

Intra-Audit Firm Office Changes and Financial Reporting Quality

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Abstract

I examine a sample of companies who have switched engagement offices *within the same audit firm*. This setting has not been previously examined in the literature and allows me to research changes in audit quality while controlling for the endogenous nature of financial reporting quality and auditor choice. I find that switching from a small audit office to a large one is associated with a significant increase in accrual quality. I also find that the sensitivity of accrual quality to auditor industry specialization is dependent on the how big a role one might expect auditor expertise to play. Specifically, for firms in industries with especially complex accounting standards, the act of switching from a non-specialist to an industry specialist audit office is associated with an increase in accrual quality. I also examine stock price synchronicity as a measure of firm- and industry-specific information in stock prices, a proxy for financial reporting quality, and find that switches both to large and industry specialist audit offices are associated with increases in stock price synchronicity. Further study reveals that industry specialist offices are associated with greater industry-specific future earnings information being impounded into stock prices.

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Introduction

Recent studies have found that, despite regulatory attempts by the PCAOB to ensure and enforce uniform levels of audit quality for SEC registrants, audit quality within the Big 4 audit firms varies greatly among the individual audit offices. Even with the use of standardized audit plans developed at the national or firm level, in practice there are frictions that may inhibit efficient sharing of knowledge and resources between offices or even engagement teams. Focusing on audit offices as the primary unit of analysis, several studies show that industry specialization at the *office* level is associated with audit fee premiums and higher client accrual quality; however, specialization at the *firm* level alone does not have a significant effect on audit quality (Ferguson et al. 2003; Francis et al. 2005; Ferguson et al. 2006). Most recently, studies by Francis and Yu (2009) and Choi et al. (2010) show that audit office size is a primary determinant of audit quality, even overriding the effects of industry expertise.

However, these findings are subject to the same caveat that troubles most audit research to date: the issue of endogeneity. Despite the insights gained by shifting focus from firm-level to office-level analysis, we are still left with the question of whether the engagement of better auditors results in higher financial reporting quality or whether firms with higher financial reporting quality simply choose to engage better auditors as part of their overall financial reporting strategy. The focus of my paper is to disentangle the effects of different audit firm, office and auditor-client characteristics on financial reporting quality, while controlling for the endogeneity of auditor choice.

I examine a sample of companies which have switched audit engagement offices *within the same audit firm*. This setting allows me to research changes in audit quality without the

potentially confounding effects of scandals, opinion shopping or auditor-client disagreements typically associated with audit firm switches. Anecdotal evidence suggests that intra-audit firm office switches may be precipitated by headquarter relocation, mandatory audit partner rotation, or voluntary audit partner turnover; none of which is expected to be systematically correlated with a company's financial reporting strategy, alleviating concerns about the endogeneity of auditor choice. This design is unique in the literature, and provides a powerful setting in which to investigate the role of the auditor and the nature of the effect of audit quality on financial reporting quality.

My study contributes to the growing literature on office-level audit research and enriches our understanding of the role that the auditor plays in the financial reporting process by revealing the effects of different auditor and auditor-client characteristics on financial reporting quality. It is also the first study to examine the setting of intra-firm audit office changes as a method of controlling for the endogeneity of auditor choice and financial reporting quality, as well as the first to examine the differential effects of audit quality on financial reporting quality based on the level of accounting complexity in the client's financial statements. I also utilize new methods for describing accounting complexity and calculating local auditor industry specialization, which are more representative of actual audit practice. My study is the first to consider the effects of audit quality on stock return synchronicity in US firms, and contributes to the literature on the effects of audit quality on other aspects of financial reporting, aside from accrual quality, and on the role of auditors as capital market intermediaries. Taken together, my findings indicate that large and industry specialist audit offices do provide superior audit quality when compared with small and non-specialist offices, in terms of improvements in client accrual quality. Industry specialist

auditors, in particular, also facilitate the incorporation of industry-specific future earnings information into returns.

Using a sample of approximately 650 intra-audit firm office changes from 2001 – 2009, I estimate regressions of the absolute value of discretionary accruals on audit office changes and control variables. I find that, consistent with predictions based on prior research, switching from a small audit office to a large one is associated with a significant increase in accrual quality. Examining industry specialization, I find that the sensitivity of accrual quality to changes in auditor industry specialization is dependent on the how big a role one might expect auditor expertise to play. Specifically, for firms in industries that are subject to especially complex accounting standards, the act of switching from a non-specialist to an industry specialist audit office is associated with an increase in accrual quality. My paper is the first in the literature to make such a distinction.

Following other recent studies in the auditing literature, I also examine stock price synchronicity as a measure of firm- and industry-specific information in stock prices, a proxy for financial reporting quality. Using international data, Sami and Zhou (2008) and Gul et al. (2010) find that increases in audit quality are associated with decreases in stock price synchronicity, indicating an increase in financial reporting quality. I estimate regressions of stock return synchronicity on audit office changes and control variables, and abnormal returns on future firm- and industry-specific earnings information. Contrary to prior findings in international studies, I find that, for US firms, switches both to large and industry specialist audit offices are associated with increases in stock price synchronicity. Multivariate tests show that industry specialist audit offices are associated with greater industry-specific future earnings information being impounded into stock prices. This finding explains the increase in stock return synchronicity

overall, and supports the hypothesis that industry specialist auditors provide superior audit quality when compared to non-specialists.

Literature Review

Audit Quality and Earnings Quality

Previous research on audit quality has focused on either factors contributing to audit quality or consequences of audit quality. The contributing factors are typically auditor-specific characteristics which are thought to contribute to audit quality: auditor size, industry specialization, auditor tenure. The consequences are measurable proxies for what would be considered the results of audit quality: accruals quality, earnings persistence, magnitude of earnings response coefficients, modified audit opinions. In general, audit quality research seeks to uncover an association between one or more of the inputs and one or more of the outcomes.

The most common and well researched indicator of audit quality is whether an audit firm is one of the “Big 4/6/8” (hereafter, Big N). (DeFond and Francis, 2005; Carcello, 2005) The motivation for such a hypothesis varies from paper to paper. DeAngelo (1981) suggests that since these larger audit firms are not as financially dependent on the fees from any one client, they are less likely to be subject to pressure from clients to “look the other way” in the event of discovering accounting irregularities. Further, it is argued that the Big N auditors have more to lose should a scandal arise, in that their brand names and reputations are more valuable compared to smaller audit firms. Previous research has shown that these large, international audit firms garner a significant fee premium over their smaller counterparts. (Palmrose, 1986; Ireland and Lennox, 2002). This premium can be attributed to higher billing rates (for superior expertise), additional audit hours (reflecting additional efforts) or simply a reputation effect. In

any case, prior research has deemed the fee premium indicative of higher audit quality compared to non-Big N firms.

Clients of the Big N firms have been shown to have higher accrual quality, typically measured as lower absolute values of discretionary accruals (Becker et al., 1998; Francis et al., 1999), and are less likely to manage earnings, as evidenced by income increasing accruals, small positive earnings changes, or meeting/beating analyst expectations (Becker et al., 1998; Nelson et al., 2002). In addition, the stock market response to an earnings surprise is greater (Teoh and Wong, 1993) and analyst forecasts are, on average, more accurate for clients of Big N firms (Behn et al., 2008), suggesting that higher audit quality contributes to more informative earnings disclosures and better informed analysts.

Other research has looked beyond the big firm/small firm distinction to other auditor characteristics as metrics of audit quality. Two of the most common alternative measures are auditor tenure and industry specialization. Auditor tenure is the duration of the auditor-client relationship. Johnson et al. (2002) finds that clients with shorter auditor tenure (less than four years) have lower accrual quality than those with longer auditor tenure (4 – 8) years, but finds no significant difference in accrual quality between firms with 4 - 8 year auditor tenure and those with auditor-client relationships longer than 8 years. Myers et al. (2003) confirms this finding, showing that longer tenure is associated with lower values of absolute discretionary and current accruals, as well as lower signed discretionary accruals, after controlling for auditor size.

Industry specialization is an important way in which audit firms can differentiate themselves from their competitors. By focusing on specific sectors, audit firms may accumulate industry specific knowledge, enabling them to provide superior audit quality compared to their

competitors. However, there are questions of how efficiently such knowledge is maintained and shared within audit firms and whether audit quality is homogenous within firms. For this reason, it is interesting to examine industry expertise at a both a firm- and office-level. Using data on Australian firms, Ferguson et al. (2003) shows that, in cases where the auditor is both the national- and city-level industry expert, there is an average fee premium of 24%, but in instances where the auditor's expertise is only firm-level, there is no significant premium. Francis et al. (2005) confirms these findings for U.S. firms, where a national- and city- level industry expert earns a fee premium of 19%. This fee premium is supported by indications that industry specialists provide higher audit quality than non-specialists. Balsam et al. (2003) find that clients of firm-level industry specialists have lower absolute discretionary accruals and higher earnings response coefficients. Krishnan (2004) finds that clients of firm-level industry experts report earnings more conservatively. In a more recent paper, Gul et al. (2009) find that industry expertise partially mitigates the effects of short auditor tenure on earnings quality, as measured by discretionary accruals.

Francis and Yu (2009a) examine another office-level characteristic related to audit quality: office size. The study shows that audit quality is higher for clients of large audit offices of Big 4 firms than for clients of smaller offices. Clients served by larger offices have lower absolute discretionary accruals, are less likely to report small positive earnings or small increases in earnings from the prior year, and larger offices are more likely to issue a modified audit report. Office size remains a significant determinant of audit quality after controlling for industry specialization, auditor tenure, and client influence, as well as company-specific characteristics.

A few papers have investigated the effect of audit quality on other metrics of financial reporting quality. Dunn and Mayhew (2004) document a positive relationship between audit quality and disclosure quality, measured as firm-wide industry specialization and AIMR disclosure score, respectively. Another recent paper moves one step away from a direct measure of disclosure or financial reporting quality and examines the effects of audit quality on the overall information environment. Behn et al (2008) investigate the effects of audit quality on the properties of analyst forecasts. They find that analyst forecasts are more accurate and less dispersed for clients of Big 5 or industry specialist auditors.

In summary, the evidence in the audit literature suggests that audit quality varies at the firm, office, and even the engagement level. I utilize multiple proxies for audit quality, at the audit-engagement level, in a particularly powerful econometric specification. This enables me to obtain a better understanding of the role that auditors play in the financial reporting process and the effect of different auditor characteristics on accrual quality.

Stock Return Synchronicity

Stock return synchronicity, or co-movement, is essentially the R^2 from a regression of firm returns on industry and market returns. The use of stock return synchronicity as a measure of firm specific information in prices began with Roll's (1988) seminal work, R^2 . Roll finds that the low predictive power of asset pricing models can be attributed to firm-specific price variation, not associated with market- or industry-wide information. Roll's findings suggest that individual firms with low stock return synchronicity may have more informative stock prices, although he acknowledges that "occasional frenzy unrelated to concrete information" could be an alternative explanation. Since that time, there have been many papers both supporting and

decreasing its use as a measure of the amount of firm-specific information in stock prices (Ashbaugh et al. 2005; Barberis et al., 2005; Jin and Myers, 2006). In an international study, Morck et al. (2000) find that in emerging markets, with poor protection of property rights, synchronicity tends to be high. In the US, Durnev et al. (2004) show that lower synchronicity is associated with more efficient capital allocation.

Using a sample of industry-matched pairs, Durnev et al. (2003) find that stock return synchronicity is negatively correlated with measures of stock price informativeness, specifically FERC (future earnings response coefficient) and FINC (future earnings incremental explanatory power). Their findings are robust to alternate specifications and the inclusion of multiple control variables, leading them to conclude that “greater firm-specific price variation is associated with more informative stock prices.” More recently, Hutton et al. (2009) examine stock return synchronicity in conjunction with financial reporting transparency. They conjecture that firms with less transparent financial reports will have stock returns with higher levels of synchronicity, as there is less firm-specific information publicly available to affect stock prices. They find that lower financial reporting transparency, as measured by accrual quality, is associated with higher stock return synchronicity.

Piotroski and Roulstone (2004) utilize stock return synchronicity as a measure of firm-specific information impounded in stock prices. They show that the actions of different types of market participants (analysts, institutional investors and insiders) have different effects on the relative amount of firm-, industry-, and market-level information reflected in stock prices. Specifically, they find that financial analysts increase the amount of industry-specific information in stock prices, and attribute this finding to the assertion that analysts specialize in industry-specific, rather than firm-specific, knowledge. In a follow up to this paper, Crawford et

al. (2010) finds that the initiation of analyst coverage, where no prior coverage existed, is associated with an increase in a firm's stock return synchronicity. However, additional analyst coverage initiations, where some analyst coverage already exists, are associated with reductions in synchronicity. These findings are interpreted by the authors to show that the initial decision on the part of an analyst to cover a firm is contingent on the existing level of coverage and the type of information that is provided by other analysts.

Stock return synchronicity has also been used in the auditing literature as a metric of firm-specific information in stock prices. Sami and Zhou (2008) find that the introduction of new auditing standards in China was associated with a decrease in earnings management, an increase in earnings quality and a decrease in stock return synchronicity, consistent with an improvement in the "quality of firm-specific information available to investors". Also using a sample of Chinese firms, Gul et al. (2010) find that increased audit quality, namely the engagement of a Big 4 audit firm, is associated with lower stock return synchronicity, compared to firms that retain a local auditor. They hypothesize that higher quality auditors can compel their clients "to disclose more detailed and better quality, firm-specific information." Their hypothesis is borne out by the results of both univariate and multivariate tests. The authors attribute this result to the notion that auditors play an important role as information intermediaries in the market.

While these papers have established a preliminary link between audit quality and stock return synchronicity, both exclusively study Chinese firms, and the metrics of audit quality are extremely blunt: simply using a Big 4 proxy (Gul et al., 2010) or a regulatory change to the audit industry as a whole (Sami and Zhou, 2008). These measures presuppose that audit quality is uniform across different audit firms or even that changes in audit quality are consistent across the

entire economy, respectively. My paper is the first to examine the effects of audit quality on stock return synchronicity for a sample of US firms. The setting of intra-firm audit office switches enables me to obtain a better understanding of the effect of different auditor characteristics on the types of information impounded into stock prices.

Motivation and Research Design

Historically, audit research has struggled to deal with the issue of endogeneity with respect to the firm's choice of both the auditor and the level of financial reporting quality. A changes specification, where the auditor changes are exogenous with respect to issues concerning financial reporting quality or auditor-client disagreements makes it possible to control for these aspects of endogeneity in this particular situation. The setting for these research questions is that of intra-audit firm office switches, e.g. when a firm switches from the New York office of a particular audit firm to the Chicago office of the same audit firm. This permits me the benefit of utilizing a "changes" methodology, but without the confounding effects that are typically associated with audit firm changes, such as accounting scandals, auditor-client disagreements or auditor resignations. (Schwartz and Menon, 1985) In the case of intra-firm audit office switches, evidence suggests that these switches are exogenous to the firm's financial reporting strategy, allowing me to control for certain aspects of the endogenous nature of audit and financial reporting quality. By examining a sample of firms that have switched audit offices, within the same audit firm, it will be possible to isolate audit office-specific characteristics in order to determine the effects office size and industry specialization on the auditor's role in the financial reporting process.

Accrual Quality Hypotheses

My first research question concerns the relationship between audit quality and accrual quality. While the Big 4 audit firms may strive for a uniform standard of audit quality, recent evidence shows that, ex post, this is not always the case: both office size and industry specialization (Francis and Yu, 2009a,b) are associated with audit quality at the audit-office level. These studies find that, due to the extent of resources and depth of expertise in large audit offices, office size is shown to be a significant indicator of audit quality. Specifically, clients of large audit offices have higher accrual quality and are less likely to report small positive earnings changes, which are considered a sign of earnings management. My first set of tests relates to the relationship between accrual quality and audit office size.

Based on the findings in Francis and Yu (2009a), I hypothesize that intra-audit firm office size switches are associated with changes in client accrual quality. Specifically, when companies switch from a small(large) office to a large(small) one, there will be an increase(decrease) in accrual quality.

H₁: Switches from a small(large) audit office to a large(small) audit office are associated with increases(decreases) in accrual quality.

Industry specialization is another common proxy for audit quality in the accounting literature, (Francis, 2004) and therefore, similar to the office size proxy, it might be expected that firms which retain industry specialist auditors would have higher accrual quality. At the audit office level, due to their greater experience, local industry specialist auditors may be more adept at proposing adjustments to client financial statements and identifying issues that will affect

client accrual quality. My second set of tests concerns the relationship between accrual quality and audit office industry specialization.

I hypothesize that intra-audit firm office switches between industry specialists and non-specialists are associated with changes in client accrual quality. Specifically, when companies switch from a non-specialist(industry specialist) office to an industry specialist (non-specialist), there will be an increase(decrease) in accrual quality.

H₂: Switches from a non-specialist(industry specialist) audit office to an industry specialist (non-specialist) audit office are associated with increases(decreases) in accrual quality.

However, as industry specialization is an auditor-client specific characteristic (i.e. the designation of an audit office as an industry specialist is dependent on the industry of the client in question) it may be that the effects of industry specialization are not as pronounced as those of office size. Indeed, Francis and Yu (2009a) find that, in their overall regression analysis, office size is a more dominant factor in determining the effect of the auditor on accruals quality, and Solomon et al. (1999) find mixed evidence of industry specialist auditors ability to improve financial reporting quality. As such, one might expect that industry specialization only plays a significant role in certain industries where a depth of industry specific knowledge would be crucial to understanding a company's operations and financial reporting issues. For example, for industries which, in practice, tend to be served by specialized audit teams (such as real estate, oil and gas, financial services and healthcare) as well as those typically subject to more complex accounting standards for revenue recognition (such as construction and business services), I hypothesize that the industry specialist auditor effect will be stronger than in other industries, where the accounting standards are comparatively straightforward.

H₃: The magnitude of changes in accrual quality associated with switches from a non-specialist(industry specialist) audit office to an industry specialist (non-specialist) audit office will be greater for firms in industries subject to more complex accounting standards.

Stock Return Synchronicity Hypotheses

My second research question concerns the effect of audit quality on the firm's overall information environment. While auditors opine only on the financial statements, in practice, the role of the auditor is much broader, and therefore the effects of audit quality may not be limited to the domain of earnings and accrual quality. Previous international audit research has found that audit quality is associated with lower stock return synchronicity. (Gul et al., 2010; Sami and Zhou, 2008) The reasoning for this finding is that higher quality audits should produce financial statements which contain more (and more reliable) firm-specific information. Consistent with findings that suggest audit office size is a significant determinant of audit quality, one would expect that firms which are audited by larger audit offices to have lower values of stock return synchronicity.

I hypothesize that intra-audit firm office size switches are associated with changes in client stock return synchronicity. For companies that switch from a small(large) office to a large(small) one, there will be a decrease(increase) in synchronicity.

H₄: Switches from a small(large) audit office to a large(small) audit office are associated with decreases(increases) in synchronicity.

The expected relationship between synchronicity and industry specialization is not as straightforward as that of office size. As with the office size proxy for audit quality, it might be

expected that firms which retain industry specialist auditors would have lower values of stock return synchronicity. Alternatively, within the Big 4 firms, it is common for industry specific audit plans to be developed at the national level and utilized at each local office of the firm, so that all clients within the same industry are audited in the same way. At the audit office level, as a result of their more focused expertise within a certain industry, local industry specialist auditors may tend to propose adjustments or shape financial statement disclosures such that they are more comparable with other firms in the same industry, and therefore industry specialist auditors may facilitate the incorporation of more industry-specific information into stock prices. Along this line, one would expect firms that retain industry specialist auditors to have higher values of stock return synchronicity, particularly with respect to an industry index.

Since there are opposing predictions for the effect of industry specialization, this remains an empirical question. As with the tests related to accrual quality, I will base my hypotheses for this test on the relative importance that auditor industry expertise might play in the audit.

H₅: Switches from a non-specialist(industry specialist) audit office to an industry specialist (non-specialist) audit office are associated with changes in synchronicity.

H₆: The magnitude of changes in changes synchronicity associated with switches from a non-specialist(industry specialist) audit office to an industry specialist (non-specialist) audit office will be greater for firms in industries subject to more complex accounting standards.

Data and Descriptive Statistics

The main sources for audit related data are the Audit Analytics Audit Opinion and Audit Fee databases. Limiting the sample to Big 4 firms, there are 2,995 Big 4 office-years in the

dataset.¹ Bifurcating the sample according to median annual office-level audit fees, the sample contains 1,507 “small” offices and 1,488 “large” offices.² The figures in table 1 illustrate the variation between the two subsets in the sample. The offices in the “small” group have mean annual fees of \$3,668,222 and an average of 6 SEC registered clients, while for the “large” offices, the mean annual fees are \$41,920,232 and the average number of SEC registered clients is 34. The smallest office in the sample is PWC’s Southfield, MI office, which had 1 SEC registered client and associated annual audit fees of 16,000 in 2002; the largest in terms of fees is PWC’s New York City office, with \$708,599,173 in audit fees in 2009; the largest in terms of number of clients is PWC’s Boston, MA office, with 343.

[Table 1]

Table 2 reveals that the client profiles of the small and large audit offices are different, as well. The clients of large audit offices are larger, but have much less influence, in terms of audit fees as a percentage total office revenue.³

[Table 2, panel A]

Following Dunn and Mayhew (2004), an audit firm is designated a national industry specialist in a particular year if, in that year, the audit firm has at least 20% of the total audit fees in a 2 digit SIC code. To classify an audit office as a local specialist, I group all offices of the

¹ The sample is limited to the clients of PriceWaterhouse Coopers, Deloitte and Touche, Ernst and Young, and KMPG. The required information for clients of Arthur Andersen is only available for the first year of the sample period (prior to the dissolution of the firm) which does not provide sufficient data to calculate many of the test variables. As such, Arthur Andersen is excluded from the sample.

² The results of the study are robust to categorization of large/small offices based on firm-specific, office-level, median fees.

³ As the designation of an auditor as an industry specialist is specific to a particular client, it is not possible to bifurcate the sample to show similar statistics for specialist and non-specialist audit firms or offices.

Big 4 audit firms into 81 “locales” by geographic area.⁴ As with the national specialist designation, an audit office is described as a local industry specialist in a particular year if, in that year, the audit office has more than 20% of the total audit fees in a 2 digit SIC code in its geographic area.

Panels B and C of table 2 show that clients of industry specialist auditors are larger, more profitable, and have longer relationships with their auditors. In the case of local industry specialists, the clients also tend to have more influence in the auditor-client relationship, compared to clients of non-local specialists. Panel D of table 2 shows the same client characteristics for audit offices which are both national (firm-level) and local industry specialists. Ferguson et al. (2003) and Francis et al. (2005) provide evidence that the effects of auditor industry expertise are most pronounced when the auditor is both the national *and* local expert. The results are similar to those for the local/non-local specialist clients.

[Table 2, panels B -D]

Accrual Quality Descriptive Statistics

The accrual quality measure utilized in the main tests is the absolute value of discretionary accruals, as measured by the modified cross-sectional Jones model. This is the standard measure of accrual quality in the audit quality literature and has been shown to be particularly suitable for detecting earnings management.⁶ (Dechow et al., 1995) Table 3 divides the sample into clients of small/large audit offices, clients of national industry specialist/non-

⁴Typically, past studies have used only a specific city to designate a local-level industry specialist; however, this seems too restrictive. For example, it seems unrealistic to suppose that audit offices in San Francisco, CA and Oakland, CA are participants in two distinct markets and do not compete for the same clients. Using a 25% cut off, rather than 20% of total fees, does not change the substance of the results.

⁶ Hribar and Nichols (2007) show that absolute discretionary accruals are sensitive to operating volatility. As my main tests concern changes in absolute discretionary accruals over a relatively short period of time, it is unlikely that this issue is driving my results.

national industry specialists, clients of local industry specialist/non-local industry specialists, and clients of dual national and local specialists/non-specialists calculating the mean values of absolute discretionary accruals for each group. Large and Small audit offices are designated as in Tables 1 and 2. For each categorization, the difference in accrual quality is statistically significant. Clients of large audit offices have higher values of absolute discretionary accruals than clients of small offices. However, clients of national, local, and dual industry specialist audit firms/offices have lower values of absolute discretionary accruals than clients of non-specialists.

[Table 3]

As the Audit Analytics databases identify the specific office of each accounting firm that issued an audit opinion, as well as the audit and total fees at the audit office level, it is possible to identify a sample of companies whose opinions were issued by different offices of the same audit firm in consecutive years. There are 3,808 such instances in the audit opinion database (representing 3,066 companies) and 1,981 of these switches are within the Big 4 audit firms.⁷ The data in my sample spans the years 2001 – 2009 and covers 75 distinct 2-digit SIC codes.⁸

Table 4, panel A illustrates changes in client characteristics for the sample of companies that switched audit offices, grouped by whether the switch was from a small office to a large one, large to small or between offices of similar size. I use the group of firms that switched between offices of similar size as a benchmark, and compare the changes in absolute discretionary accruals (and later, the changes in synchronicity) for this group of firms to those of the other two

⁷ Only 1,845 have sufficient data for analysis.

⁸ By contrast, over the same time period there were 12,388 instances of companies switches audit firms, with 2,432 of these being between member of the Big 4 audit firms and 1,557 being switches to a Big 4 firm from a non-Big 4 firm (including Arthur Andersen).

groups. For firms switching from a small office to a large office, only the changes in leverage, Z-Score and Client Influence were significantly different from those firms which switched between offices of the same size. For firms switching from a large office to a small one, only the change in Client Influence was significantly different from the benchmark firms. Panel B of table 4 breaks the sample into groups based on whether the switch was to or from a local industry specialist or between offices of the same category. Again, I use the group of firms that switched between offices within the same category as a benchmark. In this case, the only significant difference from the benchmark group is the change in client influence for firms switching from an industry specialist to a non-specialist.⁹ The comparisons in table 4 provide additional support for the assertion that these audit office switches are exogenous to firm performance and for the use of these groups as benchmarks for analysis.

[Table 4]

Univariate Accrual Quality Tests

Utilizing the same subsets from Table 4, based on the nature of the switch, I test the effect of intra-audit firm office changes on absolute discretionary accruals and compare the between-category changes to within-category changes. In table 5, panels A and B, I find that the univariate results for the test of the relationship between the change in audit office size and the change in absolute discretionary accruals are qualitatively consistent with Francis and Yu (2009a) in that switching from a small audit office to a large one is associated with a significant decrease in absolute discretionary accruals, indicating an increase in accrual quality. However,

⁹ In untabulated analysis, I find that the act of “switching” is not significantly correlated with the issuance of shares, modified audit opinions, M&A activity or the incidence of restatements. However, within the sample of intra-firm office switches, following restatements deemed a result of an accounting irregularity (Hennes, et al., 2008), it is more likely for the switch to be from a small office to a large office.

when compared to the change for companies that switched between audit offices of the same size, the difference is not significant.

The univariate results for the test of the relationship between the change in audit office industry specialization and the change in absolute discretionary accruals are less straightforward than those for office size. Based on prior literature, it is expected that switching to an industry specialist audit office would be associated with a decrease in absolute discretionary accruals. As shown in table 5, panels B and C, the changes in absolute discretionary accruals do not differ significantly between the between-category and within-category switches; however, this could be an issue of confounding factors which are not controlled for in a univariate setting.

[Table 5]

To investigate this issue further, I split the sample into two subsets, parsing out those industries for which auditor industry specialization is most likely to be an important factor, represented in panels E and F of table 5. The sample is divided into “high specialization” and “low specialization” subsets based on industries. The “high specialization” subset contains industries which, in practice, tend to be served by specialized audit teams (such as real estate, oil and gas, financial services and healthcare) as well as those typically organized in more complex business models, which are therefore subject to more complex accounting standards for revenue recognition (such as construction and business services)¹⁰. For these “high specialization industries” switching to an industry specialist office from a non-specialist office is associated with a significant decrease in absolute discretionary accruals. The univariate results show a similar decrease in absolute discretionary accruals for the firms switching from specialist to non-

¹⁰ The “high specialization” industries were based on the Fama-French 48 industry groupings and include the following groups: 11, 18, 23-31, 34, 40, 44-47. (Fama and French, 1997)

specialist, however when compared to the benchmark group of companies that switched audit offices within the same category, only the change for those companies switching *to* an industry specialist is significant. This is consistent with audit quality being “sticky” with respect to decreases. While an industry specialist auditor may utilize their additional expertise or apply additional effort to increase audit quality, particularly in the case of a new engagement, non-specialists may be likely to simply follow the audit procedures outlined in the prior year’s audit plan which, in the case of intra-firm audit office switches, would be fully available to them. Overall, the results of these tests indicate that, in these complex industries, switches to industry specialist auditors are associated with significant increases in accrual quality compared to the benchmark of within-category switches. This result is new to the literature, as prior studies have not examined the interaction of accounting complexity and audit quality.

Multivariate Accrual Quality Results

In order to examine further the mixed results of the univariate tests, I regress the change in absolute discretionary accruals on the audit-office characteristics from the previous tables in addition to a set of control variables, chosen for consistency with prior literature.

$$\begin{aligned} \Delta AbsDiscAcc_{i,t} = & \alpha + \beta_1 \Delta Size_{i,t} + \beta_2 \Delta SalesGrowth_{i,t} + \beta_3 \Delta CashFlow_{i,t} + \beta_4 \Delta Leverage_{i,t} \\ & + \beta_5 \Delta ZScore_{i,t} + \beta_6 \Delta MB_{i,t} + \beta_7 \Delta Influence_{i,t} + \beta_8 BigtoSmall_{i,t} \\ & + \beta_9 SmalltoBig_{i,t} + \beta_{10} SpectoNonspec_{i,t} + \beta_{11} NonspectoSpec_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (1)$$

$$\begin{aligned} \Delta AbsDiscAcc_{i,t} = & \alpha + \beta_1 \Delta Size_{i,t} + \beta_2 \Delta SalesGrowth_{i,t} + \beta_3 \Delta CashFlow_{i,t} + \beta_4 \Delta Leverage_{i,t} \\ & + \beta_5 \Delta ZScore_{i,t} + \beta_6 \Delta MB_{i,t} + \beta_7 \Delta Influence_{i,t} + \beta_8 BigtoSmall_{i,t} \\ & + \beta_9 SmalltoBig_{i,t} + \beta_{10} SpectoNonspec_{i,t} + \beta_{11} NonspectoSpec_{i,t} \\ & + \beta_{12} HighSpec_i + \beta_{13} HighSpec * SpectoNonspec_{i,t} \\ & + \beta_{14} HighSpec * NonspectoSpec_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

In the first regression, I find that switching to an industry specialist from a non-specialist has a negative association with absolute discretionary accruals, although the effect is not significant. In the second regression, I introduce a control variable for the high specialization industries, and I also interact this indicator variable with the switching indicator. The sum of the coefficients of the non-specialist to specialist dummy variable and the interaction variable is negative and significant, indicating that the marginal effect of switching to an industry specialist audit office, for a firm in a high specialization industry, is a significant decrease in absolute discretionary accruals. Consistent with the univariate results, this suggests that, in industries where specialized audit expertise is likely to be most important, increases in audit quality are associated with increases in accrual quality. The indicator variables for the office size switches are not significant in either regression. Contrary to the predictions based on Francis and Yu (2009a), controlling for auditor choice, I do not find that audit office size is the dominant factor in determining client accrual quality in this setting.¹¹ In both regressions, the signs of the coefficients on the control variables are consistent with prior literature. Increases in size, sales growth and leverage are associated with increased absolute discretionary accruals. Increases in cash flow are associated with decreased absolute discretionary accruals.

[Table 6]

Stock Return Synchronicity Descriptive Statistics

Consistent with Piotroski and Roulstone (2004), to calculate stock return synchronicity, I regress firm returns on industry and market returns for each firm-year in the sample, beginning three months after the prior fiscal year end, over a twelve month period. The first measure,

¹¹ In untabulated analysis, I repeated the tests in tables 5 and 6 with accrual quality measures based on Dechow and Dichev (2002), Francis, et al. (2005), and Kothari, et al. (2005). The results are consistent with those tabulated.

labeled synch1, is a logarithmic transformation of the R^2 from each firm-specific regression, and is calculated as $\ln\left[\frac{R^2}{1-R^2}\right]$. The second measure, labeled synch2, is simply R^2 .

Table 7 divides the sample into clients of small/large audit offices, clients of national industry specialist/non-national industry specialists, clients of local industry specialist/non-local industry specialists, and clients of dual national and local industry specialist/non-specialists calculating the mean values of the synchronicity measures for each group. For each categorization, the difference in synchronicity is statistically significant. Contrary to the predictions based on prior literature, clients of large audit offices have higher values of stock return synchronicity than clients of small offices. Clients of national, local, and dual industry specialist audit firms/offices all have higher values of stock return synchronicity than those of their non-specialist counterparts.

[Table 7]

Univariate Stock Return Synchronicity Results

As with the tests of accrual quality, I test the effect of intra-audit firm office changes on stock return synchronicity and compare the between-category changes to within-category changes. I find that switching from a large audit office to a smaller one has a significantly negative effect on stock return synchronicity when compared to switching from/to an office of similar size (table 8, panels A and B). The effect of a switch from a small office to a large office is not significantly different from a same-size switch. This is contrary to predictions based on the international literature (Gul et al., 2010; Sami and Zhou, 2008), which suggests that increases in audit quality are associated with increases the firm specific information in returns, and therefore decreases in stock return synchronicity. Given this finding, it may be the case that

large audit offices, while having more depth of experience with SEC clients, stress consistency and uniformity in reporting, rather than focus on firm-specific accounting issues, and thus do not necessarily increase the relative amount of relevant firm-specific information in the financial statements and associated disclosures.

[Table 8]

Examining intra-audit firm switches between local industry specialist and non-specialist offices provides additional evidence. Companies that switch from a non-specialist to an industry specialist audit office experience a significant increase in stock return synchronicity compared to companies that switch between offices within the same category (table 8, panels C and D). Similarly, companies that switch from an industry specialist to a non-specialist office experience a significant decrease in synchronicity when compared to the control group of within-category switches. These findings support the hypothesis that industry specialist auditors facilitate the incorporation of more industry-specific information into stock prices by proposing adjustments or shaping financial statement disclosures such that they are more comparable with other firms in the same industry.

Similar to the analysis of industry specialization and accrual quality, I split the sample into “high specialization” and “low specialization” groups based on industry using the same criterion as with the previous tests (table 8, panels E-H). I find that the industry specialization results only hold for clients in high specialization industries. The changes in synchronicity for the firms in low specialization industries are not significantly different between the three subsets.

Multivariate Stock Return Synchronicity Results

To test my hypotheses in a multivariate setting, I regress changes in synchronicity on indicator variables for switches to/from an industry specialist audit office and to/from a large audit office, controlling for changes in accrual quality, size, leverage, Z score and market to book ratio.

$$\begin{aligned}\Delta Synch1_{i,t} = & \alpha + \beta_1 \Delta AbsDiscAcc_{i,t} + \beta_2 \Delta Size_{i,t} + \beta_3 \Delta Leverage_{i,t} + \beta_4 \Delta ZScore_{i,t} \\ & + \beta_5 \Delta MB_{i,t} + \beta_6 BigtoSmall_{i,t} + \beta_6 SmalltoBig_{i,t} + \beta_7 SpectoNonspec_{i,t} \\ & + \beta_8 NonspectoSpec_{i,t} + \varepsilon_{i,t}\end{aligned}\quad (3)$$

$$\begin{aligned}\Delta Synch1_{i,t} = & \alpha + \beta_1 \Delta AbsDiscAcc_{i,t} + \beta_2 \Delta Size_{i,t} + \beta_3 \Delta Leverage_{i,t} + \beta_4 \Delta ZScore_{i,t} \\ & + \beta_5 \Delta MB_{i,t} + \beta_6 BigtoSmall_{i,t} + \beta_6 SmalltoBig_{i,t} + \beta_7 SpectoNonspec_{i,t} \\ & + \beta_8 NonspectoSpec_{i,t} + \beta_9 HighSpec_i + \beta_{10} HighSpec * SpectoNonspec_{i,t} \\ & + \beta_{11} HighSpec * NonspectoSpec_{i,t} + \varepsilon_{i,t}\end{aligned}\quad (4)$$

In the first specifications in table 9, I exclude the accrual quality measure in order to include all firms in the switching sample which would otherwise have sufficient data for analysis. In the second specification, the sample size is restricted to 509 observations by the inclusion of the accrual quality measure, as the Modified Jones model of measuring discretionary accruals is not typically utilized for firms in financial or regulated industries.

[Table 9]

I find that, in three of the four specifications of the model (columns 1, 3 and 4 of table 9), the marginal effect of switching from a non-industry specialist audit office to a specialist is an increase in stock return synchronicity, while in column 2 the effect is positive but insignificant.

The other “switch-type” indicator variables are not significant at conventional levels.¹² This is contrary to the notions of increased audit quality based on prior literature, which has documented that increases in audit quality are associated with decreases in synchronicity (Gul et al., 2010; Sami and Zhou, 2008). With the exception of the specification in column 2, the designation of firms as being in a “high specialization” industry is not significant in the synchronicity regressions. In order to better understand what is driving these results, I test to see whether the effect of an industry specialist auditor facilitates the incorporation of more industry-level information into returns, relative to firm-level information.

Following Piotroski and Roulstone (2004) I regress current abnormal returns on current and future earnings components.

$$CAR_{i,t} = \alpha + \lambda_1 I_{i,t} + \lambda_2 I_{i,t+1} + \gamma_1 F_{i,t} + \gamma_2 F_{i,t+1} + \beta_1 X + \lambda_3 I_{i,t} * X + \gamma_3 F_{i,t} * X + \lambda_4 I_{i,t+1} * X + \gamma_4 F_{i,t+1} * X + \beta_2 CAR_{i,t+1} + \beta_3 \log MVE_{i,t-1} + \beta_4 \log MB_{i,t-1} + \varepsilon_{it} \quad (5)$$

As in Ayers and Freeman (1997), the industry-level component of annual earnings changes, denoted $I_{j,t}$, is calculated as $\Delta IE_{j,t} - \Delta ME_t$, and the firm-specific component of annual earnings changes, denoted $F_{i,t}$, is calculated as $\Delta FE_{i,t} - \Delta IE_{j,t}$, where:

$\Delta FE_{i,t}$ = firm i 's annual earnings change deflated by beginning market value of equity in year t

$\Delta IE_{j,t}$ = median($\Delta FE_{i,t}$) for all firms in firm i 's 2-digit SIC code in year t

ΔME_t = median($\Delta IE_{j,t}$) in year t

¹² Results using Synch2 as the dependent variable are consistent with those reported.

These earnings components are calculated for years t and $t+1$. I also include indicator and interaction variables (X in equation 4) for auditor characteristics (office size, national industry specialist, local industry specialist, dual national/local industry specialist) in alternate specifications of the model. The standard errors for these regressions are adjusted for clustering by firm.

Table 10 shows the results for the benchmark model are qualitatively consistent with prior literature (Ayers and Freeman, 1997; Piotroski and Roulstone, 2004). For the office size model, I find that the incremental effect of retaining a large audit office on the market's anticipation of one year ahead earnings changes is insignificant; again, this is contrary to the predictions based on prior literature. Francis and Yu (2009a) find that large audit offices provide higher audit quality. If we associate higher audit quality with financial reports that contain more relevant firm-specific or industry-specific information, as stated in Gul et al. (2010), we would expect the incremental effect of retaining a large audit office to be positive.

For the both national industry specialist model and the dual national/local specialist model, the interaction of the industry specialist indicator variable and one year ahead industry-level earnings changes is positive and statistically significant, indicating that for clients of national or dual industry specialists, the market is better able to anticipate industry level earnings innovations. This supports the explanation that industry specialist auditors facilitate the incorporation of industry-level information into returns. The interaction of the industry specialist indicator variables with one year ahead firm-specific earnings changes is positive, but not significant at the 10% level. This is similar to the effect of analyst following, as documented in Piotroski and Roulstone (2004), in that industry specialist auditors improve the incorporation of both firm- and industry-specific future earnings information into returns, but the industry-

specific information is the dominant effect. This result also explains the overall increase in stock return synchronicity, despite increases in the incorporation of firm-specific information. Combined with the results of the tests on stock return synchronicity, these findings are consistent with audit quality, in the form of industry specialization, improving the firm's information environment.

Robustness Tests

Restatements: Francis & Yu (2009b) find that audit office size is negatively associated with client restatements. I examine the incidence of restatements within my sample and find that, of the 714 intra-audit firm office switches in my sample, 96 companies had restatements within +/- 3 years of the switch, with 39 of these restatements occurring prior to the office switch, and 57 in the years following. Following the classification of restatements into those driven by errors vs. irregularities, as in Hennes et al. (2008), there are 19 incidences of restatements related to accounting irregularities within +/- 3 years of an intra-audit firm office switch, 10 of which occurred prior to the switch. While the incidence of a restatement does not appear to be correlated with an audit office switch, either between offices of different sizes or those of different industry specializations, it appears that, among switching firms, in the case where a firm announces a restatement due to an irregularity, the switch is relatively more likely to be from a small office to a large one, rather than in the other direction. There is no difference in correlation between restatements and switches between offices of different industry specialization.

Merger and Acquisition Activity: The inferences in my study are dependent upon the exogeneity of audit office switches to a firm's financial reporting strategy. It might be the case

that a switch could be prompted by a headquarter relocation, which may be related to M&A activity. To alleviate these concerns, in untabulated analysis, I remove all firms from the sample having undergone any M&A activity in the years immediately preceding or following the audit office switch and replicate all of the tests in the study on this subsample of firms. I find the results unchanged.

Access to Capital Markets: To test whether intra-firm audit office switches are related to firms' access to capital markets, I examine the correlation between the incidence of office switches and changes in shares outstanding. I do not find any significant correlation between office size/specialization switches in either direction and changes in shares outstanding. I repeat the analysis with changes in leverage, to address the potential effects of issuance of debt. Changes in leverage do have a small but significant negative correlation with switches from small offices to larger ones. As seen in Table 4, the mean value of changes in leverage differs between the different subsamples within the office size switch sample. As such, I control for changes in leverage in my multivariate tests.

Subsequent Periods: In untabulated analysis, I perform the tests in Tables 5 and 8 utilizing data from periods $t-1$ and $t+1$. I find that the differences in accrual quality between the sample subsets are reduced in year $t+1$ compared to those in t_0 . This is consistent with the effects of auditor tenure mitigating shortfalls in audit quality.

Going Concern Opinions and Material Weaknesses: I also test whether the act of switching audit offices is associated with the nature of the audit opinion. I find no significant correlation between audit office switches and either going concern audit opinions or material weakness disclosures.

Conclusion

Previous research on the relationship between audit quality and financial reporting quality has struggled with the issue of endogeneity of auditor choice. The research setting of intra-firm audit office changes utilized in this study is unique in the literature and provides an opportunity to examine this much-researched relationship in a new light.

The results of this study indicate that audit office size and industry specialization influence audit quality; however office size is not the dominant factor, as has been suggested in prior literature. In addition, the effects of industry specialization vary, depending on the nature of the accounting standards to which firms in an industry are subject. For firms in industries with relatively complex accounting standards or unique reporting requirements, industry specialist auditors are particularly effective in constraining abnormal accruals. These findings are the first of their kind in the audit quality literature. Additionally, I find that auditors play an important role in shaping the overall information environment surrounding their clients. Both large and industry specialist audit offices are associated with increases in stock return synchronicity. Closer inspection reveals that this result is driven not by a lack of firm-specific information, but simply the overwhelming effect of industry-specific information in prices. Industry specialist auditors, in particular, facilitate the incorporation of industry-specific future earnings information into returns, resulting in more informative stock prices.

In summary, the results support the hypothesis that audit quality varies among the different practices offices of the Big 4 audit firms, despite strong economic and regulatory incentives of uniformity. Future research can exploit the intra-firm changes design to gain more

robust insights into the relationship between auditors and clients by isolating the auditor vs. company-specific characteristics which influence financial reporting quality.

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Table 1

Audit Office Characteristics

Variable	Small			Big		
	N	Mean	Median	N	Mean	Median
Annual Office Fees	1507	3,668,222	2,412,000	1488	41,920,232	22,661,631
Total # Clients	1507	6	4	1488	34	18

Table 2, panel A

Firm Characteristics by Audit Office Size

	Small			Big			Difference
	N	Mean	Median	N	Mean	Median	
Total Assets	3927	1316.4214	320.9560	21236	2695.5230	395.4360	1379.1016 ***
Operating Income	3927	49.6356	7.7170	21236	134.0243	6.7335	84.3887 ***
EPS	3756	1.0987	0.4800	20744	2.3861	0.3300	1.2874
ROA	3927	0.0258	0.0780	21236	-0.0164	0.0647	-0.0422 ***
M/B	3690	2.2191	1.8298	20136	3.0095	2.0840	0.7904
Z Score	3652	4.1777	3.3732	20012	4.3613	3.2925	0.1836
Tenure	3927	0.4912	0.0000	21236	0.4935	0.0000	0.0023
Client Influence	3927	0.2258	0.1180	21236	0.0425	0.0153	-0.1833 ***

Table 2, panel B

Firm Characteristics by Audit Firm Specialization

	Non-Nat'l Spec			National Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Total Assets	8844	1446.1872	268.5610	16319	3040.7278	458.9460	1594.5406 ***
Operating Income	8844	58.0585	3.2900	16319	154.8862	9.4830	96.8277 ***
EPS	8655	2.6770	0.2100	15845	1.9220	0.4300	-0.7550
ROA	8844	-0.0604	0.0577	16319	0.0177	0.0714	0.0781 ***
M/B	8425	2.3400	2.0120	15428	3.1824	2.0624	0.8424
Z Score	8344	4.4093	3.3064	15320	4.2783	3.3062	-0.1310
Tenure	8844	0.4371	0.0000	16319	0.5236	1.0000	0.0865 ***
Client Influence	8844	0.0695	0.0191	16319	0.0720	0.0209	0.0025

Table 2, panel C
Firm Characteristics by Audit Office Specialization

	Non-Local Spec			Local Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Total Assets	6754	838.3483	170.6910	18409	3082.7052	520.5810	2244.3569 ***
Operating Income	6754	28.8929	1.4045	18409	154.5937	11.0060	125.7008 ***
EPS	6591	3.0880	0.1000	17909	1.8578	0.4900	-1.2302
ROA	6754	-0.0714	0.0458	18409	0.0128	0.0731	0.0842 ***
M/B	6428	2.5400	2.0126	17425	3.0153	2.0592	0.4753
Z Score	6393	4.2842	3.3620	17271	4.3394	3.2848	0.0552
Tenure	6754	0.4386	0.0000	18409	0.5132	1.0000	0.0746 ***
Client Influence	6754	0.0483	0.0135	18409	0.0795	0.0238	0.0312 ***

Table 2, panel D
Firm Characteristics by Audit Office Specialization

	Non- Specialist			Nat'l*Local Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Total Assets	12366	1271.0900	238.7980	12797	3648.7800	591.9770	2377.69 ***
Operating Income	12366	50.0561	2.9535	12797	189.2682	13.7010	139.21 ***
EPS	12067	3.6215	0.1900	12433	0.7982	0.5500	-2.82
ROA	12366	-0.0480	0.0569	12797	0.0272	0.0755	0.08 ***
M/B	11740	2.5499	2.0012	12113	3.2142	2.0811	0.6643
Z Score	11644	4.3097	3.3393	12020	4.3389	3.2657	0.0292
Tenure	12366	0.4495	0.0000	12797	0.5354	1.0000	0.0859 ***
Client Influence	12366	0.0637	0.0176	12797	0.0782	0.0232	0.0145 ***

Total Assets	The value of total assets at the end of the fiscal year
Operating Income	Operating income after depreciation
EPS	Basic annual earnings per share
ROA	Operating income scaled by lagged total assets
M/B	The ratio of market value of common equity to book value
Z-Score	Altman's Z-score (Altman, 1968)
Tenure	Indicator variable equal to 1 if the client has engaged the same audit office for at least three years.
Client Influence	The ratio of the total fees of an individual audit client to the total annual office revenue for the audit office issuing the audit opinion.

Table 3

Absolute Discretionary Accruals by Auditor Characteristics

	Small Office			Large Office			Difference
	N	Mean	Median	N	Mean	Median	
Abs. Disc. Accruals	3927	0.0535	0.0352	21236	0.0590	0.0373	0.0055 ***
	Non-Nat'l Spec			National Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Abs. Disc. Accruals	8844	0.0637	0.0402	16319	0.0552	0.0354	-0.0085 ***
	Non-Local Spec			Local Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Abs. Disc. Accruals	6754	0.0665	0.0422	18409	0.0551	0.0353	-0.0114 ***
	Non-Specialist			Nat'l*Local Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Abs. Disc. Accruals	12366	0.0634	0.0402	12797	0.0532	0.0343	-0.0102 ***

Table 4

Intra-Audit Firm Office Switches

Panel A	Small to Large		Same size switch		Large to Small	
Variable	N	Mean	N	Mean	N	Mean
Δ Total Assets	175	0.06380 *	459	0.00159	123	-0.01369
Δ Operating Income	169	0.01360	441	0.02120	116	0.06360
Δ Cash Flow	171	0.01182	446	0.01505	117	0.05100
Δ Leverage	175	0.01125 #	454	0.06363 *	123	0.00160
Δ Z-Score	151	-0.57163 #	412	-2.38788 *	102	-1.93606 *
Δ M/B	152	-0.49342	413	6.46295	102	-0.23389
Δ Client Influence	146	-0.39122 *,#	397	0.00665	90	0.33055 *,#

Panel B	Non-Spec to Spec		Same category switch		Spec to Non-Spec	
Variable	N	Mean	N	Mean	N	Mean
Δ Total Assets	116	0.01966	479	0.01326	119	0.00033
Δ Operating Income	116	0.00297	472	0.03865	116	0.04226
Δ Cash Flow	116	0.00513	472	0.01560	116	0.03700
Δ Leverage	115	0.00734	474	0.00970	119	0.08579
Δ Z-Score	108	-0.82015	451	-1.31997 *	111	-3.22257 *
Δ M/B	108	0.88748	451	5.48500	112	2.68912
Δ Client Influence	116	-0.06436 *	479	-0.02406	119	0.06021 *,#

*group mean is significantly different from zero at the 5% level

#group mean is significantly different from the large-large/small-small group mean at the 5% level

Changes in Absolute Discretionary Accruals

By audit office size

Table 5	Small to Big			Same size switch			Big to Small		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel A	150	-0.0098	0.0505	451	-0.0035	0.0576	102	-0.0044	0.0571
t value		-2.38 **			-1.31			-0.78	
Panel B		-0.0063						-0.0009	
t value		-1.27						-0.14	

Changes in Absolute Discretionary Accruals

By audit office industry specialization

	Non-spec to Spec			Same category switch			Spec to Non-spec		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel C	116	-0.0040	0.0546	471	-0.0045	0.0538	116	-0.0079	0.0661
t value		-0.79			-1.83 *			-1.28	
Panel D		0.0005						-0.0033	
t value		0.10						-0.50	

High Specialization Industries

	Non-spec to Spec			Same category switch			Spec to Non-spec		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel E	51	-0.0217	0.0443	139	-0.0058	0.0552	41	-0.0189	0.0703
t value		-3.50 ***			-1.24			-1.72 *	
Panel F		-0.0159						-0.0131	
t value		-2.04 **						-1.10	

Low Specialization Industries

	Non-spec to Spec			Same category switch			Spec to Non-spec		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel G	65	0.0099	0.0581	332	-0.0040	0.0533	75	-0.0019	0.0634
t value		1.37			-1.37			-0.25	
Panel H		0.0139						0.0022	
t value		1.79 *						0.27	

Table 6

Regression of Change in Absolute Discretionary Accruals on Audit Office Changes

	(1)	(2)
Intercept	-0.0047	-0.0048
Δ Size	0.0102	0.0112 *
Δ Sales Growth	0.0096 **	0.0081 *
Δ Cash Flow	-0.0409 ***	-0.0391 ***
Δ Leverage	0.0494 **	0.0529 ***
Δ Z-Score	-0.0001	0.0002
Δ M/B	0.0001	-0.0001
Δ Client Influence	0.0108	0.0113
Big to Small	-0.0027	-0.0038
Small to Big	-0.0009	-0.0005
Spec-to-Nonspec	0.0029	0.0037
Nonspec-to-Spec	-0.0022	0.0200 **
High-spec Industry		0.0005
High-spec * Spec-to-Nonspec		-0.0167
High-spec * Nonspec-to-Spec		-0.0374 ***
Obs.	657	657
Adj. R-square	0.0246	0.0412
	F = 2.51 ***	F = 3.01 ***
Significance levels for two-tailed tests are denoted as:		* < 10%
		** < 5%
		*** < 1%

Table 7

Stock Return Synchronicity by Auditor Characteristics

	Small Office			Large Office			Difference
	N	Mean	Median	N	Mean	Median	
Synch1	9911	-1.6021	-1.3519	22135	-1.4846	-1.2628	0.1175 ***
Synch2	9917	0.2411	0.2056	22157	0.2545	0.22069	0.0134 ***
	Non-Nat'l Spec			National Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Synch1	12545	-1.6497	-1.4542	19501	-1.4381	-1.2026	0.2116 ***
Synch2	12553	0.2333	0.1895	19521	0.2614	0.2313	0.0281 ***
	Non-Local Spec			Local Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Synch1	9322	-1.8288	-1.6401	22724	-1.3946	-1.1667	0.4342 ***
Synch2	9324	0.2138	0.1625	22750	0.2654	0.2378	0.0516 ***
	Non-Specialist			Nat'l*Local Specialist			Difference
	N	Mean	Median	N	Mean	Median	
Synch1	16614	-1.6906	-1.4843	15432	-1.3382	-1.1069	0.3524 ***
Synch2	16622	0.2286	0.1849	15452	0.2739	0.2489	0.0453 ***

Synch1 is a logarithmic transformation of the R^2 from each firm-specific regression of firm returns on market and industry returns, and is calculated as $\ln\left[\frac{R^2}{1-R^2}\right]$. Synch2, is simply R^2 .

Changes in Stock Return Synchronicity

By audit office size

Table 8	Small to Big			Same size switch			Big to Small		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel A	187	0.1345	0.9424	544	0.0832	0.8789	149	-0.2142	1.0135
t value		1.95 *			2.21 ***			-2.58 **	
Panel B		0.0513						-0.2974	
t value		0.65						-3.26 ***	

Changes in Stock Return Synchronicity

By audit office industry specialization

Table 8	Non-spec to Spec			Same category switch			Spec to Non-spec		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel C	156	0.2424	0.9579	550	0.0505	0.8470	174	-0.1558	1.0746
t value		3.16 ***			1.40			-1.91	
Panel D		0.1919						-0.2063	
t value		2.26 ***						-2.32 ***	

High Specialization Industries

Table 8	Non-spec to Spec			Same category switch			Spec to Non-spec		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel E	96	0.3137	0.9974	290	0.1136	0.8850	110	-0.2619	1.1153
t value		3.08 ***			2.19 **			-2.46 **	
Panel F		0.2001						-0.3755	
t value		1.75 *						-3.17 ***	

Low Specialization Industries

Table 8	Non-spec to Spec			Same category switch			Spec to Non-spec		
	N	Mean	Std Dev	N	Mean	Std Dev	N	Mean	Std Dev
Panel G	60	0.1283	0.8873	260	-0.0198	0.7984	64	0.0265	0.9826
t value		1.12			-0.40			0.22	
Panel H		0.1481						0.0463	
t value		1.19						0.35	

Table 9

Regression of Change in Stock Return Synchronicity on Audit Office Changes				
	(1)	(2)	(3)	(4)
Intercept	0.2122	0.2091	0.1627	0.1636
Δ Abs Disc Acc			-1.4923 **	-1.5414 **
Δ Size	-0.1894	-0.1820	-0.1273	-0.1331
Δ Leverage	-0.0967	-0.0901	-0.0586	-0.0626
Δ Z Score	-0.0024	-0.0023	-0.0025	-0.0025
Δ M/B	-0.0021	-0.0021	-0.0013	-0.0012
Big to Small	-0.0051	0.0042	-0.0718	-0.0715
Small to Big	-0.1183	-0.1163	0.1349	-0.1378
Spec to Non-spec	0.0647	0.0162	0.0589	0.1054
Non-spec to Spec	0.1716 *	0.1673	0.2213 **	0.2439 *
High-spec Industry		-2.0039 ***		-0.2521
High-spec * Spec-to-Nonspec		0.1206		-0.1220
High-spec * Nonspec-to-Spec		0.0174		-0.0610
Includes Fama-French industry indicators (not tabulated for parsimony)				
Obs.	586	586	506	506
Adj. R-square	0.0588	0.0560	0.0488	0.0454
	* < 10%			
	** < 5%			
	*** < 1%			

