a high of 15,895 for SIZE_AFTER.

^c The sample consists of 400 observations (200 matched pairs) for each of the variables except EM_AFTER and PROB_LIT_AFTER which have 366 observations (183 matched pairs) and 266 observations (133 matched pairs), respectively.

^c Variable definitions:

SIZE_AFTER	=	assets in millions of dollars;
ROA_AFTER	=	return on assets;
DISTRESS_AFTER	=	the probability of bankruptcy calculated using Zmijewski's (1984) financial distress score;
DELIST_AFTER	=	1 if company delisted in the year after resignation, 0 otherwise;
RESTATE_AFTER	=	1 if company restated their financial statements in the year after resignation, 0 otherwise;
GC_AFTER	=	1 if company received a GC opinion in the year after the resignation;
LOSS_AFTER	=	1 if the company reports negative income, 0 otherwise;
IC_DEF_AFTER	=	1 if the company reports a deficiency in its internal controls, 0 otherwise;
EM_AFTER	=	the decile of the company's absolute value of performance adjusted discretionary accruals from the modified Jones model as compared to all firms on Compustat;
PROB_LIT_AFTER	=	the probability of litigation calculated using Stice's (1991) litigation score.

^d Tests for differences in the means are based on t-statistics (z-statistics) for continuous (dichotomous) variables. Nonparametric tests for differences in location are based on the Wilcoxon rank-sum test.

TABLE 6: Correlation Matrix - First Year After ^a

Variable ^b	SIZE_AFTER	ROA_AFTER	DISTRESS_AFTER	DELIST_AFTER ^c	RESTATE_AFTER
ROA_AFTER	0.2875 ***				
DISTRESS_AFTER	-0.3569 ***	-0.4237 ***			
DELIST_AFTER	-0.1613 ***	-0.1509 ***	0.1013 **		
RESTATE_AFTER	-0.0638	0.0683	0.0864 *	-0.0348	
GC_AFTER	-0.4281 ***	-0.4319 ***	0.4163 ***	0.1946 ***	0.1198 **
LOSS_AFTER	-0.4301 ***	-0.8531 ***	0.3970 ***	0.1449 ***	0.0229
IC_DEF_AFTER	0.0285	-0.0566	-0.0075	0.0325	0.1919 ***
PROB_LIT_AFTER ^c	-0.3116 ***	-0.3296 ***	0.2805 ***		0.0844
EM_AFTER	-0.3652 ***	-0.2615 ***	0.2909 ***	0.1210 **	-0.0297

TABLE 6 (Continued)

Variable ^b	GC_AFTER	LOSS_AFTER	IC_DEF_AFTER	PROB_LIT_AFTER
LOSS_AFTER	0.3246***			
IC_DEF_AFTER	0.0938*	0.0652		
PROB_LIT_AFTER	0.3097***	0.4188***	0.0457	
EM_AFTER	0.2911***	0.3128***	-0.0160	0.2059***

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a I report Spearman rank correlation coefficients for DELIST_AFTER, RESTATE_AFTER, GC_AFTER, LOSS_AFTER and IC_DEF_AFTER and Pearson correlations otherwise.

^b All variables are defined in Table 5.

^c There is not a correlation coefficient between PROB_LIT_AFTER and DELIST_AFTER because there are no sample items with the data to calculate the PROB_LIT_AFTER who also delist in the following year.

TABLE 7: Matched-Pairs Logistic Regression Analysis – First Year After

$$\text{RETAIN}^a = b_0 + b_1\text{SIZE_AFTER} + b_2\text{ROA_AFTER} + b_3\text{DISTRESS_AFTER} + b_4\text{DELIST_AFTER} + b_5\text{RESTATE_AFTER} + b_6\text{GC_AFTER} + b_7\text{LOSS_AFTER} + b_8\text{IC_DEF_AFTER} + b_9\text{EM_AFTER} + b_{10}\text{PROB_LIT_AFTER} + e$$

Variable ^b	Model 1	Model 2	Model 3 ^c	Model 4 ^c
SIZE_AFTER	0.4034 ***	0.4305 ***	0.4128 ***	0.4226 ***
ROA_AFTER	0.0208	-0.0337	-0.2987	-0.6324
DISTRESS_AFTER	-0.3912	-0.5444	0.8591	0.2740
DELIST_AFTER	0.0126	0.2296		
RESTATE_AFTER	-0.3962	-0.3818	-0.2772	-0.3594
GC_AFTER	-1.1968 **	-1.4498 **	-1.1462	-0.9175
LOSS_AFTER	-0.3825	-0.5204	-0.2801	-0.5939
IC_DEF_AFTER	-1.1756 ***	-0.9754 **	-1.6506 ***	-1.9230 ***
EM_AFTER		-0.0545		-0.0739
PROB_LIT_AFTER			-0.2926	-0.2195
<i>N</i>	400	366	266	244
χ^2	74.79	76.85	48.36	49.99
p-value	0.0000	0.0000	0.0000	0.0000
Pseudo R ²	26.97%	30.29%	26.23%	29.56%

** and *** indicate significance at $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a The dependent variable for this analysis is RETAIN, which equals 1 if the company is retained by the audit firm and 0 otherwise.

^b All variables are defined in Table 5. For the regression analyses, SIZE_AFTER is transformed using the natural log.

^c DELIST_AFTER is dropped from these models because there are no sample items with the data to calculate the PROB_LIT_AFTER who also delist in the following year.

**TABLE 8: Descriptive Statistics - Two Years After
Mean (Median) [Std. Dev.]**

Panel A – Full Sample

Variable ^a	Resignation Sample	Retained Sample	(Resignation - Retained) ^b
SIZE_AVG	529.435 (49.490) [2,219.654]	7,277.123 (486.847) [51,253.540]	-6,747.688 *** -2.643 ***
ROA_AVG	-1.218 (-0.046) [9.331]	-0.085 (0.032) [3.788]	-1.133 *** -0.013 ***
DISTRESS_AVG	0.185 (0.001) [0.338]	0.049 (0.000) [0.161]	0.136 *** 0.001 ***
DELIST_AVG	0.089 (0.000) [0.286]	0.016 (0.000) [0.126]	0.073 *** 0.000 ***
RESTATE_AVG	0.285 (0.000) [0.452]	0.164 (0.000) [0.370]	0.121 *** 0.000 ***
GC_AVG	0.266 (0.000) [0.442]	0.047 (0.000) [0.213]	0.218 *** 0.000 ***
LOSS_AVG	0.643 (1.000) [0.480]	0.361 (0.000) [0.480]	0.282 *** 1.000 ***
IC_DEF_AVG	0.266 (0.000) [0.442]	0.126 (0.000) [0.332]	0.139 *** 0.000 ***
EM_AVG	6.276 (6.500) [2.333]	4.944 (5.000) [2.159]	1.332 *** 1.500 ***
PROB_LIT_AVG	0.339 (0.200) [0.374]	0.172 (0.007) [0.295]	0.167 *** 0.193 ***

TABLE 8 (Continued)

Panel B – Matched Sample

Variable ^a	Resignation Sample	Retained Sample	(Resignation - Retained) ^b
SIZE_AVG	630.051 (69.476) [2,663.994]	4,045.364 (181.564) [14,804.260]	-3,415.313 ** -112.088 ***
ROA_AVG	-0.526 (-0.062) [1.842]	-0.152 (-0.009) [0.490]	-0.375 * -0.053
DISTRESS_AVG	0.137 (0.001) [0.290]	0.057 (0.000) [0.153]	0.080 ** 0.001 ***
DELIST_AVG	0.093 (0.000) [0.292]	0.021 (0.000) [0.143]	0.072 ** 0.000 **
RESTATE_AVG	0.330 (0.000) [0.473]	0.165 (0.000) [0.373]	0.165 *** 0.000 ***
GC_AVG	0.278 (0.000) [0.451]	0.031 (0.000) [0.174]	0.247 *** 0.000 ***
LOSS_AVG	0.711 (1.000) [0.455]	0.619 (1.000) [0.488]	0.093 0.000
IC_DEF_AVG	0.309 (0.000) [0.465]	0.072 (0.000) [0.260]	0.237 *** 0.000 ***
EM_AVG	6.313 (6.500) [2.092]	5.364 (5.500) [2.192]	0.949 *** 1.000 ***
PROB_LIT_AVG	0.364 (0.201) [0.397]	0.261 (0.016) [0.378]	0.103 0.185

TABLE 8 (Continued)

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a The sample size for the full sample ranges from a low of 6,728 observations for PROB_LIT_AVG to a high of 10,521 for SIZE_AVG.

^b The sample consists of 194 observations (97 matched pairs) for each of the variables except EM_AVG and PROB_LIT_AVG which have 176 observations (88 matched pairs) and 124 observations (62 matched pairs), respectively.

^c Variable definitions:

SIZE_AVG	=	the average of assets for the first two years after resignation in millions of dollars;
ROA_AVG	=	the average of the return on assets for the first two years after resignation;
DISTRESS_AVG	=	the average probability of bankruptcy calculated using Zmijewski's (1984) financial distress score assets for the first two years after resignation;
DELIST_AVG	=	1 if company delisted in the either of the first two years after resignation, 0 otherwise;
RESTATE_AVG	=	1 if company restated their financial statements in either of the first two years after resignation, 0 otherwise;
GC_AVG	=	1 if company received a GC opinion in either of the first two years after resignation;
LOSS_AVG	=	1 if the company reports negative income in either of the first two years after resignation, 0 otherwise;
IC_DEF_AVG	=	1 if the company reports a deficiency in its internal controls in either of the first two years after resignation, 0 otherwise;
EM_AVG	=	the average decile of the company's absolute value of performance adjusted discretionary accruals from the modified Jones model as compared to all firms on Compustat for the first two years after resignation;
PROB_LIT_AVG	=	the average probability of litigation calculated using Stice's (1991) litigation score for the first two years after resignation.

^d Tests for differences in the means are based on t-statistics (z-statistics) for continuous (dichotomous) variables. Nonparametric tests for differences in location are based on the Wilcoxon rank-sum test.

TABLE 9: Correlation Matrix – Two Years After ^a

Variable ^b	SIZE_AVG	ROA_AVG	DISTRESS_AVG	DELIST_AVG	RESTATE_AVG
ROA_AVG	0.3758 ***				
DISTRESS_AVG	-0.3705 ***	-0.6064 ***			
DELIST_AVG	-0.1471 **	-0.0585	0.0028		
RESTATE_AVG	-0.0995	-0.1462 **	0.1678 ***	0.0328	
GC_AVG	-0.4469 ***	-0.3741 ***	0.4462 ***	0.1948 ***	0.1349 ***
LOSS_AVG	-0.4407 ***	-0.7652 ***	0.3528 ***	0.1189 **	0.0684
IC_DEF_AVG	0.0264	-0.0678	0.0316	0.0608	0.3175 ***
EM_AVG	-0.5014 ***	-0.3434 ***	0.3288 ***	0.0131	0.0533
PROB_LIT_AVG	-0.4500 ***	-0.4697 ***	0.2698 ***	0.0668	0.0871

TABLE 9 (Continued)

Variable ^b	GC_AVG	LOSS_AVG	IC_DEF_AVG	EM_AVG
LOSS_AVG	0.3416 ***			
IC_DEF_AVG	0.1178 **	0.1134 **		
EM_AVG	0.4240 ***	0.3011 ***	-0.1478 **	
PROB_LIT_AVG	0.3690 ***	0.5252 ***	0.1145	0.3715 ***

** and *** indicate significance at $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a I report Spearman rank correlation coefficients for DELIST_AVG, RESTATE_AVG, GC_AVG, LOSS_AVG and IC_DEF_AVG and Pearson correlations otherwise.

^b All variables are defined in Table 8.

TABLE 10: Matched-Pairs Logistic Regression Analysis – Two Years After

$$\text{RETAIN}^a = b_0 + b_1\text{SIZE_AVG} + b_2\text{ROA_AVG} + b_3\text{DISTRESS_AVG} + b_4\text{DELIST_AVG} + b_5\text{RESTATE_AVG} + b_6\text{GC_AVG} + b_7\text{LOSS_AVG} + b_8\text{IC_DEF_AVG} + b_9\text{EM_AVG} + b_{10}\text{PROB_LIT_AVG} + e$$

Variable ^b	Model 1	Model 2	Model 3	Model 4
SIZE_AVG	0.5774 ***	0.5007 ***	0.6329 ***	0.6153 **
ROA_AVG	0.9997	0.4875	0.7523	-1.3118
DISTRESS_AVG	-2.4722	-3.3188 *	-2.0487	-4.3837
DELIST_AVG	-2.2215	-2.4764 *	-21.6324	-20.0722
RESTATE_AVG	-0.4814	-0.6334	0.3851	-0.0172
GC_AVG	-4.3313 **	-4.8079 **	-16.6422	-15.2059
LOSS_AVG	0.6132	-0.3517	0.8992	-1.0835
IC_DEF_AVG	-2.5657 ***	-2.5066 ***	-3.6902 ***	-3.7959 ***
EM_AVG		-0.2171		-0.2715
PROB_LIT_AVG			-1.1347	-0.2475
<i>N</i>	194	176	124	110
χ^2	74.74	70.39	45.96	44.37
p-value	0.0000	0.0000	0.0000	0.0000
Pseudo R ²	55.58%	57.70%	53.47%	58.19%

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a The dependent variable for this analysis is RETAIN, which equals 1 if the company is retained by the audit firm and 0 otherwise.

^b All variables are defined in Table 8. For the regression analyses, SIZE_AVG is transformed using the natural log.

TABLE 11: Descriptive Statistics – Risky Clients Sample ^a
Mean (Median) [Std. Dev.]

Variable ^b	Dismissed Sample	Missed Sample	(Dismissed - Missed) ^c
IC_DEF	0.202 (0.000) [0.403]	0.106 (0.000) [0.309]	0.096 * 0.000 *
NEW	0.654 (1.000) [0.478]	0.692 (1.000) [0.464]	-0.038 0.000
NEG_CF	0.510 (1.000) [0.502]	0.452 (0.000) [0.500]	0.058 0.000
DISTRESS	0.184 (0.001) [0.347]	0.100 (0.001) [0.236]	0.083 ** -0.000
GC	0.240 (0.000) [0.429]	0.077 (0.000) [0.268]	0.163 *** 0.000 ***
LEVERAGE	9.342 (0.623) [88.251]	0.599 (0.569) [0.428]	8.743 0.055
LOSS	0.673 (1.000) [0.471]	0.653 (1.000) [0.478]	0.020 0.000
RELATED_PARTY	2.913 (2.000) [3.113]	2.971 (2.000) [3.437]	-0.058 0.000
AUDIT_LAG	77.135 (75.000) [35.090]	68.038 (70.000) [25.737]	9.097 ** -5.000 **
AC_IND	0.808 (1.000) [0.396]	0.846 (1.000) [0.363]	-0.038 0.000

TABLE 11 (Continued)

Variable ^b	Dismissed Sample	Missed Sample	(Dismissed - Missed) ^c
AC_MEET	0.115 (0.000) [0.321]	0.087 (0.000) [0.283]	0.029 0.000
FE	0.673 (1.000) [0.471]	0.712 (1.000) [0.455]	-0.038 0.000
ABN_AUDITFEES	0.148 (0.008) [0.827]	0.383 (-0.015) [0.569]	-0.235 0.023
NONAUDITFEES	0.262 (0.076) [0.802]	0.621 (0.121) [1.683]	-0.359 ** 0.045 ***
SIZE	937.153 (68.533) [3,191.237]	8,371.52 (177.887) [59,751.420]	-7,434.370 * 109.354 ***
AGE	13.394 (9.000) [10.325]	13.721 (10.000) [11.412]	-0.327 -1.00
BLOCK	0.405 (0.387) [0.266]	0.397 (0.386) [0.257]	0.008 0.002
GROWTH	0.023 (-0.036) [0.482]	0.774 (-0.023) [6.395]	-0.750 -0.013
PROB_RESTATE	0.599 (0.563) [0.372]	0.653 (0.671) [0.326]	-0.053 -0.109
HIGH_EM	0.410 (0.000) [0.494]	0.347 (0.000) [0.478]	0.063 0.000
HIGH_PROB_LIT	0.510 (1.000) [0.504]	0.397 (0.000) [0.493]	0.117 1.000

TABLE 11 (Continued)

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a The sample consists of 208 observations (104 matched pairs) for each of the variables except HIGH_EM and HIGH_PROB_LIT which have 202 observations (101 matched pairs) and 126 observations (63 matched pairs), respectively.

^b All variables are defined in Table 2 except as described below.

AGE	=	the number of years the company has had positive assets on Compustat;
BLOCK	=	the cumulative percentage of outstanding common stock shares held by 5 percent plus blockholders not affiliated with management (Compact D);
GROWTH	=	the growth rate of total assets;
PROB_RESTATE	=	the estimated probability of restatement at the resignation decision calculated using the model developed by Turner and Sennetti (2001).

^c Tests for differences in the means are based on t-statistics (z-statistics) for continuous (dichotomous) variables. Nonparametric tests for differences in location are based on the Wilcoxon rank-sum test.

TABLE 12: Correlation Matrix – Risky Clients Sample ^a

Variable ^b	IC_DEF	NEW	NEG_CF	DISTRESS	GC	LEVERAGE
NEW	0.0983					
NEG_CF	0.0700	0.0350				
DISTRESS	-0.1019	0.1147 *	0.2070 ***			
GC	-0.0028	0.0221	0.1880 ***	0.4448 ***		
LEVERAGE	0.0304	0.0500	-0.1270 *	0.2042 ***	0.2793 ***	
LOSS	-0.0347	0.0025	0.5220 ***	0.3062 ***	0.1979 ***	-0.0210
RELATED_PARTY	-0.0567	0.0208	-0.0470	0.0807	0.0500	0.0446
AUDIT_LAG	0.1760 **	0.1678 **	0.1610 **	0.1361 **	0.0843	-0.0148
AC_IND	-0.0163	0.0063	-0.1190 *	-0.1219 *	-0.0100	-0.2178 ***
LOW_AC_MEET	-0.0987	-0.0386	0.1570 **	0.2611 ***	0.2476 ***	0.1426 **
FE	0.2265 ***	0.0461	0.0160	-0.1202 *	0.0044	0.0618
ABN_AUDITFEES	0.2506 ***	0.0819	0.1050	0.0221	0.0216	0.0002
NONAUDITFEES	-0.0778	0.0183	-0.2130 ***	-0.1899 ***	-0.2340 ***	-0.0070
SIZE	0.0737	0.0208	-0.5130 ***	-0.4271 ***	-0.4551 ***	-0.2979 ***
AGE	-0.0020	-0.0208	-0.3670 ***	-0.2364 ***	-0.1956 ***	-0.0275
BLOCK	-0.0913	-0.0465	-0.0690	-0.0116	0.0103	0.0447
GROWTH	0.1303 *	-0.0993	-0.2810 ***	-0.0216	-0.2644 ***	-0.0096
PROB_RESTATE	-0.0637	0.0244	0.3530 ***	-0.3071 ***	-0.0789	-0.1288 *
HIGH_EM	-0.0454	-0.0119	0.3550 ***	0.2075 ***	0.2649 ***	-0.0079
HIGH_PROB_LIT	-0.0642	-0.0184	0.4200 ***	0.3277 ***	0.3208 ***	0.0800

TABLE 12 (Continued)

Variable ^b	LOSS	RELATED_PARTY	AUDIT_LAG	AC_IND	AC_MEET
RELATED_PARTY	0.0364				
AUDIT_LAG	0.1092	0.1645 **			
AC_IND	-0.1107	-0.2374 ***	-0.0452		
LOW_AC_MEET	0.2049 ***	0.1196 *	0.0078	-0.1841 ***	
FE	0.0984	-0.0469	0.1418 **	0.1080	-0.2606 ***
ABN_AUDITFEES	0.0061	-0.0463	0.2158 ***	0.0698	-0.0921
NONAUDITFEES	-0.2214 ***	-0.0506	-0.0143	0.1678 **	-0.2539 ***
SIZE	-0.4512 ***	0.0023	-0.0762	0.1562 **	-0.3430 ***
AGE	-0.2463 ***	-0.0962	0.0177	0.1431 **	-0.2316 ***
BLOCK	0.0260	0.0733	0.0963	-0.0409	-0.0416
GROWTH	-0.4496 ***	-0.0025	0.0315	-0.0015	-0.1524 **
PROB_RESTATE	0.4486 ***	-0.0165	0.0047	0.0942	-0.0378
HIGH_EM	0.2943 ***	0.0700	0.0243	-0.0057	0.0703
HIGH_PROB_LIT	0.4175 ***	0.0950	0.1333	0.1802 **	0.0963

TABLE 12 (Continued)

Variable ^b	FE	ABN_AUDITFEES	NONAUDITFEES	SIZE	AGE
ABN_AUDITFEES	0.1206 *				
NONAUDITFEES	0.0120	0.1575 **			
SIZE	0.1286 *	0.0000	0.3946 ***		
AGE	0.1345 *	0.0618	0.2418 ***	0.4167 ***	
BLOCK	0.0432	-0.0053	0.0596	-0.0477	0.1371 **
GROWTH	0.1233 *	0.1405 **	-0.2219 ***	-0.0233	-0.1464 **
PROB_RESTATE	-0.0746	-0.0648	0.0219	-0.1416 **	-0.1758 **
HIGH_EM	0.0017	-0.0773	-0.1545 **	-0.3785 ***	-0.2301 ***
HIGH_PROB_LIT	-0.1691 *	0.0112	-0.2008 **	-0.4746 ***	-0.3224 ***

TABLE 12 (Continued)

Variable ^b	BLOCK	GROWTH	PROB_RESTATE	HIGH_EM
GROWTH	-0.0976			
PROB_RESTATE	-0.0669	-0.1310 *		
HIGH_EM	0.0178	-0.1900 ***	0.2030 ***	
HIGH_PROB_LIT	0.0651	-0.3255 ***	0.3314 ***	0.3134 ***

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a I report Spearman rank correlation coefficients for IC_DEF, NEW, NEG_CF, GC, LOSS, AUDIT_LAG, AC_MEET, FE, HIGH_EM, LOSS and HIGH_PROB_LIT and Pearson correlations otherwise.

^b All variables are defined in Table 2 or Table 11.

TABLE 13: Matched-Pairs Logistic Regression Analysis – Risky Clients Sample

$$\text{MISSED}^a = b_0 + b_1\text{IC_DEF} + b_2\text{NEW} + b_3\text{NEG_CF} + b_4\text{DISTRESS} + b_5\text{GC} + b_6\text{LEVERAGE} + b_7\text{LOSS} + b_8\text{RELATED_PARTY} + b_9\text{AUDIT_LAG} + b_{10}\text{AC_IND} + b_{11}\text{AC_MEET} + b_{12}\text{FE} + b_{13}\text{ABN_AUDITFEES} + b_{14}\text{NONAUDITFEES} + b_{15}\text{SIZE} + b_{16}\text{AGE} + b_{17}\text{BLOCK} + b_{18}\text{GROWTH} + b_{19}\text{PROB_RESTATE} + b_{20}\text{HIGH_EM} + b_{21}\text{HIGH_PROB_LIT} + e$$

Variable ^b	Model 1	Model 2	Model 3	Model 4
IC_DEF	-0.9363	-1.0161	-2.4162 *	-3.1139 *
NEW	0.5463	0.4557	2.3310 **	3.4043 **
NEG_CF	-0.4969	-0.5705	-0.4303	-0.3089
DISTRESS	0.7196	0.7688	5.5860	-7.5472
GC	-1.5286 **	-1.5030 *	-1.1256	-0.8613
LEVERAGE	-0.0201	-0.2501	-1.5492	0.3573
LOSS	-0.2459	-0.9940	5.1709	12.2125
RELATED_PARTY	0.0456	0.0402	0.0582	0.1979
AUDIT_LAG	-0.2435	-0.1152	0.5120	1.1577
AC_IND	0.2357	-0.3803	-1.9816	-3.9112 *
AC_MEET	0.4101	0.7923	-1.5641	-3.4320
FE	0.3967	0.5435	-0.0984	-0.1363
ABN_AUDITFEES	-0.6380 *	-0.5555	-1.1331	-2.2959
NONAUDITFEES	0.0363	0.0544	0.1174	0.2237 *
SIZE	0.3896 ***	0.4820 ***	1.2486 **	2.1818 **
AGE	-0.2965	-0.3716	-1.4842 **	-3.7299 **
BLOCK	-0.1182	-0.0724	1.9116	2.2862
GROWTH	0.0936	0.0496	1.0352	0.8973
PROB_RESTATE	0.1853	0.0893	-2.4425	-9.4683 *
HIGH_EM		0.1259		0.0325
HIGH_PROB_LIT			-3.7791 **	-7.0110 **
N	208	202	126	124
χ^2	43.73	46.80	42.23	50.54
p-value	0.0010	0.0006	0.0026	0.0003
Adjusted R ²	30.33%	33.43%	48.35%	58.80%

TABLE 13 (Continued)

*, ** and *** indicate significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$, respectively, based on two-tailed tests.

^a The dependent variable for this analysis is MISSED, which equals 1 if the company restated their financial statements and the audit firm did not resign in the period prior to the restatement and 0 otherwise.

^b All variables are defined in Table 2 or Table 11. For the regression analysis AGE, AUDIT_LAG, ABN_AUDITFEES, NONAUDITFEES and SIZE are transformed using the natural log.

Vita

Carl W. Hollingsworth was born in Texarkana, TX. He graduated from Texas Tech University in 1997 with a Bachelor of Business Administration in Accounting and a Masters in the Science of Accounting. After graduation, Carl moved to Dallas, TX where he spent three years as an auditor with PricewaterhouseCoopers and three years as a senior accountant for Hicks, Muse, Tate & Furst, a private equity firm. In 2003, he moved to Knoxville, TN to pursue his Ph.D. in Business Administration at the University of Tennessee. Carl will complete his Ph.D. in May of 2007 and join the faculty at Clemson University in August of 2007 as an Assistant Professor of Accounting. Carl is a Certified Public Accountant in Texas.