WHY HIGHER LEVELS OF AUDITOR-PROVIDED TAX SERVICES LOWER THE LIKELIHOOD OF RESTATEMENTS

Kevin A. Diehl, Western Illinois University

ABSTRACT

Kinney et al. (2004) ask in the Journal of Accounting Research: Why do higher levels of auditor-provided tax services lower the chances of restatements? In resolving this question, this paper investigates the relationship between auditor-provided tax services and restatements with proxies to represent the motivations of the audit committee and chief financial officers. Because Sarbanes-Oxley requires audit committee preapproval for these tax services, the necessity for including these variables is obvious. Logistic regression of seven specifications show that higher levels of auditor-provided tax services, financial experts, and long-term compensation are inversely and statistically significantly related to all restatements and (more strongly) to tax-influential restatements. The cash effective tax rate directly and statistically significantly relates to those specifications, showing that just increasing spending on these tax services cannot signal high-quality financial reporting in the absence of effective utilization.

JEL: H20

KEYWORDS: restatements, audit committees, tax

INTRODUCTION

This research seeks to answer the question that Kinney et al. (2004) ask in the *Journal of Accounting Research*. They seek to know why higher levels of auditor-provided tax services lower the chances of restatements. In the course of answering the posed research question, this paper is the first to investigate the relationship between auditor-provided tax services fees and restatements with proxies to represent the motivations of the audit committee of the board of directors and chief financial officers. Because Sarbanes-Oxley requires audit committee preapproval for all auditor-provided tax services that chief financial officers request, the reasons for including these variables are obvious. The question is timely as well.

Determining what conditions lower the chances for restatement can signal to investors which companies have higher-quality financial reporting. High-quality financial reporting is important to investors as companies, on average, lose 9.2 percent of market capitalization for each restatement (Srinivasan, 2005). Once investors consider these signals, perhaps surprisingly, tax services acquisition could become more efficient. Likewise, stronger corporate governance could emerge. While Kinney et al. (2004) mention that larger companies seem to exhibit the relationship between the extent of auditor-provided tax services fees and restatements, they leave the relationship between auditor-provided tax services fees and restatements largely unexplained and untested. In the intervening years, research has considered the relationship between audit fees and non-audit fees before and after the implementation of Sarbanes-Oxley (Omer et al., 2006; Bedard & Paquette, 2010). However, little to no extant research has sought to answer the 2004 *Journal of Accounting Research* implied question. This situation has less to do with the importance and continued currency of the question and potentially more to do with the lack of researchers with the necessary experience in tax and auditing to pursue this inquiry with sufficient vigor.

The sole specific inquiry has emerged from Seetharaman et al. (2010) relatively recently, showing the currency of the question. They consider whether Kinney et al.'s (2004) discovery with regard to auditor-

provided tax services fees relates to restatements in general or solely to restatements correcting errors involving FAS 109, deferred assets, deferred liabilities, tax contingencies, sales taxes, etc. Seetharaman et al. (2010) find that the ratio of auditor-provided tax services to the total fees is not related to restatements in general but only to restatements directly involving the previously mentioned specific tax errors. This research deserves congratulations for seeking to answer the important unresolved question. However, the results are limited in application as they include only the years 2003 through 2005 and consider only direct tax effect restatements. This research seeks to extend Seetharaman et al. (2010) by more-robust means and therein finally completely resolve Kinney et al.'s (2004) enduring question.

This research explores more years, 2004 through 2009, and utilizes the data set more in line with Kinney et al.'s (2004) original discovery than Seetharaman et al. (2010). Kinney et al. (2004) mention that larger companies tend to exhibit the strongest inverse relationship between the extent of auditor-provided tax service fees and restatements, so there is no data set more in line with exploiting this discovery than the 2010 Fortune 500. Besides properly following Kinney et al.'s (2004) original discovery, the Fortune 500 is the typical data set for compensation-based inquiries (Yermack, 2004).

This research also considers whether Seetharaman et al.'s (2010) finding that the ratio of tax fees over total fees remains unrelated to restatements in general for this better fitting group of the Fortune 500 and whether there are any other significant groupings separate from just directly tax related restatements. Seven logistic regressions are utilized involving filings of 10-K/As together for error corrections and restatements; error corrections; restatements; tax-influential restatements; non-tax-influential restatements; tax-influential restatements involving two or more such occurrences during the time period; and directly tax-influential restatements (Seetharaman et al.'s (2010) finding of significance).

The variables considered are the following: the ratio of auditor-provided tax service fees to total auditor-provided fees, the percentage change in the cash effective tax rate (CETR) over those years, the ln of total assets, the leverage (debt over total assets), the number of financial experts on the audit committee, the ratio of equity to the total compensation of board of directors members, and the ratio of equity to the total compensation of the chief financial officer (CFO). Interestingly enough, Seetharaman et al. (2010) find statistical significance in the broader company pool between the ratio of auditor-provided tax service fees to the total auditor compensation and the following: FAS 109, deferred tax changes, state tax changes, etc. types of restatements. With the Fortune 500 as the data set, no studied variable is significant under Seetharaman et al.'s (2010) specification. However, there is statistical significance between the variables studied and other specifications. The other results are that the ratio of total auditor-provided tax services fees over total auditor fees is statistically significant and inversely related to restatements in general and tax-influential restatements (close to statistical significance for error corrections and restatements and two or more tax-influential restatements). Similarly, the CETR and the number of financial experts on audit committees are statistically significant and inversely related to restatements in general and tax-influential restatements. (The CETR is close to being statistically significant for two or more tax-influential restatements.) Under the first four specifications, the ratio of equity to the total compensation of each director is statistically significant and inversely related to restatements. The ln of average total assets during the time period is statistically significant and directly related to tax-influential restatements.

The ratio of equity to the total compensation of each CFO is close to statistical significance with and inversely related to the error corrections and restatements category. Thus, the extent of the relationship is more comprehensive than Seetharaman et al.'s (2010) discuss. The following pages discuss the literature review, hypotheses, data set, methodology, results, and implications. If possible, these parts elevate the importance of this investigation.

LITERATURE REVIEW

The entire research inquiry emerges from the effects of Sarbanes-Oxley. This legislation denies audit firms the opportunity of supplying many non-audit services to their audit clients. In the wake of Enron and related high profile business failures where audits did not report material misstatements or omissions, the US government and regulators sought some reason for the auditors' decisions. They resorted to the potential quid pro quo of more favorable audit opinions being exchanged for increased client acquisition of non-audit services as the necessary loophole to close. The problem is that the auditor's provision of non-audit services can result in greater efficiencies from knowledge spillover. The concept of knowledge spillover originates with Simunic (1984). Sarbanes-Oxley does not deny companies the opportunity to receive tax services from their auditor, but this legislation does make this acquisition more difficult (Omer et al., 2006). Specifically, audit committees must give approval before any auditor-provided tax services fees. Thus, executives, including the proxy here of the CFO, face an extra hurdle to the pursuit of tax services from the auditor than they would in seeking tax services from any firm but their auditor.

Furthermore, all auditor-provided tax services fees must be separately identified in the proxy statement, giving investors and regulators greater opportunity to question the extent of auditor-provided tax services purchased. This hurdle similarly diminishes executives' and directors' pursuit of auditor-provided tax services. Some institutional investors do not want any non-audit services purchased from their auditor as some evidence of greater auditor objectivity and increased financial reporting quality without the possibility of quid pro quo entering the equation (Seetharaman et al., 2010). In the Fortune 500 sample for the current research, 12 companies do not purchase any auditor-provided tax services likely because of institutional investors pushing them to emphasize the perception of auditor objectivity over the presence of efficiencies from auditor-provided tax services.   With this regulatory atmosphere, Omer et al. (2006) report decreases in auditor-provided tax services coincident with increasing audit fees.

From 2004 through 2009 for the Fortune 500 data set, average auditor-provided tax services fees have declined $501,339. The decrease over those years is 28 percent. However, from 2006 through 2008, auditor-provided tax services fees have actually increased. Thus, companies could be learning over time that there are knowledge spillover efficiencies from having the auditor provide tax services that counterbalance any potential impairment of objectivity in fact or in the investors' perception thereof (Simunic, 1984). There is not necessarily consensus on the effect of non-audit services fees in general on financial reporting quality (here represented with the proxy of no error corrections or true restatements). Larcker and Richardson (2004) find an inverse relationship between non-audit services fees in general and the extent of discretionary accruals. Still others find no significant relationship between non-audit services fees and discretionary accruals (Chung & Kallapur, 2003). Krishnan (2005) emphasizes the market's take on non-audit service fees, discovering that stock prices react inversely and statistically significantly to higher disclosed non-audit service fees.

To begin, the reason that CFOs and therein audit committees consider spending fees on auditor- provided tax services is knowledge spillover (Simunic, 1984). The information that auditors gather can be shared with tax professionals within the same accounting firm more readily and efficiently. Furthermore, CFOs consider tax minimization activities important as shareholders consider such activities value enhancing (Minnick & Noga, 2010).With regard to tax-specific non-audit fees, there is limited research.This research does extend Seetharaman et al. (2010) and Kinney et al. (2004). Nevertheless, finding more backing is sparse. Fortin and Pittman (2008) do show the quality of reporting as signaled to the debt market. They discover that companies investing more in auditor-provided tax services over audit fees generate lower yield spreads for new bond issues. The strength of corporate governance does influence the extent to which auditor-provided tax services are purchased. The proxy for the strength of corporate governance here is the number of financial experts. Sarbanes-Oxley requires at least one financial expert to be on the board of every publicly traded company. The presence of more financial experts on the audit

committee enhances each board's capability to pursue the shareholders' interests and therein to increase stock value (Defond et al., 2005). If the audit committee feels the auditor's objectivity would not be impaired through the company's simultaneous acquisition of tax services, then the extent of tax services receiving preapproval is likely to be higher. The quality of this audit committee judgment on objectivity improves as more financial experts are on the audit committee (Defond et al., 2005). Thus, the presence of more financial experts than necessary could signal the market of higher-quality financial reporting.

With an opposing result, Bedard and Paquette (2010) remark that audit committee financial experts are less likely to purchase auditor-provided tax services. Despite these varying opinions, this variable is included in the logistic regressions for each specification. Further discussion of this variable follows in the methodology area. Audit committee director compensation that is tied to long-term results in greater emphasis on tax minimization activities (Minnick & Noga, 2010). Thus, these researchers' discussion leads to the creation of the ratio of equity compensation (long-term emphasizing) over total director compensation as relevant to the level of auditor-provided tax services purchases that the audit committee supports. CFO compensation that is tied to the long term leads to increased tax minimization activities.

CFOs indirectly rely on the approval of shareholders to maintain their employment status through the shareholders' election of directors, who directly review CFOs' activities. Shareholders consider tax minimization activities to be value enhancing (Minnick & Noga, 2009). Thus, CFOs would be motivated to pursue tax minimization activities, especially where their compensation is more geared toward equity (long term) as they must then maintain their job over time to realize the full benefits of their compensation. Under their definition then, the ratio of equity compensation (long-term emphasizing) over total compensation should illustrate whether CFOs have sufficient motivation to pursue tax minimization objectives. To understand why the extent of auditor-provided tax services influences the likelihood of error correction or restatements requires examination of the signaling effects contained within the acquisition of these tax services. The background on signaling begins with finance research. Miller and Modigliani (1961) first bring this concept to consideration. Where there is incomplete information, they consider current dividends to signal future cash patterns (Miller & Modigliani, 1961).

Spence (1973) becomes the first to bring this concept to wider application.This researcher remarks that high-quality producers are motivated to incur higher costs to signal uninformed members of the market of their higher quality (Spence, 1973). Ball (2009) indicates that this signaling concept is directly applicable to accounting research as higher-quality financial reporting companies are motivated to incur higher signaling costs to indicate their higher-quality status to otherwise uninformed investors. For the specific situation, the extent of auditor-provided tax services signals reporting quality (here, the lack of error corrections or restatements). Members of audit committees could lose their directorships or have to pay damages if restatements occur. Thus, their primary emphasis would be on ensuring the quality of the financial statements. Inviting auditors to provide tax services as well could impair their objectivity on the audit. Thus, audit committees would be unlikely to approve any auditor-provided tax services unless they had confidence in the financial statements and the internal controls. Likewise, as the level of auditor-provided tax services increases, the chances of impairing the objectivity similarly increase. Therein, the extent to which they approve auditor-provided tax services signals the level of their confidence in the company's reporting quality.

DATA AND THE METHODOLOGY

Hypotheses

H1: Some relationship could exist between the auditor provision of tax services and the likelihood of error corrections and restatements.Seetharaman et al. (2010) seem to find no connection between just providing higher levels of audit services and the likelihood of error corrections and restatements. Thus, this

specification should not result in any statistically significant relationship. If it were to be shown, then knowledge spillover benefits would prevail over any concerns over impairment of auditor objectivity.

H2: Some relationship could exist between the auditor provision of tax services and the likelihood of true restatements involving the body of the financial statements. Seetharaman et al. (2010) do not investigate this potential relationship. If this hypothesis is established, then knowledge spillover benefits would prevail over any impairment issues.

H3: Greater auditor provision of tax services lowers the likelihood of error corrections. This uninvestigated hypothesis provides the background to check for the validity of any statistically significant relationship finding in H1. If H1 is statistically significant, it could be the result of significance from the true restatements involving the body of the financial statements investigated in H2. Thus, this hypothesis acts as the control on H1.

H4: Some relationship could exist between the auditor provision of tax services and the likelihood of true restatements that primarily or secondarily result in some tax effects. Seetharaman et al. (2010) do not specifically investigate this category. They only review primary tax effects. If this relationship is shown, then Seetharaman et al. (2010) restrict their category (where statistical significance is found) too much.

H5: Some relationship could exist between the auditor provision of tax services and the likelihood of true restatements that have no tax effect at all. By means of comparison, this hypothesis enables the identification of how significant any findings of significance in H4 are. Thus, its validity does relate to other specifications.

H6: Some relationship could exist between the auditor provision of tax services and the likelihood of companies having at least two tax-influential reasons for restatements during the years 2004 through 2009. This hypothesis investigates whether companies that continue to have tax-influential restatement errors have lower levels of auditor-provided tax services. Governance variables could prove important in this specification in particular.

H7: Finally, some relationship could exist between the auditor provision of tax services and the likelihood of true restatements having primary tax effects. Seetharaman et al. (2010) utilize this specification to find statistical significance. Thus, the same finding could be expected here. The involvement of the auditor's own tax professionals would provide knowledge spillover. The tax professionals would have greater access to the financial details of the company by means of the audit professionals' information sharing. Thus, the tax professionals should have the capability to help provide backing to limit the possibilities of restatements in at least the tax areas of the financial statements.

The data set is the Fortune 500 as of 2010. This set is chosen as Kinney et al. (2004) discover the statistical significance between auditor-provided tax services fees and restatements to be strongest in the set of larger companies. Thus, investigating this relationship is best pursued through studying the 500 largest revenue-producing companies in the US market. Also, other typical indicator variables for audit-related inquiries involve the presence or absence of the leading market share audit firms and the number of years of continued service from those audit firms (Seetharaman et al., 2010; Bedard & Paquette, 2010). Only 4 companies of the Fortune 500 have auditors other than the four leading audit firms. Only 39 have changed their auditors at any point during 2004 through 2009. As the result of logistic regression and matching pairs developed not involving differences in these variables, the methodology does not have to control for them. The Fortune 500 is typical as the data set for any compensation research, especially such as here where some hand collection of data is necessary and therein the entire set of US equities would be extremely costly to explore (Yermack, 2004). Compustat provides the cash paid for taxes, pretax income, and special items to determine the cash effective tax rate and therein the percentage changes in the CETR

under the formula from Dyreng et al. (2008) and Minnick and Noga (2010). It also gathers the total assets to ascertain the variable ln of total assets as Seetharaman et al. (2010) utilize. Compustat reports short-term and long-term debt and the previously mentioned total assets to develop the leverage variable of which Seetharaman et al. (2010) make use.

Audit Analytics usually becomes the premier vehicle for ascertaining various figures. However, for greater confidence in the numbers therein disclosed, hand collection of data has become necessary for the financial experts and the more specific disclosures of equity over total compensation of directors and chief financial officers. These numbers emerge from consulting each company's proxy statements contained within the EDGAR database. Likewise, error corrections and restatements are discovered through consulting all Fortune 500 companies' filings for the time period of 2004 through 2009 for 10-K/As. The 10-K/As involve only annual report error correction and restatements. Seetharaman et al. (2010) investigate quarterly restatements as well. However, even though quarterly restatements are important, significantly more importance resides within the relationship between the ratio of auditor-provided tax service fee over total auditor compensation and the annual reports.

This annual report error corrections and restatements are particularly important here for investigating the effects of the number of financial experts and equity compensation on the executive and board members in deciding the extent of tax fees to requisition from the auditor. From the Fortune 500, public companies without data for certain parts of the time period and private companies without publicly disclosed data are excised. This process leaves 445 Fortune 500 companies and 2,670 company years for identifying the error corrections and restatements. From this data then, 112 10-K/As have been filed during the time period for error corrections or actual restatements of the financial statements. Even though error corrections can sometimes be considered part and parcel of restatements, this research specifically separates error corrections of management discussion and analysis and financial statement notes from actual restatements within the body of the financial statements. The reason for this distinction involves the motivations studied. The variables of equity compensation over total compensation for directors and CFOs are more tied to striving to get the body of the financial statements correct.

The body is from where most securities damages result. Of the 112 10-K/As, 63 involve true restatements of the body of the financial statements. Of the 63 true restatements then, 45 have some tax effect. Of the 45 with some tax effect, 14 involve the type of tax related restatements that Seetharaman et al. (2010) separately investigated. Of the 45 with some tax effect, 20 have at least two different filings for correcting those errors. In each logistic regression, each error correcting or restating Fortune 500 company is matched with some other non-error correcting or restating Fortune 500 company that has at least the same first two numbers of the Standard Industrial Code (SIC). After this first matching test, the next search involves finding the closest combination of total assets and total revenues figures to match. Subsequent error corrections or restatements involving the same error are not counted as regressions. In separate unreported results, their inclusion is determined not to change the results.
To test H1, the following logistic regression is utilized:

$$ERRORCORRRESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon. \tag{1}$$

To test H2, the following logistic regression is utilized:

$$RESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon. \tag{2}$$

To test H3, the following logistic regression is utilized:

$$ERRORCORR = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon. \tag{3}$$

To test H4, the following logistic regression is utilized:

$$PRIMSECTAXRESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIR\ EQ/TO + \beta_7 \times CFO\ EQ/TO + \varepsilon. \tag{4}$$

To test H5, the following logistic regression is utilized:

$$NONTAXRESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon. \tag{5}$$

To test H6, the following logistic regression is utilized:

$$TWORESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon. \tag{6}$$

To test H7, the following logistic regression is utilized:

$$PRIMTAXRESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon. \tag{7}$$

The error correction or restatement variable specification constitutes the only difference in comparing equations (1) through (7). Thus, each error correction or restatement variable specification is discussed below with each equation's common variables explained thereafter. *ERRORCORRRESTATE* is an indicator variable with the value of one where the company files any 10-K/As to correct errors or make true restatements to the body of the financial statements in (1). *RESTATE* is an indicator variable with the value of one where the company files any 10-K/As to make true restatements in the body of the financial statements (2). *ERRORCORR* is an indicator variable with the value of one where the company files any 10-K/As to correct errors (3). *PRIMSECTAXRESTATE* is an indicator variable with the value of one where the company files any 10-K/As to make true restatements to the body of the financial statements that result directly or indirectly in changes to the income tax components of the financial statements (4).

NONTAXRESTATE is an indicator variable with the value of one where, within the category of true restatements to the body of the financial statements, tax-influential restatements are excluded to leave these components (5). They represent classification errors and other changes with no tax effects. *TWORESTATE* is an indicator variable with the value of one where, within the category of tax-influential restatements, there are more than two occurrences of tax issues for filing 10-K/As (6). *PRIMTAXRESTATE* is an indicator variable with the value of one where companies file any 10-K/As to make true restatements to the body of the financial statements for FAS 109, deferred tax, state tax, etc. changes (the specification with significance in Seetharaman et al. (2010)) (7). The primary variable here is the *TAXTO* as it represents the ratio of auditor-provided tax services fees to the total fees to the auditor's firm. Seetharaman et al. (2010) utilize the same specification of the variable of interest. If tax fees were not scaled (as Kinney et al. (2004) do), then some alternative specification would be necessary. As the *TAXTO* variable stands here, utilization of percentages of totals is sufficient to remove scaling or alternative specification requirements to adjust for larger companies.

Besides the fact that the selection of the Fortune 500 as the data set already controlling for it, there is still more reason for why the specifications do not have to control for complexity. Audit fees and other non-audit service fees would likely be similarly proportionally higher in the presence of increased complexity. Thus, as tax fees that increase from the influence of complexity is the numerator over the denominator of audit, audit related, tax, and other fees that experience increases from complexity as well, no specification of this control is necessary within the equations. The expectation would be that the *TAXTO* variable would be inversely related to the likelihood of error correction or restatement because of the knowledge spillover benefits from utilizing the auditor to provide more tax services.

The percentage change in the cash effective tax rate (*%CETR*) is included to help indicate effective spending of higher auditor-provided tax services fees that increase the *TAXTO* variable. Otherwise, companies could spend more on auditor-provided tax services without any actual benefits for the purpose of improperly signaling that they have high-quality financial reporting. As Dyreng et al. (2008) show, cash effective tax rates are best consulted over time periods rather than as an annual specification. The reason is that there can be incredible variation from year to year to the extent that effective tax minimization strategies only become discernible on consulting the CETR over longer time periods. The expectation would be for this variable to be inversely related to the likelihood of error correction or restatement as the true signal of higher auditor-provided tax services representing higher quality could not be as effective. Even though the matching process already controls for the effects of larger companies versus smaller companies, the inclusion of the total assets variable can represent this feature and provide means for comparing whether the expansiveness of the companies influences the results. The ln is taken of the total assets because this variable otherwise tends to be right skewed. This variable (*LNTA*) could be directly related with the likelihood of restatements based on Kinney et al. (2004) finding that larger companies exhibited stronger relationships between auditor-provided tax services and restatements. However, with the data set and ln already seeking to control for this influence, there potentially could be no directional component or significance to this variable.

The leverage variable (*LEV*) is included as there has been extensive research showing the extent of debt has significant influences on tax choices. The executive for more leveraged companies could tend toward reporting that supports continued satisfaction of debt covenants than toward any other pursuit. However, in this specific situation regarding restatements, there has been less evidence of significance. Thus, there could be no directional component or significance to this variable. As the audit committee must give approval before any auditor-provided tax services fees are incurred, the model's inclusion of some representation of the effectiveness of this body on the determination of the extent of these fees is important. An impressive candidate is the number of financial experts (*FINEXP*).

As there are more financial experts on the audit committee, the level of expertise is more likely to include an understanding of the spillover benefits from seeking tax services from the audit provider. Also, with more financial experts, the audit committee is more likely to have sufficient capability to determine the extent to which the financial statements are free of material misstatements or omissions and the internal controls are effective. This situation would give the audit committee more confidence in supporting higher levels of auditor-provided tax services because, without concerns with regard to the quality of the reporting system, the audit committee would then have less necessity to question whether the objectivity of the auditor were impaired with higher levels of tax services. This variable should be inversely related to the likelihood of error correction or restatement. The ln is not taken of the number of financial experts because, through unreported testing here, the financial experts do not evidence sufficient right skewing to adjust for that potentiality. The compensation literature already has shown that companies are more properly led and monitored if the executives' and directors' compensation places them closer to the position of the investors they are supposed to represent. Thus, the percentages of the directors' and CFOs' compensation as equity represent tests to this concept. The *DIREQTO* variable determines whether higher levels of long-term compensation as the percentage of total compensation motivate audit committee

directors to secure higher levels of auditor-provided tax services because of the efficiencies produced therein providing greater benefits to the company and them over the long run than any potential costs of the perception of impairing the auditor's objectivity. The *CFOEQTO* variable pursues the same inquiry. However, it does so for CFOs as the proxy for executives. This variable seeks to determine whether higher levels of long-term compensation as the percentage of total compensation motivate them to disregard the barriers created from the preapproval and separately stating of auditor-provided tax services fees requirements enough to purchase more auditor- provided tax service fees. Therein, they would seek to lower the likelihood of restatements through the long-run knowledge spillover benefits from utilizing the auditor more for tax services as more beneficial than any potential cost from the perception of impairing the objectivity of the auditor. Each of these variables should be inversely related to the likelihood of error correction or restatement.

RESULTS

The following part first discusses the trend in auditor-provided audit fees, audit-related fees, tax fees, other fees, and the average ratio of auditor-provided tax services fees over total auditor compensation. Then, descriptive statistics are presented to compare and contrast the means of the restating and non-restating companies for each of the seven specifications. Next, the results of the logistic regressions of the seven specifications are shown. As Table 1 indicates, audit fees and audit related fees are generally increasing from 2004 through 2009 whereas auditor-provided tax services fees and other fees are decreasing. This combination of factors makes for the average ratio of auditor-provided tax services fees over total auditor fees declining over the time period studied. However, the decline in the average actually is helpful as it improves the power of the signal for high-quality financial reporting companies that have higher ratios of auditor- provided tax services fees over total auditor compensation. This potentiality remains for investigation in subsequent paragraphs.

Table 1: Descriptive Statistics on Means of Auditor-Provided Audit Fees, Audit Related Fees, Tax Fees, Other Fees, Total Fees, and Ratio of Tax Fees over Total Fees (in millions of dollars)

Variables	Average	2009	2008	2007	2006	2005	2004
Audit	8.0956	8.8189	8.9141	8.5346	8.3688	7.9769	7.5431
Related	1.0609	1.2361	1.2686	1.2110	1.1201	1.0515	1.1373
Tax	1.1651	1.2687	1.2948	1.2902	1.2617	1.3535	1.7701
Other	0.0937	0.2080	0.1603	0.1463	0.1753	0.2919	0.4245
Total	10.3793	11.5318	11.6377	11.1824	10.9259	10.6739	10.8750
Ratio	0.0926	0.1100	0.1113	0.1154	0.1155	0.1268	0.1628

As Table 2 shows, there are significant differences in the descriptive statistics (means) for the restating companies and the non-restating companies. The largest contrast emerges from *%CETR*. Under all the specifications except for *ERRORCORR*, *%CETR* is positive for the restating companies and just the opposite for the non-restating companies. This situation could imply that the restating companies are so concerned with financial reporting issues that they have less time and resources to expend on their tax minimization activities (auditor-provided tax services).

This characterization of the situation receives further support from then considering *TAXTO*. The ratio of auditor-provided tax services fees over total auditor compensation is substantially lower for the restating companies compared to the non-restating companies under every specification save for *ERRORCORR*. This finding supports high-quality financial reporting being signaled through higher spending on auditor-provided tax services (as compared to the total auditor compensation). The significance of this signal remains to be explained through the subsequent logistic regressions. *DIREQTO* also seems to be explanatory of the differences between restating and non-restating companies. With reference to the means of the entire data set, the defining characteristic does not reside within the non-restating companies having higher means but instead resides within the restating companies having much lower means than

the data set. The exception to this trend is in specification seven where the smallest number of observations in any could have some bearing. Nevertheless, the significance of this explanatory power could lead to all compensation committees of boards of directors considering the extent of the equity compensation over total compensation to directors, especially audit committee members.

Table 2: Descriptive Statistics Involving the Means of All the Specifications as to Restatements v. Non-Restatements

Specification	TAXTO	%CETR	LNTA	LEV	FINEXP	DIREQTO	CFOEQTO
Fortune 500	0.0926	0.0131	9.5390	0.6539	2.5266	0.6116	0.3150
1							
Restate	0.0846	0.1184	9.6763	0.6539	2.2342	0.5740	0.3063
Non-restate	0.1041	-0.2996	9.6687	0.6909	2.4475	0.6129	0.3016
2							
Restate	0.0796	0.2318	9.7760	0.6819	2.3016	0.5721	0.2974
Non-restate	0.1060	-0.3395	9.7253	0.7071	2.8254	0.6346	0.2995
3							
Restate	0.0899	-0.0278	9.5297	0.6171	2.1633	0.5748	0.3167
Non-restate	0.0889	-0.3111	9.5075	0.6448	2.0612	0.6082	0.3069
4							
Restate	0.0807	0.3573	9.8437	0.6964	2.5111	0.5904	0.3242
Non-restate	0.1023	-0.5946	9.3720	0.6678	2.8222	0.6116	0.3073
5							
Restate	0.0847	-0.0772	10.0941	0.6913	1.8333	0.5821	0.2466
Non-restate	0.1074	0.2934	10.1215	0.7595	2.7778	0.6367	0.2639
6							
Restate	0.0769	0.3694	9.3443	0.6776	2.4500	0.6031	0.3046
Non-restate	0.0930	-1.2164	9.4112	0.6567	2.2500	0.6477	0.3233
7							
Restate	0.0748	0.3799	9.3522	0.6888	2.8462	0.6429	0.3224
Non-restate	0.0968	-1.9274	9.3425	0.6895	2.6923	0.6273	0.2965

ERRORCORRRESTATE involves companies filing any 10-K/As to correct errors or make true restatements to the body of the financial statements in (1). RESTATE considers companies filing any 10-K/As to make true restatements in the body of the financial statements (2). ERRORCORR involves companies filing any 10-K/As to correct errors (3). PRIMSECTAXRESTATE considers companies filing any 10-K/As to make true restatements to the body of the financial statements that result directly or indirectly in changes to the income tax components of the financial statements (4). NONTAXRESTATE involves excluding tax-influential restatements within the category of true restatements to the body of the financial statements (5). TWORESTATE considers situations within the category of tax-influential restatements where there are more than two occurrences of tax issues for filing 10-K/As (6). PRIMTAXRESTATE involves companies filing any 10-K/As to make true restatements to the body of the financial statements for FAS 109, deferred tax, state tax, etc. changes (7). TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.

Tying long-term results, which most shareholders seek, with the directors' compensation through more equity and less cash compensation could motivate directors to improve their level of governance over the reporting process. More specifically, this changed compensation ratio could empower them to seek more auditor-provided tax services, especially considering the long-term efficiencies from knowledge spillover as evidenced in the previously mentioned significant reductions in CETRs seemingly through higher spending on auditor-provided tax services. *FINEXP* also indicates restating and non-restating companies to some level. Contrary to the finding from Bedard and Paquette (2010), this fact could evidence that more financial experts could result in better governance of the financial reporting process and therein reductions in the likelihood of restatements. Audit committees have certain limits on the number of times all the members can meet to review the financial reporting process. Some are on other committees, are on other boards, have jobs that sometimes conflict, or generally not capable of communicating so often as necessary. The presence of more financial experts could then enable delegation of tasks to the extent necessary without jeopardizing the quality of the governance. Also, even in the absence of any delegation, less time is necessary to explain what is under consideration to the extent more members already have that necessary financial expert status. That situation would leave more time actually to consider the pressing reporting issues. There is also the signaling explanation for why higher numbers of financial experts relate to higher-quality reporting companies. With audit committee members potentially at higher risk of director liability for any financial reporting issues that emerge than any other directors, candidates

for audit committees would seek opportunities to govern high-quality financial reporting companies and decline to be considered for low-quality reporting companies.

Specifically with regard to tax services, more financial experts on the audit committee could empower higher levels of auditor-provided tax services to be sought. With more financial experts present on the audit committee, the confidence in the capability to govern the reporting process increases. Also, as previously mentioned here, less time would be wasted on educating non-financial experts of the background to any particular decision. Thus, more time would be present to pursue the encouragement and governance of tax minimization activities. This level of financial expertise on the committee would also increase the likelihood of understanding the importance of knowledge spillover efficiencies from auditor-provided tax services. All these factors could lead to the greater acquisition of auditor-provided tax services. Surprisingly, no powerful signal emerges from the *CFOEQTO* variable.

To some extent here, the market for Fortune 500 CFOs could be so competitive that companies are forced to match compensation structures without regard to their influence on the motivations of CFOs. This situation would leave compensation structures similar between high-quality reporting and low-quality reporting companies. *LNTA* and *LEV* seem the least explanatory of restating and non-restating companies because these variables' means under each specification differ only slightly for each category. This result for *LNTA* is somewhat expected as the selection of the Fortune 500 data set controls for large companies. However, some could consider higher leverage companies to have different reporting trends to make it easier to satisfy their debt contracts. This fact in of itself would seem to imply differences in restating and non-restating companies with regard to this variable. For each of the logistic regressions, the predicted signs for each variable are indicated in the tables.

The results of the descriptive statistics help inform these predictions save for the *CFOEQTO*. This variable could easily receive the "?" designation that *LNTA* and *LEV* receive as it fits into their category of not being that explanatory. Nevertheless, the extent of long-term compensation (equity) and the tying that it produces between the interests of the each CFO and each company's shareholders still would seem to be related to the quality of financial reporting. The direct relationship between *%CETR* and restatements is predicted for the following reasons.

As the *%CETR* increases, lower-quality tax minimization is occurring. Thus, more time is probably being spent on taking care of financial reporting matters as the area of primary importance. This increased emphasis on reporting to the exclusion of tax minimization then could indicate lower-quality financial reporting. The inverse relationships between *TAXTO*, *FINEXP*, and *DIREQTO* and restatements all follow from what has been discussed already under the descriptive statistics. In Table 3, all the predicted signs are as expected except for the *CFOEQTO* variable. Only the *DIREQTO* variable is statistically significant with its inverse relationship with the possibility of error corrections or restatements. In fact, *DIREQTO* is powerful at the .05 significance level. Even though *TAXTO* is not statistically significant, it is essentially the next most explanatory variable. *TAXTO* inversely relates to the likelihood of error corrections or restatements. However, nothing too powerful otherwise can be extracted from this first specification. Thus, deconstructing this specification into the true restatement component could lead to stronger relationships.

In Table 4, all the predicted signs follow through save for the *CFOEQTO* variable once more. In this specification of the explanatory power of the variables to the likelihood of true restatements, four variables are shown to be statistically significant. This result is extraordinarily important as Seetharaman et al. (2010) consider there to be no significance between auditor-provided tax services and any general restatement category. This result also helps explain for what Kinney et al. (2004) have been searching.

Table 3: H1: Determinants of Error Corrections or Restatements

variables		Estimated Coefficients (x^2)
intercept		1.433
		(1.176)
taxto	−	-2.255
		(1.886)
%cetr	+	0.114
		(1.162)
lnta	?	0.080
		(0.528)
lev	?	-0.905
		(1.667)
finexp	−	-0.133
		(1.907)
direqto	−	-2.269**
		(5.030)
cfoeqto	−	1.160
		(0.462)
observations		224
likelihood ratio x^2		256.867
pseudo R^2		0.089

$ERRORCORRRESTATE = α + β_1 × TAXTO + β_2 × \%CETR + β_3 × LNTA + β_4 × LEV + β_5 × FINEXP + β_6 × DIREQTO + β_7 × CFOEQTO + ε$. ***, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. ERRORCORRRESTATE is an indicator variable with the value of one where the company files any 10-K/As to correct errors or make true restatements to the body of the financial statements. TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.

Table 4: H2: Determinants of True Restatements to the Body of the Financial Statements

variables		estimated coefficients (x^2)
intercept		0.680
		(0.172)
taxto	−	-5.058**
		(4.641)
%cetr	+	0.546**
		(3.609)
lnta	?	0.158
		(1.318)
lev	?	-0.304
		(0.096)
finexp	−	-0.229*
		(3.223)
direqto	−	-2.360*
		(2.794)
cfoeqto	−	1.437
		(0.454)
observations		126
likelihood ratio x^2		145.82
pseudo R^2		0.160

$RESTATE = α + β_1 × TAXTO + β_2 × \%CETR + β_3 × LNTA + β_4 × LEV + β_5 × FINEXP + β_6 × DIREQTO + β_7 × CFOEQTO + ε$. ***, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. RESTATE is an indicator variable with the value of one where the company files any 10-K/As to make true restatements in the body of the financial statements. TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.

At the .05 significance level reside the variables of *TAXTO* and *%CETR*. As the level of auditor-provided tax services over the total auditor compensation increases, the likelihood of true restatements decreases. Thus, *TAXTO* can signal high-quality financial reporting. Instead of detracting from the signaling quality of *TAXTO*, the significance of *%CETR* actually enhances it. With the significance of *TAXTO* considered in isolation, companies could increase their spending on auditor-provided tax services relative to the total auditor compensation and improperly signal reporting quality where none exists. The combination of the two variables illustrates that the CFO request for auditor-provided tax services from the audit committee

and the audit committee's subsequent preapproval of those fees have efficient results. The reason is that knowledge spillover occurs with the auditors themselves being willing to share information with their tax professionals to enable them in turn better to provide their tax services to the client than any outside provider could without access to that information.

FINEXP and *DIREQTO* are explanatory at the .10 significance level. The fact that *TAXTO* and *%CETR* exhibit stronger statistical significance is important. Even though *FINEXP* and *DIREQTO* can easily be explained within the context of the influence of *TAXTO* and *%CETR* (previously discussed), they could also be determined to be distinct from these influences. In Table 5, the research returns mostly more of the same results as from specification one. The signs continue to be as predicted except for now including *TAXTO* with *CFOEQTO* as variants from expectations. *DIREQTO* is the only variable with statistical significance and is at the .10 level. Now, the lack of explanatory power of the variables with regard to the error corrections or restatements in specification one seems understandable. The explanatory power of the variables with regard to error corrections, which are defined as having nothing to do with the body of the financial statements but as still requiring 10-K/As to be filed, is close to the lowest of any specification save for possibly the last one.

Table 5: H3: Determinants of Error Corrections

Variables		Estimated Coefficients (x^2)
Intercept		2.468
		(0.933)
TAXTO	−	1.907
		(0.393)
%CETR	+	0.065
		(0.303)
LNTA	?	0.009
		(0.002)
LEV	?	-0.864
		(0.672)
FINEXP	−	-0.085
		(0.231)
DIREQTO	−	-3.271*
		(3.392)
CFOEQTO	−	0.439
		(0.016)
Observations		98
Likelihood ratio x^2		106.111
Pseudo R^2		0.096

ERRORCORR = α + β₁ × TAXTO + β₂ × %CETR + β₃ × LNTA + β₄ × LEV + β₅ × FINEXP + β₆ × DIREQTO + β₇ × CFOEQTO + ε.
***, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. ERRORCORR is an indicator variable with the value of one where the company files any 10-K/As to correct errors. TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.

In Table 6, an equally important discovery is found as in Table 4. Just as the essential variables *TAXTO* and *%CETR* are significantly explanatory of the likelihood of true restatements to the body of the financial statements, they are even more significantly explanatory of the likelihood of true restatements with primary or secondary effects on taxes. Primary are defined (discussed previously) in the same way Seetharaman et al. (2010) do. However, they intentionally removed secondary tax from consideration. Thus, this finding also differs from what Seetharaman et al. (2010) show and demonstrates the sources of the significance that Kinney et al. (2004) left as part of their unresolved question.

Here, *TAXTO* and *%CETR* are explanatory at the .01 significance level and have the same reinforcing relationship discussed previously under Table 4. *FINEXP* is significant at the .05 level whereas *DIREQTO* is significant at the .10 level. *LNTA* is finally significant here at the .10 level. This combination of larger companies with more restatements follows what Kinney et al. (2004) find.

Table 6: H4: Determinants of Primarily or Secondarily Tax-Influential True Restatements to the Body of the Financial Statements

Variables		Estimated Coefficients (x^2)
intercept		-1.600
		(0.494)
taxto	–	-9.537***
		(6.196)
%cetr	+	1.790***
		(7.552)
lnta	?	0.386*
		(3.179)
lev	?	0.142
		(0.016)
finexp	–	-0.402**
		(5.327)
direqto	–	-2.704*
		(2.650)
cfoeqto	–	3.764
		(1.613)
observations		90
likelihood ratio x^2		95.013
pseudo R^2		0.314

$PRIMSECTAXRESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon$. ****, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. PRIMSECTAXRESTATE is an indicator variable with the value of one where the company files any 10-K/As to make true restatements to the body of the financial statements that result directly or indirectly in changes to the income tax components of the financial statements. TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.*

In Table 7, the findings of Table 4 under specification two are diminished slightly. In specification two, the relationship between *TAXTO* and true restatements in general is shown.

Table 7: H5: Determinants of Non-Tax-Influential True Restatements to the Body of the Financial Statements

Variables		Estimated Coefficients (x^2)
intercept		2.703
		(0.513)
taxto	–	0.045
		(0.000)
%cetr	+	-0.650
		(0.989)
lnta	?	0.310
		(1.370)
lev	?	-3.937
		(1.381)
finexp	–	-0.279
		(1.118)
direqto	–	-2.640
		(0.389)
cfoeqto	–	-2.148
		(0.292)
observations		36.00
likelihood ratio x^2		37.645
pseudo R^2		0.210

$NONTAXRESTATE = \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon$. ****, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. NONTAXRESTATE is an indicator variable with the value of one where, within the category of true restatements to the body of the financial statements, tax-influential restatements are excluded to leave these components. TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.*

However, this investigation of the relationship with non-tax-influential restatements shows no significance for *TAXTO* or any other variable in fact. For once, *CFOEQTO* follows the predicted sign. *TAXTO* does not follow the predicted sign but is so ineffective in explanatory power that it does not even matter.

In Table 8, specification six investigates how the variables' relationships with the likelihood of restatements change in the context of second occurrences of different tax issues within the 10-K/As for any company. Only *FINEXP* varies from the expected sign. There is no statistically significant variable, but *TAXTO* and *%CETR* are extremely powerful explanatory variables. Thus, the documented combined effect of those two is present to some extent in this specification. *DIREQTO* is the other variable with explanatory power here as has become the usual case in this series of investigations.

Table 8: H6: Determinants of Two or More Occurrences of Primarily or Secondarily Tax-influential True Restatements to the Body of the Financial Statements

Variables		Estimated Coefficients (x^2)
intercept		1.792
		(0.204)
taxto	−	-9.624
		(2.089)
%cetr	+	1.913
		(2.169)
lnta	?	0.041
		(0.009)
lev	?	0.806
		(0.237)
finexp	−	0.102
		(0.089)
direqto	−	-3.759
		(1.676)
cfoeqto	−	-0.930
		(0.047)
observations		40
likelihood ratio x^2		41.461
pseudo R^2		0.310

TWORESTATE $= \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon$.
***, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. TWORESTATE is an indicator variable with the value of one where, within the category of tax-influential restatements, there are more than two occurrences of tax issues for filing 10-K/As. TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.

In Table 9, the lead finding of Seetharaman et al. (2010) is tested. However, this specification produces no variables with statistical significance. Two factors should be considered. This specification has the smallest number of observations, and this research does involve the different data set. Nevertheless, the relationship between *TAXTO* and the likelihood of primary tax effect restatements is not statistically significant. However, just as in specification six documented in Table 8, *TAXTO* and *%CETR* are powerfully explanatory of the indicator variable.

Implications

Based on specifications two and four in particular, the implications are that companies cannot just spend more on auditor-provided tax fees to signal the market place of quality where there is none. Indeed, the quality reporting companies do spend more on auditor-provided tax fees as the percentage of total auditor fees. However, this spending is effective to signal quality only where the increased percentage of tax fees has tangible results in actually reducing the CETR and only where there are sufficient financial experts on the audit committees (who must pre approve tax fees from the auditors). Essentially, audit committee members have to be efficient in their utilization of higher percentages of tax services from their auditor and not just approve higher payments for the typical auditor-provided tax services as some process toward paying more for the same services to elicit better audit opinions. Directors are substantially more likely to

be penalized with the loss of their post and subsequent damages for not sufficiently guiding their companies toward presenting financial statements free of material misstatements than they are for not adequately guiding their companies toward lowering their CETRs.

Table 9: H7: Determinants of Primarily Tax-Influential True Restatements to the Body of the Financial Statements

Variables		Estimated Coefficients (x^2)
intercept		-14.933
		(1.489)
taxto	−	-6.370
		(0.715)
%cetr	+	0.956
		(0.714)
lnta	?	0.923
		(0.714)
lev	?	4.680
		(1.829)
finexp	−	0.080
		(0.046)
direqto	−	-1.284
		(0.070)
cfoeqto	−	12.263
		(1.512)
observations		26
likelihood ratio x^2		27.313
pseudo R^2		0.339

PRIMTAXRESTATE $= \alpha + \beta_1 \times TAXTO + \beta_2 \times \%CETR + \beta_3 \times LNTA + \beta_4 \times LEV + \beta_5 \times FINEXP + \beta_6 \times DIREQTO + \beta_7 \times CFOEQTO + \varepsilon$. ***, **, and * indicate significance at the .01, .05, and .10 levels. Statistics are computed based on robust standard errors clustered at the company level. PRIMTAXRESTATE is an indicator variable with the value of one where companies file any 10-K/As to make true restatements to the body of the financial statements for FAS 109, deferred tax, state tax, etc. changes (the specification with significance in Seetharaman et al. [2010]). TAXTO represents the auditor-provided tax services fees over total auditor fees (audit, audit related, tax, and other) for the years 2004 through 2009. %CETR stands for the percentage change in the cash effective tax rate from 2004 through 2009. LNTA represents the ln of total assets. LEV stands for the average of the combination of short-term and long-term debt over total assets for the years. FINEXP represents the number of financial experts on the audit committee. DIREQTO stands for the ratio of equity compensation over total compensation for members of the audit committee of the board of directors. CFOEQTO represents the ratio of equity compensation over total compensation for the chief financial officer.

Thus, where audit committees give their approval for higher tax fees as percentages of the total fees paid to their auditors, they are signaling their confidence in the financial statements and therein the low possibility of restatements. They would not spend an extra moment considering whether to approve any tax fees if not for expressing belief in the financial statements and internal controls as they stand with the penalties they would otherwise experience. Even with belief in the quality of the financial statements to move on to consider tax minimization, audit committee members would only do so with confidence in their comprehension of the process. Financial experts have the qualifications or experience to understand the audit process and the financial statements. As there are more financial experts on the audit committee, the audit committee's confidence in the quality of the financial statements that are of high quality is sufficient for them to move on to consider tax minimization.

Furthermore, as the percent of their compensation moves toward the long term (equity rather than cash), these audit committee members would even less likely chance the possibility of restatements from not spending an extra moment on the review of the financial statements rather than considering tax minimization opportunities from their auditors. In general, compensation for directors should be geared more toward equity than cash as the chances of restatement decrease with that situation in play. Just as Kinney et al. (2004) discover the relationship between auditor-provided tax services fees and restatements as their secondary finding left for someone else to develop, this paper's discovery of the importance of moving toward the greater proportion of equity as director compensation in the context of these error corrections and restatements is left for others to pursue.

CONCLUSION

This paper finally resolves the implicit question left from Kinney et al.'s (2004) *Journal of Accounting Research* with regard to why higher levels of auditor-provided tax services lower the chances of restatements. In resolving this question, this paper becomes the first to investigate the relationship between auditor-provided tax services and restatements with proxies to represent the motivations of the audit committee and chief financial officers. After logistic regression of seven specifications, higher levels of auditor-provided tax services, financial experts, and long-term director compensation are shown to be inversely and statistically significantly related to all restatements and (more strongly) to tax-influential restatements. The cash effective tax rate directly and statistically significantly relates to those specifications, showing that just increasing spending on these tax services cannot signal high-quality financial reporting in the absence of effective utilization.

There are limitations to the results as hundreds of thousands of company years are not utilized in the logistic regressions. However, as Wilson (2010) shows, the data set of only 30 matched pairs is sufficient not only to show evidence of specific relationships in logistic regression but also more impressively to establish models for future research. Furthermore, the extraordinary number of specifications should provide sufficient robustness to find confidence in these results. The unreported results that are mentioned throughout the discussion of this research should further bolster these findings. As disclosure requirements become more comprehensive, future research can examine what types of auditor-provided tax services fees in particular relate to restatements. For instance, whether higher tax compliance fees or higher tax planning fees relate to the incidence of restatement could then be tested. Also, future research can look at these effects in the International Financial Reporting Standard (IFRS) context. The UK market would be the likely target.

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BIOGRAPHY

Kevin A. Diehl, JD, CPA, is an assistant professor of accounting at Western Illinois University. He can be reached at KA-Diehl@wiu.edu.