PRACTITIONER SUMMARY

Evaluating the Effect of Abnormal Audit Fees on Future Restatements

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SUMMARY: This article summarizes our recently published article, “Abnormal Audit Fees and Restatements” (Blankley et al. 2012), which discusses the relationship between abnormal audit fees and future restatements. We find that there is a negative relationship between the two; specifically, unusually low audit fees are associated with an increased likelihood of a future restatement (i.e., one or two years in the future). This relationship has important implications for auditors in terms of audit planning, pricing, and client retention. After summarizing the published study, we discuss how examining abnormal audit fees may be useful for audit professionals and audit committees.

Keywords: audit fees; audit quality; restatements.

INTRODUCTION

In this paper, we summarize our recent research that examines the association between abnormal audit fees and the likelihood of future restatements (Blankley et al. 2012). Examining whether and how current audit fees are associated with future client restatements is an interesting question with important implications for auditors and audit committees with respect to audit planning, pricing, and client retention. We first summarize the motivation for the study, then discuss the empirical methods used, explain the results, and conclude with a discussion of how our results might prove useful for practitioners.

MOTIVATION

Restatements are important events for both auditors and clients. Despite the attention given to restatements in the academic literature, there has been relatively little research into the...
relationship between current audit fees and the likelihood that the company announces a restatement within the next two years. The question we address is whether audit fees in periods prior to a restatement have any relationship to the restatement. If so, what is the nature of the relationship? Previous academic research has been inconclusive.

Some studies have found that current fees are higher for firms that restate their financial statements in the future than they are for firms that do not restate their financial statements (Kinney et al. 2004; Li and Lin 2007). If true, that result is consistent with economic bonding between auditors and clients. Under this view, the economic bonding between auditors and clients creates an environment in which auditors fail to exercise sufficient professional skepticism to interpret audit evidence correctly or judge the evidence impartially (Bazerman et al. 1997). As a result, auditors would fail to detect a misstatement not because of a lack of effort, but rather because of compromised independence or judgment, in spite of sufficient effort. Studies that support this view, however, used pre-Sarbanes-Oxley (SOX) data and did not control for internal control quality. Consequently, a possible alternative explanation for these results is that firms with future restatements had weaker controls that, in turn, caused auditors to increase substantive testing and increase fees. The higher fees may indicate that, for these clients, auditors are doing more audit work than required for the average firm, but still not enough work to detect the issues that resulted in restatements.

Importantly, there are reasons to suspect that audit fees are lower in periods preceding restatements. Under this view, in some instances auditors underestimate the level of risk and reduce hours accordingly, with unfortunate future consequences (i.e., restatements). Auditors also may face cost-cutting pressure from clients, resulting in lower average hourly rates, if hours are not reduced. When clients pay lower audit fees, auditors are under greater pressure to complete audits efficiently to ensure that engagements are profitable. Profitability concerns may cause auditors to over-rely on client controls and incorrectly reduce substantive testing.

Such fee pressure may emanate from audit committees renegotiating the financial terms of the audits, or in response to pressure from management because of unfavorable economic conditions. Coupled with auditors’ own cost constraints and regulatory pressure to meet filing deadlines, auditors potentially face an environment in which there is significant pressure to complete audits quickly while realizing lower fees than would be necessary to achieve a reasonable return on engagements. The end result would be fewer hours, reflecting reduced effort, with over-reliance on controls. In fact, in a 2005 letter to the Securities and Exchange Commission (SEC), Lynn Turner, former SEC chief accountant, cites the link between pressure to reduce fees and a reduction in audit effort as a contributing factor in the decline in quality audits (Turner 2005):

[T]hroughout the 1980s and 1990s, corporations, sometimes with the assistance of their audit committees, “twisted” the arms of independent auditors to reduce their audit fees . . . In turn, the audit firms reduced the level of work they needed to perform in their role as gatekeepers for investors. Inevitably inferior audits resulted.

Because these audit studies generally use data from the pre-SOX time frame and fail to control for internal control quality, we believe that there is reason to suspect that these earlier results may not hold in the current audit environment. Given evidence that the Big 4 auditors have become more conservative with audit pricing during the early years of the post-SOX period (Huang

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1 Because we limit our consideration to restatements associated with managerial choices, we exclude restatements associated with GAAP changes or errors.
et al. 2009), and given the pressures that auditors face to reduce fees and meet statutory filing deadlines, we believe that it is more likely that, when fees are unusually low, there is a greater likelihood of a future restatement. In other words, the restatement reflects, at least in part, lower audit effort, as measured through fees, in the years preceding the restatement. We formally state our research hypothesis as follows:

**H1:** Abnormal audit fees in the current year are negatively associated with future restatements of the current year’s financial statements.

### RESEARCH METHOD

To test our hypothesis, we conducted a two-stage statistical analysis. In the first stage, we use a robust regression model to determine the “unusual” or “abnormal” portion of audit fees. We determined “abnormal” fees by regressing audit fees on a number of publicly available variables representing issues that would require increased audit effort, including complexity (e.g., client size, mergers, foreign operations), audit risk (e.g., liquidity, activity, profitability measures), capital structure, and the quality of the client’s internal control system. Because no statistical model perfectly explains audit fees, there is a residual amount of “unexplained” audit fees for each observation. Large, positive residuals would indicate that audit fees were unusually high for that particular audit, relative to the portion of fees explained by the statistical model. Conversely, large, negative residuals would indicate that audit fees were unusually low for that particular audit. After we determined the abnormal portion of audit fees, we included that measure as a variable in the second-stage analysis. This research design allows us to consider the association of both unusually high and low audit fees with future restatements.

The second-stage analysis involves evaluating a logistic regression model relating the abnormal fee to the future restatement. In this model, the dependent variable is a binary variable that indicates whether the client had a restatement within the next two years. The abnormal audit fee is then included as the explanatory variable of interest. We also include an internal control quality measure in this second stage to control for the effect that the client’s internal control system may have on the likelihood of a future restatement. Finally, we include other independent variables that prior research has shown to have some association with restatements in order to control for these influences, such as size, leverage, free cash flows, and the trend in earnings-per-share. We refer interested readers to pages 83 and 84 in Blankley et al. (2012) for exact specification of the models and definitions of the variables.

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2 Alternatively, low fees may be a proxy for the client’s ability to pressure the auditor. Given the association between pressure and audit ineffectiveness, even if the auditor exerts sufficient effort, client pressure may still undermine audit quality.

3 Because we include an internal control variable in the model, the abnormal fee represents the unusual portion of the fee after controlling for the quality of the client’s internal control system. We measure the client’s internal control quality using a “dummy” variable; we coded firms that reported a material weakness in internal control in either the current year or the subsequent year with a 1 and all other firms with a 0. Although it is a binary measure, it effectively partitions the sample into those firms that did not report a material weakness (i.e., the higher control quality group) and those firms that did (i.e., the lower control quality group).

4 We include the internal control variable in the second stage to control for the effect that the quality of internal controls has on future restatements, independent of the effect that control quality might have on fees, which was captured in the first model.
RESULTS

We first calculated descriptive statistics and tested for differences in the variables across firms that restated in the future and those that do not restate. Table 1 summarizes those statistics and tests the internal control quality variable (whether the firm reported a material weakness) and our abnormal audit fee variable.

Results in Table 1 indicate that internal control quality differs between firms that do not restate their financials and those that restate in the future. Specifically, we found that 35 percent of restating firms also reported a material weakness in the restatement year or in the prior year. Conversely, only 9 percent of non-restating firms reported a material weakness in the restatement year or in the prior year. More importantly, we also observe that abnormal audit fees are significantly lower for firms that restate in the future relative to those firms that do not.

We next include the abnormal fee variable in the logistic regression model. This model has the advantage of incorporating the effects of all of the control variables into the statistical test, and represents a more rigorous means to examine the question. The results showed that, after controlling for the effect of the firm’s internal control quality, complexity, and other performance measures, the coefficient on the abnormal fees variable was negative and statistically significant. This result provides empirical evidence that, in the post-SOX period, clients with unusually low audit fees were more likely to have a restatement within the next two years than were firms whose abnormal audit fees were closer to, or greater than, zero. If audit fees reflect audit effort, then our results are consistent with reduced audit effort yielding an increased likelihood of a future restatement, as opposed to the economic bonding explanation. To ensure that our results are reliable, we also conducted the statistical tests using alternative definitions of internal control quality as well as types of restatements.5 In all cases, our conclusions remained unchanged.

Finally, we constructed 10 groups of firms based on abnormal audit fees to investigate the likelihood of future restatements within abnormal audit fee deciles to examine whether this association differs over the distribution of positive and negative abnormal fees. We found that firms having the highest likelihood of future restatements have noticeably more negative abnormal audit fees than firms with lower occurrences of future restatements. At the low end of the distribution, the

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5 For example, we ran the model using only restatements that generated a negative market reaction when announced and also omitting restatements related to leases.

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TABLE 1
Comparison of Material Weakness and Abnormal Audit Fee between Firms Never Restating and Firms Restating in the Future

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Never Restate</th>
<th>Restate Future</th>
<th>Difference</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Weakness</td>
<td>11.3%</td>
<td>9.0%</td>
<td>34.7%</td>
<td>-26.7%</td>
<td>-18.3</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>

Panel B: Average

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Never Restate</th>
<th>Restate Future</th>
<th>Difference</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal Audit Fee</td>
<td>0.00</td>
<td>0.01</td>
<td>-0.08</td>
<td>0.10</td>
<td>4.53</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>
mean firm in the bottom 10 percent of firms has abnormal fees of $-0.82$ and a corresponding likelihood of a future restatement of approximately 13 percent. At the other end, the mean firm in the top 10 percent of firms has abnormal fees of 0.83 and a corresponding likelihood of a future restatement of less than 7 percent. Because the abnormal fee is the residual of a regression model with a logged dependent variable, the easiest way to interpret what the value means is to scale the average residual by the average logged audit fee, which in our sample was 14.29. For the lowest decile, the mean abnormal fee was $-0.82$. Dividing this number by 14.29 yields $-5.7$ percent, which suggests that the average firm in the lowest decile had audit fees that were 5.7 percent lower than the average audit fee, after controlling for the other influences on the audit fee captured in the regression model.

**PRACTICAL APPLICATIONS**

We posit that there are certain practical applications that can be drawn from our results. First, auditors can use their own data to develop proprietary audit fee models from which the residuals will capture the abnormal portion of audit fees. While the data analysis requires some knowledge of statistics and careful attention to the quality of the data, many firms already have this expertise in-house. For firms that do not, it is easily available through consultation. While our audit fee model explains approximately 80 percent of the audit fees charged, it is limited by the fact that we use publicly available information to develop the model. Audit firms have access to privately available data that could even further improve the precision and predictive ability of the model. We suggest that firms consider including the following measures in the audit fee model:

1. **Budgeted Hours.** This measure would be, perhaps, the best measure of the estimated work required to complete an audit.

2. **Control Risk.** The estimate of each particular client’s control risk in each year captures the firm-specific risk related to internal controls much more effectively than the measure of reported material weaknesses that we used. For example, control risk could be based on the number of identified deficiencies or significant deficiencies, not just any material weaknesses.

3. **Engagement Risk.** The auditor’s assessment of engagement risk is another proprietary estimate that should have a direct bearing on fees and should be included in a fee model. While we used proxies for several risk factors, the auditor’s unique assessment of engagement risk should provide greater explanatory power than our proxies.

4. **Previous Misstatements Detected.** The magnitude of misstatements as a percentage of materiality may effectively capture the auditor’s perception of managerial reporting aggressiveness.

5. **Quality Indicators.** If there have been indicators of quality issues on the engagement identified through the firm’s system of quality control, such as significant findings identified by the internal quality review program, peer review, and engagement quality reviews, these should be captured in the model.

Applying the regression model to the audit firm’s client data will yield the abnormal audit fee for each client in each year. These data will give auditors some indication of which clients are being undercharged (abnormally low audit fees, after controlling for hours, risk, and other influences on fees) and which clients are being overcharged (abnormally high fees).

Second, with this information, auditors could consider targeting certain engagements for internal practice quality reviews based on abnormally low fees. While abnormal audit fees are only one factor that affects engagements, it is still important to understand the source of the lower fees.
Do the fees indicate lower effort and, if so, why? Or, are they the result of difficult negotiations with the audit committee? Do they reflect incorrect risk assessments? Have they provided the firm with a reasonable rate of return on the audit? There may be an appropriate reason for the result, but auditors will need to consider the amount of effort exerted within the context of the necessary effort for the engagement. If the necessary effort is high and the effort exerted was low, then the risk of a low-quality audit and a future restatement increases. Conversely, if necessary effort is low and expended effort is high, there may be inefficiencies associated with the engagement that can be addressed.

Third, the information also is useful for assessing the risk of a future restatement. For engagements with abnormally low audit fees, it may be useful to consider additional questions bearing on the likelihood of a subsequent restatement. Did the client have problems with internal controls? Auditors would consider any non-trivial control issues, regardless of materiality, a concern. Were there more than inconsequential, but less than material, problems detected in prior-period audits that may heighten concerns about future restatements? Did the audit take an unusually long time to complete? Were there any issues raised during the audit or existing at the company that increased the likelihood of errors, omissions, or fraud? For example, a new system implementation that crosses accounting periods could increase the risk of a material misstatement, which might not be uncovered until a subsequent period. Finally, does the client represent a partner’s primary client engagement? Abnormally low fees can act as a marker to indicate the need for a quality control review of the engagement, during which auditors may consider whether it is necessary to reassess risk, the level of effort required, and appropriate pricing going forward.

Fourth, abnormal fee information would allow auditors to address pricing issues. It could reveal which engagements are underpriced (or overpriced) relative to the risk present and effort required. Auditors may see the need to either raise fees or resign from engagements in order to reduce the level of risk to the firm or increase the client’s profitability. At the very least, auditors should be able to approach negotiations with the client’s audit committee armed with empirical evidence concerning the relative pricing status for that client, as well as knowledge of what the fees should be to make that client profitable, given its risk profile.

Finally, audit committee members should carefully consider the implications of pressuring the auditor to accept lower fees or engaging a new auditor based on potential cost savings. Using publicly available data, audit committees could generate expectations concerning what would be reasonable audit fees. Alternatively, the audit committee could add industry experts or retired auditors who are capable of assessing the reasonableness of audit fees. While this action may seem most useful in order to avoid overpaying, it may also prevent the committee from unintentionally underweighting risk when evaluating fees. The audit committee may ask, for example, for a comparative analysis of actual and planned audit hours in relation to identified risk areas, or they may ask the auditor to identify any areas of the audit in which audit hours (effort) are being reduced and the rationale for the reduction.

**CONCLUSION**

We summarize evidence that clients who restated their financial statements tended to have relatively lower audit fees in the one or two years prior to the restatement than clients who did not restate their financial statements. This result suggests that auditors may have under-assessed audit risk, resulting in insufficient effort to detect the material misstatement. Alternatively, an overreliance on internal controls may result in unusually low fees and a heightened risk that a material misstatement will not be detected.
Practitioners may find this information useful in their efforts to evaluate client engagements. By using an audit fee model to assess the abnormal portion of engagement fees, auditors should be able not only to identify those engagements that pose a higher risk of restatement in the future, but also to use the information for practical benefit to the firm. An abnormal fee analysis could provide auditors with information that allows them to evaluate current audit fees in light of the effort required and the risk presented by the engagement, allowing auditors to better assess client fee structures as well as the relative value of engagements to the firm. It could also allow audit committees to better assess the appropriateness of the level of fees.

REFERENCES