

Causes and Consequences of Audit Shopping: An Analysis of Auditor Opinions, Earnings Management, and Auditor Changes

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Companies change auditors for a variety of reasons. At one end of the continuum, companies change auditors to improve operating performance. At the other, managers change auditors to enhance their own position. If auditor changes are driven by managerial opportunism, companies may increase their level of earnings management after the change. In this paper we reexamine prior research in earnings management that surround auditor changes (DeFond and Subramanyam, 1998) and extend prior work by examining earnings management and auditor changes while controlling for prior audit opinion. We find that, on average, earnings management does not increase following auditor changes. We do find, however, that the level of earnings management is larger for companies that switch from Big Six to non-Big Six auditors following the receipt of a modified audit opinion from their original auditor.

Introduction

The choice of auditor firm is an important decision in the life of a corporation, and the decision to change auditors should not be made lightly. Extant research has identified several reasons for a company to change its auditor. Williams (1988) argues that companies change auditors when the contracting environment of the corporation changes, when a company desires a more effective auditor or different services, when a company wants to upgrade a tarnished image, or when a company

wants to reduce audit fees. When an auditor change occurs for one of these reasons, the change generally would be expected to benefit shareholders.

Other reasons for changing auditors fall under the heading of audit shopping. Audit shopping can be subdivided into two categories. In the first category, audit shopping could be an agency cost. Here, the company's management may be searching for a lower quality audit. A lower quality audit likely reduces the quality of information that reaches financial markets. Management may hope to use the resulting increase in asymmetric information for its own benefit. For example, management might want to report inflated earnings to increase its earnings-based compensation or to insulate the company from takeovers. Management of earnings for this reason would not occur (or would occur to a smaller extent) with a higher quality audit.

A second category of audit shopping may be more benign. Here, management's desire to change auditors is not to distort earnings; instead the auditor change occurs when companies and their auditors legitimately disagree, and the disagreement stems from overly conservative accounting methods preferred by the auditor. Management, in these cases, merely desires less conservative reporting requirements that it believes better reflects the company's true economic performance and chooses an accounting firm that is less conservative. This can be considered audit shopping as well, but does not have the same implications as a company choosing an auditor to distort earnings.

In this paper, we reexamine the earnings management auditor question that has been studied elsewhere (e.g., DeFond and Subramanyam, 1998), so the issues we examine are similar to those in prior research. We examine these auditor change motivations using a sample of 1,132 auditor changes from 1993 to 1997. As in DeFond and Subramanyam (1998), we measure the extent of earnings management preceding and following the auditor changes. We extend their work by relating auditor changes to variations in the sizes of the new and prior audit firm after controlling for the type of prior audit opinion. We propose that when firms do not receive an unqualified audit opinion and then switch from a Big Six to a smaller auditor, they may be engaging in audit opinion shopping. By changing auditors and perhaps receiving a lower quality audit, we argue that these firms are more likely to engage in earnings management.

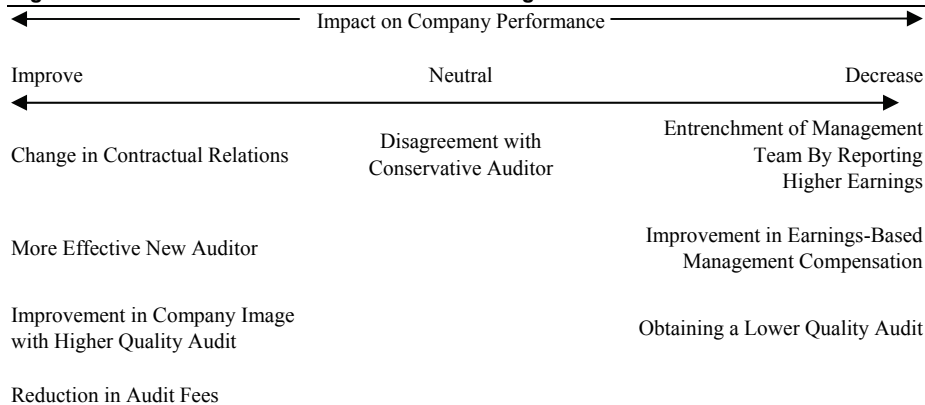
Our findings largely support the notion that auditor changes on average are not driven primarily by shareholder-manager agency conflicts and contribute to the extant literature on auditor changes in a number of ways. First, the findings support those of DeFond and Subramanyam (1998), as we find no evidence of pervasive income increasing earnings management in the year following auditor changes for most of our sample firms. Second, we find that the likelihood of choosing a non-Big Six auditor (lower quality auditor) increases following the receipt of a modified audit opinion. Third, we identify cases in which managers may change auditors to engage

in opportunistic behavior. Specifically, we show that firms changing to a lower quality auditor (i.e., from a Big Six to a non-Big Six firm) following a modified prior audit opinion, exhibit larger levels of discretionary current accruals. Thus, our paper has extended prior work by showing some conditions under which auditor changes may be opportunistic.

Auditor Changes Motives For Auditor Changes

Companies change auditors for a wide variety of reasons. We categorize these reasons on a continuum based on the underlying motivation behind the change. Figure 1 depicts this continuum. At one end of the continuum are auditor changes motivated by management's desire to improve company operations. At the other end of the continuum are auditor changes designed to entrench an incumbent management team. Here, management chooses a lower quality auditor to benefit from more relaxed reporting requirements. This action entrenches management by making the company's financial performance appear to be better. The decision to fire an executive is most closely related to prior firm performance (Weisbach, 1988). By boosting reported earnings managers may reduce the chances of being fired, thereby entrenching themselves.

Figure 1—Motivation Continuum For Auditor Changes



Williams (1988) and Beattie and Fearnley (1995) argue that there are a number of reasons for changing auditors. They observe that many of these reasons are not detrimental to stockholders. These reasons would appear on the left side of the continuum in Figure 1. Taken as a whole, these studies suggest that many auditor changes are motivated by legitimate factors. If the change in auditor improves a company's operating performance, reduces its expenses, or improves the company's image, shareholder wealth could be enhanced.

Event studies on auditor change announcements, however, have either found negative stock market reactions (Eichenseher, Hagigi, and Shields, 1989; Johnson and Lys, 1990; Fried and Schiff, 1981; Smith 1988) or insignificant abnormal returns (Nichols and Smith, 1983; Davidson and Gribbin, 1999). If most auditor changes are motivated to improve company operations, then it is unclear why a negative stock market reaction would occur, on average, for auditor changes. One explanation for the results found in event studies is that the market's reaction may depend on the underlying motivation for the change. In computing abnormal returns, results are summed cross-sectionally across sample firms, and some sample firm auditor changes may be motivated to improve company performance while others are motivated to entrench managers. Positive abnormal returns for some companies may be offset by negative abnormal returns in others. This could explain the lack of significance found in auditor change event studies. Thus, we need to go beyond the traditional event study format to determine motives and outcomes of auditor changes.

An alternate reason for auditor changes that would be more consistent with the reported negative abnormal returns is that the change is being used to entrench an incumbent management team. In other words, management may be audit opinion shopping.

Auditor Change and Audit Opinion

The first question that we address is whether companies select a lower quality auditor after receiving a modified audit opinion. Selecting a lower quality auditor would be consistent with audit opinion shopping. Chow and Rice (1982) and Smith (1986) did not find a difference between the audit opinions of predecessor and successor auditors. Krishnan and Stephens (1995) find that companies that switch auditors are treated equally as conservatively by both the predecessor and successor auditors. These results cast some doubt on whether audit opinion shopping occurs as a motive for changing an auditor.

We address this question in a different way. We propose that prior audit opinion often affects the choice of new auditor. In particular, companies that choose to switch auditors following a modified audit opinion will be more likely to select a lower quality auditor. If our prediction is correct, a company audited by a Big Six firm would be more likely to switch to a non-Big Six firm when the Big Six firm gives them a modified opinion than if the Big Six auditor gives them an unqualified opinion. A company audited by a non-Big Six firm that chooses to switch auditors will be more likely to stay with a non-Big Six auditor if the predecessor has given them a modified audit opinion. Firms that received an unfavorable audit opinion may be more motivated to switch to auditors who are less strict, either for legitimate or illegitimate reasons. Therefore, we hypothesize that:

H₁: Companies that switch auditors following receipt of a modified audit opinion are more likely to choose a non-Big Six auditor than are those auditor-switching companies receiving unqualified prior audit opinions.

H₁ is conditioned upon the prior auditor. That is, if a company's prior auditor was Big Six, the likelihood of switching to a non-Big Six auditor is predicted to increase following a modified audit opinion. A company with a prior non-Big Six audit firm will more likely remain with a non-Big Six auditor following a modified opinion. There are also legitimate reasons that a firm might use a non-Big Six auditor. We, therefore, examine this hypothesis in a multivariate setting controlling for company size and financial distress.

Audit Shopping and Earnings Management

Some companies might change auditors to shop for better audit opinions or more lenient auditor interpretation of company results. The evidence that auditor changes occur more frequently following qualified opinions (Chow and Rice, 1982; Smith, 1986; and Geiger, Raghunandan, and Rama, 1996) could mean that companies try to improve their own image with an auditor change. Alternately, it may be that companies search for a more lenient auditor after a qualified opinion (DeAngelo, 1981; Chow and Rice, 1982). Companies that have a disagreement with an auditor seem to be more likely to select a lower quality auditor more often than when there has not been a disagreement (Whisenant and Sankaraguruswamy, 2000b, 2000d).

Prior research has shown that the reduction of audit fees motivates some auditor changes (Eichenseher and Shields, 1983; Johnson and Lys, 1990). One interpretation of this finding is that lower fees would improve company performance by reducing company expenditures. On the other hand, if a lower cost audit reduces audit quality, the selection of a lower cost auditor could hurt company performance in the long run.

Audit shopping also may result from management's desire to manipulate earnings. Loomis (1999) argues that earnings management is rampant and that CEOs view earnings management as a reasonable mechanism for helping to ensure that their company meets the market's expectations. Former SEC Chairman Levitt viewed the earnings management problem to be so severe that he created a blue ribbon panel to study the problem and to make recommendations. If earnings management is pervasive, a significant portion of auditor changes may be motivated by a desire to manage earnings.¹

¹ We are assuming that earnings management is motivated by managerial self-interest which is not necessarily consistent with shareholder interests. On the other hand, earnings management could occur as a mechanism to signal information to the market that the current financial results do not reflect the true nature of the company's opportunity. We do not consider this

Our measure of earnings management is the abnormal or unexpected discretionary accruals estimated by the modified Jones (1991) model. The comparison group in the Jones model is industry based. Abnormal discretionary accruals occur when the sample company's discretionary accruals are different from those in the industry group. We infer that there has been earnings management when discretionary accruals are positive (income increasing) following an auditor change.

Our research design attempts to identify the extent of audit shopping by examining abnormal accruals following auditor changes. If a company selects a new auditor for reason(s) consistent with shareholder wealth maximization, we would not expect there to be an increase in earnings management. An audit shopping company (one hoping to hire a more lenient auditor), however, more likely would engage in greater earnings management after the auditor change.

DeFond and Subramanyam (1998) have studied this issue. Their results show that "discretionary accruals are significantly income decreasing during the last year with the predecessor auditor and, after controlling for financial distress, are generally insignificant during the first year with the new auditor" (p. 64). Based on these findings, we reexamine this issue. Thus, our second hypothesis is:

H₂: Earnings management will increase following auditor changes.

If we were to find significant discretionary accruals following auditor changes, it could imply that some companies change auditors to find a more lenient auditor. This could be detrimental to shareholders in that company performance may suffer.

There is another type of audit shopping that may not be detrimental to shareholders. We show this in Figure 1 as the neutral or middle ground. Companies may choose new auditors when they believe the incumbent auditor is too conservative. In these cases, the audit shopping is not motivated by management's desire to entrench themselves, but comes only from a legitimate disagreement with the prior audit firm. Here, we might expect there to be an increase in discretionary accruals following an auditor change but, perhaps not as large an increase as when management desires to actively manage earnings.

Audit Quality and Earnings Management

As stated previously, audit shopping may be motivated by the desire for a lower quality audit to facilitate earnings management. To distinguish high and low quality audits, we follow DeAngelo (1981) who argues that larger audit firms have a greater incentive to report earnings misstatements. Empirical evidence supporting this cate-

alternate view because there are likely alternative ways to convey this information that would not distort the current year's financial results.

gorization of audit quality by auditor size appears in Teoh and Wong (1993), St. Pierre and Anderson (1984), DeFond and Jiambalvo (1991), DeFond and Jiambalvo, 1993, and Aharony et al. (1993).

Becker et al. (1998) find audit quality (measured by Big Six versus non-Big Six auditors) is related to earnings management. They report that discretionary accruals are larger for clients of non-Big Six accounting firms than for clients of Big Six firms. Hence, earnings management appears to occur more frequently for companies that use non-Big Six auditors. By this reasoning, some managers may change to a non-Big 6 firm if their decision is motivated by the desire to manage earnings.

Becker et al (1998) show that the level of earnings management is greater for clients of non-Big Six audit firms. One explanation for their findings is that client choice rather than auditor behavior is responsible for the relation between earnings management and auditor type. We build on the work in Becker et al. (1998) by examining earnings management when companies change auditors. When a company's new auditor is non-Big Six, we argue that earnings management will be greater than when the new auditor is Big Six. This leads to our third hypothesis:

H₃: Companies that switch auditors are more likely to engage in earnings management after the auditor change if the company's new auditor is a non-Big Six audit firm.

We believe that the logic in H₃ most likely would impact companies whose prior auditor was Big Six and who then switched to a smaller auditor because this would be a reduction of audit quality. It could impact a company using a non-Big Six auditor as well, in particular if this company has grown and is now large enough to require the services of a Big Six auditor but chooses to remain with a small audit firm. Therefore, we examine auditor changes when the predecessor auditor is Big Six and the company switches to a non-Big Six firm and when the predecessor is a non-Big Six firm and the company stays with a non-Big Six firm.

Audit Quality, Prior Audit Opinion and Earnings Management

In our first hypothesis, H₁, we hypothesize that auditor choice is related to prior audit opinion. In particular, that hypothesis predicts that following a modified audit opinion, companies will be more likely to switch to a lower quality auditor. Here, we argue that following a modified audit opinion and when a company switches to a lower quality auditor, there likely will be greater earnings management. Thus, we predict that when companies switch auditors the level of post-switch earnings management will be related to the choice of new auditor and prior audit opinion. We therefore expect that earnings management will increase when a company has a prior

modified audit opinion and has selected a lower quality auditor. This is our final hypothesis:

H₄: When companies choose a non-Big Six auditor in an auditor change, earnings management will be more likely when the company has received a modified audit opinion from its prior auditor.

We believe that this effect will be more likely when the prior auditor was a Big Six firm and the company chooses a non-Big Six auditor because this would reduce audit quality.

This represents an extension to the prior research testing the relation between earnings management and auditor change. DeFond and Subramanyam (1998) have shown that discretionary accruals are generally insignificant in the year following an auditor change. We have proposed that prior audit opinion and auditor type may affect their findings.

Sample Selection

We use Compustat to identify auditor-changing firms over the period 1993-1997. We chose the period 1993 to 1997 because Compustat makes auditor opinion available only after 1993. We ended our sample period in 1997 because in 1998 Price Waterhouse and Coopers and Lybrand merged. In addition, there was a proposed merger of KPMG and Ernst and Young that did not actually occur. The merger and proposed merger may have had a confounding effect on the data by causing some companies to consider changing auditors. We, therefore, stopped our sample period at the end of 1997.

We select all auditor change listings on Compustat during these years that had sufficient data to compute the accruals. Our sample selection procedure yields a total of 1,330 auditor changes. From this group we deleted all financial firms and all firms whose previous auditor had not been employed for at least two years. These restrictions are consistent with those in DeFond and Subramanyam (1998) and leave us with 1,132 auditor changes. Table 1 lists the number of auditor changes by year. The number of auditor changes ranges from a low of 155 in 1993 to a high of 319 in 1997.²

² We are unable to explain why the number of auditor changes increases each year in our sample period, but one explanation may be due to better data availability on Compustat and better tracking of auditor data. There also may have been economic changes occurring in the audit-service industry causing an increase in the number of changes.

Table 1—Description for a Sample of 1,132 Companies Changing Auditors, 1993-1997

	Total Sample	1993	1994	1995	1996	1997
Panel A: Audit Opinions						
Unqualified	753	81	113	158	177	224
Other ^a	379	74	71	60	79	95
Total	1132	155	184	218	256	319
Panel B: Auditor Changes						
Small-to-small	101	13	21	10	31	26
Small-to-big	220	23	36	50	51	60
Big-to-small	266	41	49	48	55	73
Big-to-big	545	78	78	110	119	160
Total	1132	155	184	218	256	319

^a The 379 other opinions include four adverse opinions and seven qualified opinions. The remaining opinions are unqualified with “additional language”

We categorized the auditor changes by type of auditor opinion received in the year immediately preceding the auditor change. Hence, the opinions shown are those given by the prior auditor for the year immediately preceding the year the auditor change occurs. As shown in Table 1, there are 753 unqualified opinions and 379 modified opinions. The other opinions include four adverse audit opinions and seven qualified opinions. The remaining 368 firms with auditor changes had unqualified opinions with additional language (11 percent for discussion of accounting changes and 79 percent for other problems such as with doubts about going concerns).

We also classify the 1,132 auditor changes by auditor type for both the prior and new auditor. We define a big auditor as a Big Six accounting firm. We define a small auditor as a non-Big Six firm. As shown in Table 1 there are 101 small-to-small auditor changes. We also have 220 small-to-big, 266 big-to-small, and 545 big-to-big auditor changes. The distribution of these change categories across the sample years also appears in Table 1.

We also determined whether the company dismissed the auditor or the auditor resigned and obtained this information by examining news stories from the Lexis Nexis database. In our sample 17.5 percent of the auditors resigned. This percentage is similar to the results in Whisenant and Sankaraguruswamy (2002) who report that 16 percent of auditor changes are initiated by the audit firm.

Statistical Method

Our statistical approach is based on the modified Jones (1991) model as developed by Dechow, Sloan, and Sweeney (1995) and as used by DeFond and Subramanyam (1998). Dechow et al. (1995) demonstrated that the model we use has the “most power in detecting earnings management” (p. 193). As we use the same procedure, we only summarize it here.

We define current accruals, CA , as the change in non-cash current assets less the change in operating current liabilities.³ Total current accruals are assumed to be the sum of both discretionary and non-discretionary components. To identify the non-discretionary component of accruals, we first estimate ordinary least squares regressions of current accruals on the change in sales from the previous year (year immediately before the switch) for all non-sample companies in the same two-digit SIC code as the auditor-changing company, listed on Compustat for the year in question. Using four-digit SIC codes does not materially change the results. Because the error terms of this regression exhibit heteroskedasticity, we follow DeFond and Subramanyam (1998); Teoh, Welch, and Wong (1998a and b) and deflate each variable in the model by the book value of lagged total assets.

Using the estimates for the regression parameters, we estimate each sample company's nondiscretionary current accruals.⁴ The nondiscretionary current accruals are the part of current accruals caused by a firm's sales growth and are "viewed as independent of managerial control" (Teoh, Welch, and Wong, 1998a, p. 95). We then define the discretionary current accruals, DCA_{it} , as the remaining portion of the current accruals. In our tests, we focus on discretionary current accruals. Teoh, Welch, and Wong (1998) argue that discretionary current accruals reflect managerial discretion better than total accruals. When discretionary current accruals are positive (negative), we conclude that income increasing (decreasing) earnings management has occurred.

We are assuming that managers desire to engage in income increasing earnings management. This may not be the case, for example, when managers want to write off excessive expenses in bad years so that the recovery in future years is not burdened with these expenses. With our assumption, if we find significant income increasing earnings management, we may be understating the results which actually have been offset by cases of income decreasing earnings management.

Results

The Choice of a Big Six or Small Auditor

In this section we examine our first hypothesis, H_1 , that prior audit opinion type influences the selection of a new auditor. Table 2 presents the number of auditor changes categorized by auditor type and audit opinion. When a company receives a modified audit opinion, the likelihood of selecting a small auditor increases. When

³ The change in non-cash current assets is the sum of the changes in Compustat data items 2, 3, and 68. The change in operating current liabilities is the sum of the changes in Compustat data items 70, 71, and 72.

⁴ Although we estimate the regression parameters $\hat{\gamma}_0$ and $\hat{\gamma}_1$ using the change in sales as the independent variable, we follow Teoh, Welch, and Wong (1998a) and adjust the change in sales for the change in accounts receivable to correct for the possibility that firms could have manipulated sales by changing credit terms.

the auditor change is small-to-small, 45.5 percent had a prior modified opinion. When the change is small-to-big, only 26.4 percent had a modified opinion. Similarly, when an auditor change is big-to-small, 44.7 percent had modified opinions; when the change is big-to-big, 28.6 percent had modified opinions. These results are nominally consistent with the predictions of H_1 .⁵ Modified audit opinions make it more likely that companies changing auditors select a non-Big Six auditor.

Table 2—Distribution of Auditor Changes Categorized by Prior Audit Opinion and Prior and Subsequent Auditor Size

Audit Opinion	Unqualified	Modified	Total
Small-to-small	55 (54.5%)	46 (45.5%)	101 (100.0%)
Small-to-big	162 (73.6%)	58 (26.4%)	220 (100.0%)
Big-to-small	147 (55.3%)	119 (44.7%)	266 (100.0%)
Big-to-big	389 (71.4%)	156 (28.6%)	545 (100.0%)

*** Significant at 0.001 or better

We extend the previous analysis to include the effects of earnings management using logit regression analysis. In doing so, we also control for firm size, auditor resignation, and financial distress. We control for firm size because larger companies tend to use larger auditors. Financial distress is also a control variable because there is literature relating financial distress to auditor changes (Schwartz and Menon, 1985) and going-concern qualifications in audit statements seem to be associated with decreasing auditor quality (Whisenant and Sankaraguruswamy, 2000b). Logit regression results are in Table 3. In Panel A, we limit the sample to firms whose prior auditor is small. In these regressions, the dependent variable equals one for small-to-small auditor changes and zero for small-to-Big Six changes. In regression 1 the dependent variable is regressed on an audit opinion dummy variable, total assets and the Altman z score. Consistent with the results in Table 2, the estimated coefficient of the audit opinion variable is negative and statistically significant at the 10 percent level. For companies using small auditors, when there is a modified audit opinion, companies are more likely to switch to another small auditor rather than a Big Six auditor. Total assets, which are included as a control variable, have a negative coefficient that is significant at the 0.1 percent level, suggesting that larger

⁵ We tested H_1 with a set of univariate tests utilizing a chi-square test. We compared the actual number of companies that selected a non-Big Six auditor following a modified audit opinion to the expected number, assuming that the expected number is the same proportion of companies that select a Big Six successor auditor. For companies starting with a small auditor, the chi-square is 19.75 and for companies starting with a Big Six auditor the chi-square is 34.78. Both are significant at the 0.001 level and are consistent with the predictions of H_1 . These results are available from the authors on request.

companies are more likely to switch to big audit firms. Finally, the coefficient for the Altman z score is not statistically significant.

Table 3—Logit Regression Results for Auditor Changes Comparing Predecessor and New Auditor Size

Panel A: Dependent Variable = 1 if Auditor Change is Small-to-Small and = 0 if Small-to-Big						
Regression*	Constant	Audit Opinion D = 1 if Unqualified ^a	Discretionary Current Accruals ^b	Log of Total Assets ^c	Altman Z ^c	Chi-Square ^d Pseudo-R ²
1	0.2270 (0.54)	-0.3873 (3.38) [†]	----	-0.4463 (21.29)***	0.0027 (0.38)	(345.26)*** 31.9%
2	0.3638 (1.68)	----	-0.1460 (2.93) [†]	-0.4625 (22.74)***	0.0020 (0.20)	(35.58)*** 16.7%
3	0.1700 (0.34)	-0.3283 (2.99) [†]	-0.0666 (1.31)	-0.4292 (24.10)***	-0.0020 (0.23)	(42.52)*** 11.4%
Panel B: Dependent Variable = 1 if Auditor Change is Big Six-to-Small and 0 if Big Six-to-Big						
4	1.7826 (52.08)***	-0.3550 (2.92) [†]	----	-0.7962 (133.26)***	0.0007 (2.63)	(260.75)*** 42.2%
5	1.9752 (75.46)***	----	-0.0200 (1.43)	-0.8205 (141.48)***	0.0007 (2.92) [†]	(258.45)*** 41.9%
6	2.0177 (74.66)***	-0.3411 (2.88) [†]	0.0141 (0.22)	-0.8474 (172.03)***	0.0010 (0.07)	(345.40)*** 44.3%

***Significant at 0.001 or better

**Significant at 0.01 or better

*Significant at 0.05 or better

[†]Significant at 0.10 or better

^a The audit opinion dummy variable represents 1 if the opinion in the previous year (year t-1) is unqualified, 0 otherwise

^b The discretionary current accruals are measure in the year before the auditor change takes place (year t-1). The accruals and audit opinion exhibit signs of multicollinearity. They are significantly correlated so we show regressions with each variable separately (regressions 1, 2, 4 and 5) as well as regressions with both of them (regressions 3 and 6)

^c The log of total assets and the Altman z score are measured in year t as well

^d We also regressed a dummy variable taking the value 1 if the auditor was dismissed and zero if they resigned. This variable was not significant

In regression 2 we estimate a model using the same dependent variables and discretionary current accruals in year t-1. Total assets and the Altman Z score remain as control variables. The estimated coefficient for the discretionary current accruals is negative and statistically significant at the 10 percent level. Companies with larger discretionary current accruals in year t-1 are more likely to switch to large auditors when changing auditors.

In regression 3 we include both the prior audit opinion and discretionary accrual variables. These two variables are significantly correlated; hence, multicollinearity

may be a problem. The estimated coefficient for prior audit opinion remains negative, however, and is significant at the 0.10 level. The estimated coefficient for discretionary accruals retains its negative sign, but is statistically insignificant. The estimated coefficient for the log of total assets remains negative and highly significant.

Panel B of Table 3 presents the results for the logit regressions for the sub-sample of auditor-switching companies starting with a Big Six auditor. In these regressions the dependent variable takes the value one when the company switches to a small auditor and is zero when the company switches to another Big Six firm. Regression 4 shows that the coefficient for audit opinion is negative (significant at better than 10 percent level) when total assets and the Altman z score are included as control variables. Thus, companies with other than unqualified audit opinions are more likely to switch from Big Six to small audit firms. In regression 5 we estimate a model regressing the dependent variable on year $t-1$ discretionary accruals, still controlling for total assets and financial distress. The coefficient for the discretionary current accruals is not statistically different from zero.⁶ In regression 6 we include the both the audit opinion and discretionary accrual variables with the control variables. Here, the estimated coefficient for audit opinion is negative and significant at the 0.10 level while the estimated coefficient for discretionary accruals remains statistically insignificant.

In all of the regressions, the log of total assets is related to the choice of big and small auditors. This result is intuitively obvious and indicates that larger companies are considerably more likely to choose a Big Six auditor than smaller companies.

The overall results from Tables 2 and 3 suggest that the choice of an auditor may depend on the type of prior audit opinion. These results are consistent with the predictions of H_1 . We find that when a company switches to a new auditor, they are likely to select a non-Big Six auditor when the prior auditor has not given them an unqualified audit opinion. This result occurs whether the prior auditor was a Big Six or non-Big Six firm and occurs even when controlling for company size and financial distress.

Post Auditor Change Earnings Management

If a company engages in audit shopping by finding an auditor more willing to endorse earnings management as predicted in H_2 , we would expect discretionary accruals to be positive in the year of the auditor change and increase from the year before. For the total sample of 1,132 auditor changes the mean discretionary current

⁶ In tests not shown, we find that the percentage of companies with above median (1.87) z-scores with unqualified opinions is 79.96 percent while this percentage drops to 57.67 percent for companies with below median z scores. The difference is significant at better than 0.001 ($t = 7.99$). Similarly, we find in untabulated tests that the likelihood of the new auditor being small is greater when the company's z-score is below the median.

accruals are -0.3070. They are negative and marginally significant ($t = -1.65$ significant at 0.10). We also compute the change in the accruals from year $t-1$, the last year with the previous auditor, to year t , the first year with the new auditor. For the total sample the discretionary current accrual change is also negative and significant ($t = -1.92$).

Because neither the mean discretionary current accruals nor the changes in the discretionary accruals are significantly positive for the total sample, we can conclude that audit shopping for a more lenient auditor is not the overriding motivation for the auditor change. These results are not consistent with the predictions of H_2 . If earnings management were the overriding reason for an auditor change, we would have expected an increase in earnings management and significantly positive coefficients for these variables. This increase, on average, did not occur.

We test H_3 and H_4 in using OLS regression. The results of these tests are in Table 4. Discretionary current accruals are the dependent variable in regressions 1 and 3 while the change in discretionary accruals is the dependent variable in regressions 2 and 4 in the following regressions.⁷

We test the predictions of H_3 in regressions 1 and 2. H_3 predicts that earnings management will occur when a company selects a non-Big Six auditor as the new auditor (and we also suggest that this will be more likely when the prior auditor was Big Six). In regression 1 the dependent variable is the discretionary current accruals in the year of the auditor change. The independent variables in this model include three binary (dummy) variables for three of the four auditor groups, a binary variable taking the value of 1 for unqualified prior audit opinions, and the log of total assets to control for company size.⁸ The results of this regression do not support H_3 . None of the dummy variables for the auditor change categories are statistically significant. The estimated coefficient for the log of total assets is highly significant, however, suggesting larger firms have larger discretionary current accruals. The discretionary current accruals are significantly related to firm size but not to the auditor change categories.

⁷ In the regressions we also controlled for wording in the modified audit opinions. Approximately 21 percent of the modifications were based on accounting procedure differences of opinion. The remaining modifications were related to going concern issues. Adding a variable to control for this did not alter our conclusions and introduced multicollinearity problems with other variables.

⁸ We reran these tests with changes in accruals but did not obtain significant results.

Table 4—Ordinary Least Square Regression Results

Regression Dependent Variable	Auditor Change Category					Interaction Term-Auditor Change Times Audit Opinion ^a			Adjusted R ² (F)
	Constant	Small D = 1	Big D = 1	Small-to- Big D = 1	Unqualified Audit Opinion D = 1	Log Total Assets	Altman Z - score	Small-to-Small-to- Small Big Small	
1 Discretionary Current Accruals (following auditor change)	-2.609 (-4.31)***	0.701 (0.88)	0.757 (1.35)	0.345 (0.60)	-0.606 (-1.40)	0.491 (4.65)***	0.000 (0.68)	---	1.9% (4.55)***
2 Change in Current Discretionary Accruals	-1.786 (-3.57)***	0.460 (0.71)	0.523 (1.15)	-0.285 (-0.61)	0.538 (1.60)	0.324 (3.75)***	0.000 (0.72)	---	1.4% (4.03)***
3 Discretionary Current Accruals (following auditor change)	-2.491 (-4.25)***	0.697 (0.69)	0.633 (1.02)	-0.328 (-0.49)	---	0.503 (4.74)***	0.000 (0.78)	0.309 (0.22)	2.0% (3.78)***
4 Change in Current Discretionary Accruals	-1.618 (-3.42)***	0.172 (0.20)	0.431 (0.82)	-0.862 (-1.51)	---	0.329 (3.80)***	0.000 (0.81)	0.747 (0.63)	1.5% (3.24)***

^a For these variables we define unqualified opinions as zero and all other opinions as 1. We then multiply this variable times the auditor change type.

Outliers may influence the results. To reduce this possibility we determined the point in which 2.5 percent and 97.5 percent of the distribution of discretionary current accruals occurs. These points are -1.0685 and 0.8611. Any discretionary current accruals below -1.0685 or above 0.8611 were dropped. The coefficient for the interaction term between audit opinion and the Big-to-small auditor changes remains positive and significant at better than 0.05 in regression 2 and at 0.10 in regression 4. The results are, therefore, quantitatively the same when we exclude the tails of the distribution. Controlling for whether the qualified opinions were the result of going-concern wording or accounting change wording did not materially affect the results or conclusion.

We eliminated the cases in which the auditor resigned. This did not materially affect the results or conclusions.

*** Significant at 0.001 or better

** Significant at 0.01 or better

* Significant at 0.05 or better

† Significant at 0.10 or better

We repeat our tests of H_3 in regression 2. The dependent variable in this regression is the change in discretionary current accruals from before the auditor change to the year of the auditor change. The results are qualitatively similar to those in regression 1. Only the estimated coefficient for the log of total assets is significant so the results do not support H_3 .

We test H_4 in regressions 3 and 4. Recall that H_4 predicts that earnings management will be more likely when the company chooses a non-Big Six auditor (especially if the prior auditor) was Big Six) following a modified audit opinion from the prior auditor. To test this, we create an interaction term between the auditor change group dummy variables and an audit opinion variable taking the value zero for unqualified prior opinions and 1 for modified opinions.⁹ Each interaction term represents companies in that auditor change group with other than unqualified prior audit opinions. We continue to control for company size and financial distress.

In regression 3 the dependent variable is the discretionary current accruals for the year of the auditor change. The estimated coefficient for the interaction term between prior audit opinion and Big to Small auditor changes is positive and significant at the 0.05 level. Companies with other than unqualified audit opinions that switch from Big Six to non-Big Six auditors are more likely to have larger discretionary current accruals. This evidence is consistent with this group of companies engaging in a form of audit shopping.¹⁰ This result is consistent with the prediction of H_4 . The results also show that the estimated coefficient for the log of total assets is significantly positive.

We reexamine H_4 in regression 4 using the change in current discretionary accruals as the dependent variable. We find similar results to those in regression 3 except the estimated coefficient for the interaction term between prior audit opinion and big-to-small auditor changes is only significant at the 10 percent level. While these results are not as strong as those in regression 3, they are consistent with the predictions of H_4 .

⁹ We switched the definition of 1 and 0 in the binary variable for ease of interpretation of the results. Each interaction term would be companies in the auditor change group with other than an unqualified prior audit opinion.

¹⁰ We eliminated cases when the auditor resigned. This did not change the results or conclusions materially. Similarly, we control for whether the auditor was dismissed or resigned. Because auditor resignations may be the result of potential litigation or client-auditor mismatches (Krishnan and Krishnan, 1997; Raghunandan and Rama, 1999; and Shu, 2000), there is the possibility that they could behave differently. Our results do not seem to vary when we control for resignations.

Conclusions

Our study straddles the auditor change literature and the earnings management literature. We focus on whether companies audit shop for auditors that will allow greater earnings management and use this as a motivation to switch auditors.

When companies with modified audit opinions choose to switch auditors, they are more likely to choose a non-Big Six firm than those companies that also switch auditors but receive unqualified opinions. This evidence is consistent with these companies choosing lower quality auditors to potentially avoid these other opinions. This result is consistent with Whisenant and Sankaraguruswamy (2000c) who report that companies having an accounting disagreement with an auditor and switching auditors are more likely to align with a lower quality audit firm. Our results suggest that these firms subsequently may engage in greater earnings management.

In our total sample of 1,132 auditor changes, we do not find evidence on average of earnings management after the auditor change, nor do we find evidence that earnings management increased.

Our results are also consistent with those in DeFond and Subramanyam (1998). Both studies find no evidence of overall earnings management in auditor-changing companies. We do extend their analysis, however, by dividing the sample by prior audit opinion and by prior and successor audit firm type. Our extension found results that suggest that some auditor changes are followed by earnings management.

When companies using Big Six auditors switch to non-Big Six auditors (lower quality auditors) and receive a modified audit opinion from their prior auditor, we find that discretionary accruals are greater than for companies with unqualified opinions and with other categories of auditor changes. Our results are consistent with those in Becker, DeFond, Jiambalvo, and Subramanyam (1998) who show discretionary accruals to be larger in non-Big Six audited firms.

Event studies have found either negative or neutral market reactions to auditor change announcements. In event studies, positive abnormal returns for some companies can be offset by negative abnormal returns in others; therefore, the equivocal results from the event studies may be caused by varying motivations among firms that change auditors. We add to this literature by identifying that some firms may engage in opportunistic behavior when changing auditors.

Future research may want to be directed at this issue. By combining the method in Lennox (2000) and ours, researchers could determine if companies that would have received lower quality opinions from their prior auditor engage in earnings management.

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