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沙賓法案後異常審計公費與審計品質之關聯性研究

The Relationship between Abnormal Audit Fees and Audit
Quality after SOX

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Thank you for everyone, especially my advisor Lin, Chan-Jane, my classmates, and Christina.

Abstract

This study re-examines the relationship between abnormal audit fees and audit quality in the period after the Sarbanes-Oxley Act of 2002 (SOX).



After SOX, the audit committee will now be responsible for appointing auditors, approving the compensations and overseeing the audit work. This effectively mitigates the economic bonding between auditors and clients. Also, clients with stronger bargaining power may instead experience a decrease in audit quality, as lower audit fees may mean less effort from auditors.

This study divides abnormal audit fees into positive and negative to measure economic bonding and bargaining power, respectively. Examining firms listed in NYSE and NASDAQ from 2005-2011, the results reveal that audit quality, using absolute discretionary accruals as proxy, has no association with positive abnormal audit fees. This is in contrast with the expectation that higher audit fees should result in better audit quality. On the other hand, higher negative abnormal audit fees leads to lower audit quality, which is consistent with expectations. Also, this paper partitions the sample data into Big N and non-Big N subsamples, with Big N auditors less likely to reduce audit quality if lower audit fees are received.

Keywords: Abnormal audit fees; audit quality; SOX

摘要



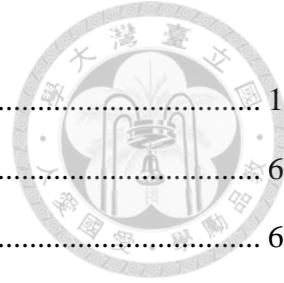
在沙賓法案實施後，審計委員會負責公司之聘請外部審計機構，決定審計公費以及監督查核工作等，因此會計師與客戶之間的經濟依賴可能被降低。另一方面，由於客戶之議價能力較高讓審計公費低於預期，會計師可能減少查核工作而造成較差的審計品質。本研究以 2005 至 2011 年間於 NYSE 及 NASDAQ 的上市公司為樣本，且將異常審計公費分為過高及過低兩部份，作為衡量經濟依賴及客戶的議價能力，而審計品質即以裁決性應計項目作為衡量方法。

本研究結果顯示：過高的異常審計公費對裁決性應計項目的關聯並不顯著，相反，過低的異常審計公費對裁決性應計項目的影響為正相關。此外，對非四大事務所來說，異常審計公費與審計品質並沒有顯著關聯。因此，本研究認為，於沙賓法案落實後，或許因審計委員會負責公司之聘請外部會計師，降低客戶與會計師之間的經濟依賴。但是，過低的審計費用卻有可能使審計品質下降，而此關係只局限於四大事務所。

關鍵詞：異常審計公費、審計品質、SOX

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1. Introduction

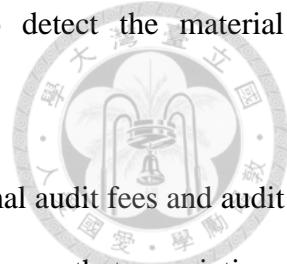
The pricing of audit service is of concern to regulators because it may compromise the independence of auditors. Prior research uses abnormal audit fee instead of actual audit fee to examine whether abnormal audit fees influence the audit quality or whether unexpected audit fees affect client's earning management.

Numerous empirical studies use a variety of audit quality proxies to evidence higher abnormal audit fees associated with lower audit quality in pre-SOX years. For example, Hoitash et al. (2007) suggest that lower scores on audit quality metrics such as the Dechow and Dichev (2002) accrual quality metrics and the absolute value of performance-adjusted discretionary accruals while abnormal total audit fees increase during 2000 to 2003. Choi et al. (2010) also suggest audit quality decrease if positive abnormal audit fees increase using the discretionary accrual metric in the same period. Asthana et al. (2012) suggest that audit quality declined as both positive and negative abnormal audit fees increase prior to SOX, in which both quasi-rents and client bargaining power make auditors succumb to clients' pressure for earning management.

Nevertheless, there are also arguments as to why abnormal audit fees may have encouraged higher quality in performing auditing work. Larcker and Richardson (2004) and Mitra et al. (2009) both suggest that auditors tend to protect their reputations rather than compromising their independence with unexpected audit fees¹. Higgs and Skantz (2006) find that earnings response coefficients are higher in firms with positive abnormal audit fees in 2000 to 2003. Blankley et al. (2012) find that abnormal audit fees and future restatements have a

¹ Larcker and Richardson (2004) find that a positive relationship between positive abnormal audit fees and earnings quality in 2000 and 2001. Mitra et al. (2009) find that positive abnormal audit fees would lead to better audit quality in pre-SOX.

negative correlation after SOX because auditors are more likely to detect the material misstatement with higher audit fees.



In sum, most of studies examine these associations between abnormal audit fees and audit quality with sample of pre-SOX beginning in 2000. Blankley et al. (2012) argue that associations between high audit fees and restatements are not generable after SOX. Thus, this study is motivated to re-examine abnormal audit fees and audit quality in the period of post-SOX because of the following reasons:

First, the association between abnormal audit fees and audit quality is unclear in the period of post-SOX. Since Sarbanes-Oxley Act required rotating partner, prohibited part of non-audit services, and made audit committees responsible for approving audit fees, it is likely that accounting firms' business models, costing structures, and pricing decisions would have significantly changed after SOX (Huang et al. 2009). Abnormally high fees may reflect in higher audit effort that could ultimately result in greater audit quality with audit committees. Meanwhile, abnormally high fee levels may still influence an auditor's independence or judgment through economic bonding that could lead to auditor to acquiesce to earning management. Thus, empirical evidence may help to clarify the association.

Second, the cost of auditing has been high to comply the internal control reports for Section 404 (Krishana et al. 2008), but audit fees have been dropping across the companies after 2007 (McCann 2010). Auditors receiving lower audit fees may lead to reductions of audit effort in an attempt to make engagement profitable. Thus, there is increased potential for audit failure after SOX (Byrnes 2011). Lynn Turner, a former chief accountant at the Securities and Exchange Commission (SEC), states the concern of lower payment to auditor related to lower audit quality.

Third, audit fees and audit quality may vary in Big N and non-Big N clients (i.e., Choi et al. 2008; Huang et al. 2009). Prior literatures may not investigate the effects of abnormal audit fees between Big N and non-Big N firms. Studies show that audit fees are higher for Big N clients in post-SOX because the downfall of Andersen increased the concentration in the market. In contrast, audit fees for non-Big N are expected to be lower because competition within the non-Big N clients audit market remained virtually unchanged (Ghosh and Lustarten 2006). Thus, associations between audit fees and audit quality may differ between Big N and non-Big N firms while the market segment is dissimilar. Hence, the primary goal of this paper is to examine the relationship between abnormal audit fees and audit quality in the period of SOX.

Audit quality may be compromised if the auditor receives abnormally high audit fees from clients, since there is economic bonding (i.e., DeFond et al. 2002). Also, clients with strong bargaining power may be able to pay unusually low audit fees, which may compromise audit quality (Asthana et al. 2012). However, the independent audit committee may mitigate this economic bonding between auditors and clients since audit committees are responsible for appointing the auditors, approving the compensations and overseeing audit work. This is expected to increase the independence of auditors. Hence, higher audit fees are expected to result in better audit quality after SOX. On the other hand, lower audit fees may lead to decreased audit efforts. Since SOX requirements increased the audit workload, auditors that are concerned with the profitability of engagements may lower audit efforts for clients paying lower audit fees due to greater bargaining power, which ultimately reduces audit quality for such clients.

To test the relationship between abnormal audit fees and audit quality in the post-SOX period, this study uses samples from 2005 to 2011 and decomposes audit fees into two components - expected and unexpected. Also, this study divides unexpected audit fees into two

types - positive and negative (Larcker and Richardson 2004; Choi et al. 2010, Asthana et al. 2012). Following Choi et al. (2010), this study uses discretionary accruals as the proxy for audit quality. Additionally, this paper partitions the sample data based on whether the accounting firm is a Big N or non-Big N firm, in order to assess if the association between abnormal audit fees and audit quality differs between these two types of accounting firms. Furthermore, the internal control variable is included in the audit fee model after considering the argument made by Blankley et al. (2012) that the exclusion of an internal control variable may result in an incorrect audit fee model which leads to inaccurate calculations of abnormal audit fees.

Results from this study provide evidences that after the introduction of SOX, audit quality exhibits an insignificant association with positive abnormal audit fees, while negative abnormal audit fees are positively associated to discretionary accruals. These findings imply that establishing independent audit committees are effective in mitigating the economic bonding that exists between auditors and clients in the post-SOX era, which would have compromised audit quality. On the other hand, audit quality may be decreased if there is a below-normal level of audit fees. Moreover, this study finds that Big N firms provide higher audit quality, which is not likely to be reduced by negative abnormal audit fees.

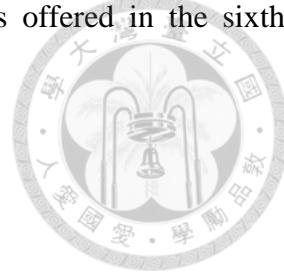
Comparing the differences between this study and prior research, this paper uses discretionary accruals as the proxy of audit quality, whereas Blankley et al. (2012) uses restatements of financial reports. Also, Mitra et al. (2009) and Asthana et al. (2012) consider the impact of SOX and conclude that SOX may mitigate the associations between abnormal audit fees and audit quality since SOX was mandatory². However, this study finds that negative abnormal fees are positively related to discretionary accruals which may be caused by omitting certain variables in the audit fee model during the pre-SOX period (Blankley et al. 2012). In sum, this paper offers two main contributions about the relationship between audit quality and audit fees. First, using only post-SOX samples, this study finds that audit quality declines when negative abnormal audit fees increase. Second, this study also indicates that the price-quality associations differ with auditor size, in which the relationship mentioned in the first point is only valid for Big N clients. This may be caused by different clientele compositions between these two groups of accounting firms.

This study has two main limitations. First, positive and negative abnormal audit fees may be attributable to other unobservable factors besides economic bonding or bargaining power. Second, this study uses discretionary accruals to proxy for audit quality, in which results may be influenced by measurement errors rather than solely a reflection of management behavior.

The remaining parts of this study are organized as follows. The next section discusses prior literatures and the hypotheses. The third section presents the research design. The fourth section describes the sample and results of univariate analyses. The fifth section reports the

²Mitra et al. (2009) find audit quality improved by SOX, in which the positive association between audit fees and earning management become significantly attenuated during post-SOX. Asthana et al. (2012) find that SOX may mitigate the effects of positive and negative abnormal fees to audit quality while they find the increase of positive and negative abnormal audit fees reducing audit quality.

results of multivariate regressions and robust testing. The conclusion is offered in the sixth section.



2. Background and Hypothesis

Generally, the audit fee can be decomposed into the expected audit fee and the unexpected audit fee (e.g., Simunic 1980; Choi et al. 2010; Asthana et al. 2012). For the former, the expected audit fee reflects the cost of audit effort, litigation risk, and the normal profit. Prior research models expected audit fees as a function of observable factors that are common across different companies such as size, complexity and specific risk (e.g., Defond et al. 2002; Choi et al. 2010; Asthana et al. 2012). For the latter, the unexpected audit fee is the abnormal profit or loss for auditors from engagements. If the audit fee model is well-defined, the residual audit fee can reflect as unexpected profit. As some factors are unobservable, thus, omitted from the audit fee model, the residual audit fee metric may measure the abnormal fees with error.

On the one hand, abnormal audit fees could be associated with economic bonding based on previous research. Kinney and Libby (2002) note that “unexpected fee may more accurately be likened to attempted bribes.” Choi et al. (2010) and Asthana et al. (2012) both suggest that positive abnormal audit fees can better capture associations between economic rent and audit quality. On the other hand, Asthana et al. (2012) argue that abnormal audit fees are related to client bargaining power, in which negative abnormal audit fees reflect billing concessions granted by the auditors.

2.1 Positive Abnormal Audit Fees

According to previous studies (DeAngelo 1981a, 1981b), client-specific quasi-rents are created by costs of audit start-ups and clients switching auditors, such that auditing services are

priced at a level in excess of the avoidable cost. Client-specific above-normal audit fees can decrease auditor independence and increases the likelihood of acquiescence to earnings management (DeAngelo 1981a, 1981b). Auditor could compromise audit integrity if the expected gain exceeds the expected loss, that is, positive abnormal audit fees.

With respect to a specific client, the positive abnormal audit fee reflects as economic bonding that is an incentive for auditors to compromise the earning management. Frankel et al. (2002) suggest that auditors are willing to acquiesce to client pressure including earning management when the unexpected audit fee generates economic rents. Dye (1991) also suggests that audit quality is impaired while auditors are overpaid by clients. Choi et al. (2010) and Asthana et al. (2012) both find that auditors are not likely to resist the management to engage in opportunistic earnings manipulations with unusually high audit fees. However, there are arguments that auditors may tend to protect their reputations rather than compromising their independence with higher audit fees (Larcker and Richardson 2004, Higgs and Skantz 2006, Mitra et al. 2009).

2.2 Negative Abnormal Audit Fees

Bargaining power between clients and auditors also influences the price of auditing service. With more bargaining power, client can ask for a lower price. Prior negotiation literature (Pruitt and Carnevale 1993) suggests that stronger side expects more billing concessions when negotiators differ in bargaining power. Cashterella et al. (2004) provide evidences of charging lower audit fees to clients with greater bargaining power.

Negative abnormal audit fees may reflect the billing concessions granted by auditors that relate to the ability of the auditor to endure the pressures from a client. Barnes (2004) suggests

that audit quality may decrease as client bargaining power increases. Also, Asthana et al. (2012) show that highly-influential clients may undermine audit quality because auditors are not able to use a negotiating strategy that weakens the advantage held by a client with stronger power of bargain. The summarization of previous literatures of abnormal audit fees refers to Table 1.

2.3 Impact of SOX

With the passage of the Sarbanes-Oxley corporate-reform legislation in the wake of corporate scandals, several prior literatures report on the influence of these new regulations on both audit pricing and audit quality (Ghosh and Lustgarten 2006; Choi et al. 2008; Ghosh and Pawlewicz 2009; Huang et al. 2009)³. Hence, there is a reason to expect higher audit quality as positive abnormal audit fees increase during post-SOX.

Prior to SOX, it is the company's management that makes decisions on selecting the auditor and dealing with the audit fee. This meant that managers could offer higher compensation to auditors and pressure them to acquiesce in earnings manipulations (DeFond 2002). With SOX⁴, the appointment and compensation of auditors are now the responsibilities of the audit committee. Management can no longer directly pressure auditors to acquiesce for

³ Ghosh and Lustgarten (2006) hypothesize that fee discounting is more intense among small audit firms than among large audit firms and find that fee discounting is expected to continue for small auditors for the post-SOX period because SOX did change the degree of competition among small auditors. Choi et al. (2008) and Ghosh and Pawlewicz (2009) suggest that audit fees increase monotonically as the enforced legal liability improved by SOX. Huang et al. (2009) argue that the strategy of pricing for new clients in Big N firms differs dramatic after SOX. In addition, Mitra et al. (2009) provide evidence that earning management may not be related to unexpected audit fees in post-SOX years.

⁴ SOX section 301 states that audit committee "shall be directly responsible for the appointment, compensation, and oversight of the work of any registered public accounting firm employed" and CPA firms "shall report directly to the audit committee." Also, SOX rules that "each member of the audit committee of the issuer shall be a member of the board of directors of the issuer, and shall otherwise be independent."

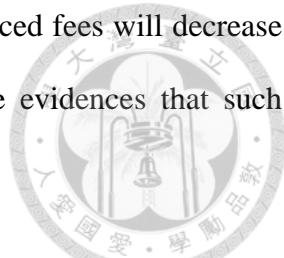
earning management by increasing audit fees or with the threat of dismissal. The economic bonding between auditors and clients may hence be mitigated by establishing audit committees. Carcello and Neal (2000, 2003) show that independent audit committees can counteract dismissal threats made by the management during a highly contentious situation involving management and auditors. In other words, the audit committee can shield the auditor from management pressure when there is a request to complete the audit quickly, or to accept management representations without adequate corroborating evidence, or to limit the audit scope.

As such, this will strengthen the link between audit fees and audit quality. Auditors receiving increased fees will put in more effort to correctly identify the nature of audit risks and adjust substantive testing (Blankley et al. 2012). Thus, this study expects a positive association between positive abnormal audit fees and audit quality.

H1a: There may be positive association between positive abnormal audit fees and audit quality in post-SOX.

On the other hand, audit quality may decline if audit efforts are lower than normal since SOX guidelines require more audit work to be performed. Lower audit effort may be caused by reduced audit fees. Hence, clients with strong bargaining power paying abnormally low audit fees may result in a decrease in audit effort (Bedard and Johnstone 2004), which affects the audit quality for these clients. In the period of post-SOX, auditor may be under pressure to audit in an efficient manner in order to maintain profit when receiving lower-than-normal audit fees (Blankley et al. 2012). For these considerations, an auditor may tend to over-rely on client controls and inappropriately reduce substantive testing. Potential earnings manipulations may go

undetected. Lynn Turner, former Chief Accountant at SEC states that reduced fees will decrease the level of work they need to perform. Blankley et al. (2012) provide evidences that such situations can lead to future restatements after SOX is made mandatory.



In contrast, bargaining power between auditors and clients may be more balanced with the presence of an independent audit committee (Abott et al. 2003). By reducing the threat of auditor dismissal, an independent audit committee could increase the auditor's relative bargaining position during audit fee negotiations. This change in relative bargaining position may diminish the degree of negative abnormal audit fees.

Hence, there is an empirical question of whether negative abnormal audit fees reduce the audit quality after SOX. This study expects audit quality to be reduced while the auditor receives negative abnormal audit fees.

H1b: There may be negative association between negative abnormal audit fees and audit quality.

2.4 Impact of Auditor Size

The association of abnormal audit fees and audit quality may be different between Big N auditors and non-Big N auditors. Prior studies find that Big N auditors may charge a premium for providing a superior level of audit assurance (e.g., Craswell et al. 1995; Simunic and Stein 1996). Since SOX requires an increase in audit workload to provide a higher quality of audit service, Big N auditors are expected to charge higher audit fees than non-Big N audit firms (Ghosh and Pawlewicz 2009). Ghosh and Lustgarten (2006) find that the practice of fee

discounting is more commonly found within small auditors because competition among small auditors is more intense than larger auditors. Hence, smaller auditors are more likely to reduce fees to attract new clients after SOX. Choi et al. (2008) find that audit fees for Big N auditors increase when there is a higher legal liability after SOX. Additionally, DeAngelo (1981) argues that accounting firm size is a proxy for auditor quality, in which larger accounting firms are less likely to compromise their independence than smaller accounting firms. Mitra et al. (2009) suggests that the audit quality of Big N firms may be improved with SOX, in which abnormal audit fees are less likely to impact the audit quality.

Numerous empirical studies find evidence suggesting that Big N auditors are able to provide higher-quality audits than non-Big N auditors (i.e., Khurana and Raman 2004; Behn et al. 2008). Larger offices, availability to more resources or industry expertise may be possible reasons. Francis and Yu (2009) document that larger audit offices provide higher audit quality because a large office has more experience in dealing with public companies. Blankley et al. (2012) document that Big N auditors are willing to increase effort to detect the nature of audit risks and adjust testing when receiving higher audit fees. Hence, positive abnormal audit fees could result in a higher increase in audit quality for Big N firms than for non-Big N firms.

H2a: Positive abnormal audit fees are less likely to increase the audit quality for non-Big N than Big N clients.

Similarly, Big N firms are less likely to be affected by receiving negative abnormal audit fees, as compared to non-Big N firms. Thus, negative abnormal audit fees are less likely to decrease audit quality for Big N firms than non-Big N firms.

H2b: Negative abnormal audit fees are less likely to reduce the audit quality for Big N than non-Big N clients.



3. Research Design

To examine how economic bonding and bargaining power affect audit quality, this study adopts audit fee model widely used in prior literature to compute the abnormal audit fees. Following Asthana et al. (2012), abnormal audit fees are divided into positive and negative groups to measure economic bonding and bargaining power, respectively. Because audit quality is unobservable, this study uses client's earnings quality to proxy for audit quality. Following Choi et al. (2010), this paper uses discretionary accruals to measure earnings quality.

3.1 Audit fee model

Based on previous literature (e.g., DeFound et al. 2002; Whisenant et al. 2003; Francis and Wang 2005; Krishana et al. 2005; Ghosh and Pawlewicz 2009; Choi et al. 2010; Blankley et al. 2012; Fung et al. 2012), this study employs an audit fee model below to estimate expected audit fees:

$$\begin{aligned}
 LAF = & \alpha_0 + \alpha_1 LTA + \alpha_2 LBS + \alpha_3 FTAX + \alpha_4 CURRENT + \alpha_5 INVREC + \alpha_6 LEVE \\
 & + \alpha_7 LIQUID + \alpha_8 LOSS + \alpha_9 ROA + \alpha_{10} CITY + \alpha_{11} LOFFICE + \alpha_{12} SCALE \\
 & + \alpha_{13} BUSY + \alpha_{14} GC + \alpha_{15} IC + \alpha_{16} LDELAY \\
 & + \text{industry and year dummies} + \varepsilon
 \end{aligned} \tag{1}$$

Consistent with prior research (i.e., Simunic 1980; Choi et al. 2008), this audit fee model includes variables to measure clients' size, complexity, audit risks, auditors' characteristics and

others. *LTA* is added to control for client size and predicted to have positive relations because the demand for audit services increase with firm's size. *LBS* and *FTAX* are included to measure clients' complexity. *LBS* is logarithm number of firm's business segment reported in Compustat database. *FTAX* is 1 if a client has foreign tax in current year, 0 otherwise, following Choi et al. (2010). Both above variables are expected to be positive because auditors charge higher audit fees with more complexity. Moreover, *CURRENT*, *INVREC*, *LEVE*, *LIQUID*, *LOSS* and *ROA* are added to control for audit risks. *CURRENT* is current assets divided by total assets. *INVREC* are sum of inventory and receivables to total assets, respectively. *LEVE* is a variable of firm's leverage. *LIQUID* is current assets divided by current liabilities. *LOSS* is a dummy variable that coded 1 if client has a negative net income in current year, 0 otherwise. *ROA* is calculated income before extraordinary items by total assets. Since auditors charge higher fees for risky clients, the expectation of coefficients of *CURRENT*, *LEVE*, *INVREC* and *LOSS* are positive, whereas those of *LIQUID* and *ROA* are negative.

Prior studies (e.g., Francis and Yu 2009; Choi et al. 2010; Reynolds and Francis 2001) argue that local offices are the primary units of decision-making and city offices are better for analyses of audit outcomes than national offices. This model, therefore, includes *CITY* and *LOFFICE* to control for auditor characteristics (Fung et al. 2012⁵). *CITY* measures the city specialization in auditors. *LOFFICE* is as log of annual office fees. Both variables are predicted to be positive related to audit fees since industry expertise and larger office size providing superior quality with higher audit fees (Francis et al. 2005; Fung et al. 2012). On the other hand, larger office can lead to scale economies that result in lower audit fees. To control for this effect, this study includes *SCALE* and expects a negative relation with audit fees. *SCALE* is measured as

⁵ Fung et al. (2012) find that coefficient of city specialization is positively related to audit fees and becomes larger in post-SOX era. Thus, including *CITY* could provide more complete audit model in period of post-SOX.

percentile rank of the city-industry number of audit clients for each audit firms. Following prior research (i.e., Francis and Wang 2005; Choi et al. 2010; Krishnun et al. 2011; Carson et al. 2012; Blankley et al. 2012), this study adds *BUSY*, *GC*, *LDELAY* to measure audit efforts. *IC*, measured as number of internal control weakness, is included in audit fee model since Blankley et al. (2012) argue that results of these studies reflect the presence of an omitted variable in pre-SOX era. Also, studies find that audit fees are positively correlated to control weaknesses within clients (Raghunandan and Rama 2006; Hoitash et al. 2008; Hogan and Wilkins 2008). Missing internal control variable may provide an incorrect audit fee model that leads to lower expected audit fees to calculate abnormal audit fees. In turn, the audit fee model may be more accurate to measure the abnormal audit fees in post-SOX period with internal control report. *BIG* is measured the Big N audit fees premium. Finally, this model includes variables of industry indicator, following Ashbaugh et al. (2003, footnote 7) and Krishnun et al. (2011, footnote 12) and the year variables indicator to control for industry and year difference.

The abnormal audit fee is calculated as the actual fee paid by the client minus the expected audit fee. The difference is deflated by the total engagement fee paid to auditors in order to measure the percentage of abnormal audit fees. Then, abnormal audit fees (*ABAFFEE*) are divided into positive and negative. If *ABAFFEE* are larger than zero, then positive abnormal audit fees are defined as *POABAFFEE*, and zero otherwise. If *ABAFFEE* are less than or equal zero, then negative abnormal audit fees are defined as $|NEABAFFEE|$, 0 otherwise. This separation helps to explain the specific relationship of abnormal audit fees with the audit quality (Asthana et al. 2012).

3.2 Discretionary Accruals Model

Based on prior studies (e.g., Balsam et al. 2003; Francis and Yu. 2009; Choi et al. 2010; Ashana et al. 2012), this study uses discretionary accruals to represent a measurement of manager's opportunistic accounting policy choices⁶. Since this study is not looking at specific managerial incentives, the absolute value of discretionary accruals is used in the following tests.

To obtain the discretionary accruals, this study considers two different measures of discretionary accruals (Choi et al. 2008; 2010). The first discretionary accruals are measured by applying the cross-sectional modified Jones model with performance-adjusted (Kothari et al. 2005), deflated by lagged total assets and estimated by year and for each industry. Following Hribar and Collins (2002) and Asthana et al. (2012), the total accrual (*TACC*) is the difference between income before extraordinary items and cash from operations, and deflated by lagged total assets (*LagAT*). Thus, the model to estimate discretionary accruals is:

$$TACC/LagAT = \beta_0 + \beta_1 [1/LagAT] + \beta_2 [\{\Delta Sales - RECCH\}/LagAT] + \beta_3 [PPEGT/LagAT] + \beta_4 ROA_{t-1} + \varepsilon \quad (2)$$

where data are collected from Compustat database, *LagAT* is lagged client's total assets. $\Delta Sales$ is change in firms' revenue; *RECCH* is the change in accounts receivables; *PPEGT* is property plant and equipment (gross total); ROA_{t-1} is lagged return on assets calculated as net income before extraordinary items of prior period divided by lagged total assets⁷. The residual from Equations (2) is the first measure of discretionary in this paper.

Next, following Choi et al. (2008; 2010), the second discretionary accruals is calculated from the model of Ball and Shivakumar (2006), which controls for the asymmetric timeliness of

⁶ The discretionary accruals at a low level represent that clients' earnings have higher quality (Francis and Yu 2009).

⁷ This study uses alternative performance control, following Francis and Yu (2009) and Asthana et al. (2012), such as operating income after depreciation and current ROA, and those results are robust to this alternative definition of incomes.

accruals in recognizing economic gain and loss. This study estimates following equation for each industry in each year. The model is below:

$$\begin{aligned}
 TACC/LagAT = & \beta_1 + \beta_2[1/LagAT] + \beta_3[\{\Delta Sales - RECCH\}/LagAT] \\
 & + \beta_4[PPEGT/LagAT] + \beta_5[CFO/LagAT] + \beta_6 DCFO + \beta_7[(CFO/LagAT) \\
 & * DCFO] + \varepsilon
 \end{aligned} \tag{3}$$

where CFO represents cash flows from operation; $DCFO$ is a dummy variable that equals 1 if CFO is negative, and 0 otherwise. The measure of discretionary accruals is the difference between actual accruals and the fitted values of the accruals from Equation (3). Further, the absolute value of discretionary accruals from Equation (2) and Equation (3) are defined as $ADACC1$ and $ADACC2$, respectively.

3.3 Model for the Association between Abnormal Audit Fees and Audit Quality

To examine the relation between accruals and abnormal audit fees, this study uses the following model (e.g., Mitra et al. 2009; Choi et al. 2010; Asthana et al. 2012):

$$\begin{aligned}
 ADACC = & \alpha_0 + \alpha_1 POABAFFEE + \alpha_2 NEABAFFEE + \alpha_3 LTA + \alpha_4 GRSALES + \alpha_5 BM \\
 & + \alpha_6 CFO + \alpha_7 SDSALES + \alpha_8 SDCFO + \alpha_9 LEVE + \alpha_{10} LOSS + \alpha_{11} LAGTA \\
 & + \alpha_{12} LAGROAt + \alpha_{13} ISSUE + \alpha_{14} IC + industry and year dummies + \varepsilon
 \end{aligned} \tag{4}$$

where, $ADACC$ is absolute discretionary accruals. $POABAFFEE$ is positive abnormal audit fee and $NEABAFFEE$ is the negative abnormal audit fees, both are test variables in this model. This study expects $POABAFFEE$ to be negatively related to $ADACC$, and $NEABAFFEE$ is expected to be positively related to $ADACC$.

This model adds LTA , $GRSALES$, BM , CFO , $SDSALES$ and $SDCFO$ to control for firm-specific operating characteristics (e.g., Francis and Yu 2009). LTA is included to control for size-

related effects. *GRSALES* is the annual growth in sales deflated by prior years' beginning assets (Menon and Williams 2004). *BM* is book-to-market ratio in current year. *CFO* is used to proxy for firm performance (Kothari et al. 2005). This model includes *SDSALES* and *SDCFO* as volatility of sales growth and volatility of cash flow operations, respectively, to control for their effect on earning quality (Hribar and Nchols, 2007).

Furthermore, *LEVE* and *LOSS* are included to measure the effect of debts and financial distress. *LEVE* is positively related to *ADACC* as found in prior studies (DeFond and Jiambalvo 1994; Becker et al. 1998), whereas *LOSS* is negatively associated with accruals quality. *LAGTA* is lagged total accruals and is included to control variations in the reversal of accruals following Choi et al. (2010). *LAGROA* is previous year's return on assets for controlling prior performance. *ISSUE* is dichotomous variable which coded 1 if the company was involved in significant financing activities, 0 otherwise (Ashbaugh et al. 2003), and expected to be positive coefficient to *ADACC*. Doyle et al. (2007) suggest that earnings quality may be a function of the quality of the firms' internal control. Therefore, *IC* is added to control for the effect of firm's internal control quality. *BIG* is control for auditor size. Finally, this model also includes variables of 12 industry indicator and the year variables indicator to control for industry and year difference.

To examine hypothesis, this study separates the sample into Big N clients and Non-Big N client subgroups. This study uses these subsamples to calculate the abnormal audit fees separately for testing the associations between abnormal audit fees and audit quality in these two market segments. All of variables used in various tests are summarized in Appendix A.

3.4 Sample

Panel A of Table 2 indicates the procedures of observation selections. The sample covers the seven-year from 2005 to 2011 based on 2012 Audit Analytics and Compustat database. First, this study starts by all of U.S. public listed companies available in Audit Analytics with 38,586 firm-year observations including Big N and non-Big N clients. Next, consistent with prior researchers (e.g., Franks and Yu 2009; Choi et al. 2010; Ashana et al. 2012; Blankley et al. 2012), 11,617 firm-year financial (SIC codes 6000-6900) observations and 1,821 firm-year utility (SIC codes 4400-4900) are excluded. Foreign filers are also excluded because audit fee function may depend upon their country of operations. This study further eliminates firms without internal control reports, paying no audit fees and paying audit fees to multiple audit firms and results in a total of 13,689 observations.

Next, 3,188 firm-year observations with missing data in Compustat database are excluded for estimating regressions. The remaining firm-year observations are 11,501 for fiscal years 2005 through 2011 with 10,040 for Big N and 1,461 for non-Big N clients, respectively. Additionally, this study winsorizes all continuous variables at the 1 and 99th percent levels to reduce the influence of extreme observations⁸.

Panel B of Table 2 shows that the industry composition for the two subsamples is similar. Consistent with Krishnan et al. (2011), Durable manufacturing industry is the major part in this distribution for both subsamples, followed by Computers and Retail industry.

⁸ This study also estimates equations without winsorizing, in which these results lead to consistent conclusions.

4. Descriptive Statistics and Correlations

4.1 Descriptive Statistics

Panel A of Table 3 presents the descriptive statistics for the full samples. The magnitude of absolute discretionary accruals (both *ADACCI* and *ADACC2*) for full sample is, on average, about 7 percent of lagged total assets. *POABAFEE* of full sample has mean of 0.12 which indicates clients pay 12 percent more than expected audit fees on average. On the other hand, the variable of *NEABAFEE* has mean of 0.19 which means, on average, clients pay 19 percent lower than expected audit fees⁹. These may implicate that companies are granted more bill concession rather than paying higher-than-expected audit fees.

Comparing with Big N and non-Big N firms, the auditor size and clientele are significantly different in auditor types. As shown Panel B, the mean of *ADACCI* (*ADACC2*) for Big N is significantly lower than non-Big N auditors for -0.02 (-0.03). Additionally, *POABAFEE* for Big N firms is less than non-Big N firms of -0.01 ($t = -1.87$), whereas *NEABAFEE* is indifferent. With respect to the audit fee determinants, the client of Big N is significantly larger size (*LAT*) than non-Big N clients of 1.90 ($t = 53.32$). In addition, Big N clients is more leverage (*LEVE*) and profitable (*ROA*). As expected, Big N accounting firms have more city-level industry expertise (*CITY*), larger office size (*LOFFICE*) and economic scales (*SCALE*) than for Big N accounting firms for 0.38, 2.97, and 0.20 ($t = 43.61$, 75.67 and 29.41), respectively. Also, Big N accounting firms charge more audit fees (*LAF*) than non-Big N of 1.16 ($t = 50.41$). Finally, the grand mean of *BIG* is 0.87. This means that 87 percent of the firms in the whole sample are audited by one of the Big N auditors.



⁹ The significant different mean between *POABAFEE* and *NEABAFEE* may be caused by abnormal audit fees deflated by total engagement fees. Thus, this study uses the residual values from audit fees model to measure *POABAFEE* and *NEABAFEE*, and finds similar mean of *POABAFEE* and *NEABAFEE*.

4.2 Correlation Matrix

Table 4 reports Pearson correlation matrix for the variable in Equation (1) and Equation (4) with significance level indications. Correlations of Equation (1) for full sample are presented in Panel A. *LAF* is highly correlated to *LAT* (0.82) and all correlations between independent variables are less than 0.61 except those correlations such as between *LOSS* and *ROA* (0.68), between *LOFFICE* and *SCALE* (0.64). For the concern of multicollinearity, regression analyses are measured by the variance inflation factor (VIF) values. These results indicate that none of the VIF values are high enough to cause such a problem¹⁰.

Panel B reports the correlation of variables in the Equation (4). The measures of absolute discretionary accruals (*ADACC1* and *ADACC2*) are highly correlated to each other. Both *ADACC1* and *ADACC2* are insignificantly correlated to *POABAFEE* of 0.01, but *NEABAFEE* is significant correlation of 0.04. Also, two measures of discretionary accruals are significantly related to all control variables that suggest the need to control for their effects in this model. For example, firms are associated with lower level of discretionary accruals when firms with larger size of assets (*LAT*), high cash flow (*CFO*) and lower operating volatility (*SDCFO*). Among independent variables, except *CFO* and *LAGROA* (0.68), the correlation with other independent variables is less than +/- 0.5¹¹.

¹⁰ This study also uses the variance inflation factor (VIF) to test the audit fee model and discretionary accruals model in both Big N sample and non-Big N sample. These results suggest that none of the VIF values are high enough to cause multicollinearity.

¹¹ This model is also measured by the variance inflation factor (VIF) values to examine potential multicollinearity problem. Though not reported, none of the VIF values are high enough to cause such a problem.

4.3 Estimation of the Expected Audit Fee Model

The regression results of audit fee model are presented in Table 5. As expected, the explanatory power from this model is very high with the adjusted R^2 of about 81 percent for using full sample. Also, Big N and non-Big N sample have high power with 79 percent and 72 percent, respectively. These strongly suggest that audit fee determinants explain a significant portion of the variations in audit fees, hence, the estimated parameters of audit fees model can be sued reliably for calculating abnormal audit fees.

With respect to the variables in Equation (1), it is worth noting the following. First, all individual coefficients for fee determinants in full sample are highly significant with predictions, except *BIG* (-0.124, $t=-3.617$). Choi et al. (2010) suggest that one possible reason about this inconsistency may be caused by high correlation between *LOFFICE* and *BIG* with 0.61¹². Second, *GC* is insignificantly related to *LAF* in Big N sample while *CITY* and *BUSY* are insignificant in non-Big N sample. Third, *IC* is significantly positively associated with audit fees consistent with prior research (i.e., Blankley et al. 2012). The result further supports the need for an internal control proxy in models evaluating audit fees and implies that previous research examining the between audit quality and audit fees without an internal control proxy may have suffered from omitted variable bias.

Using the estimated coefficients of audit fee model, this study computes the fitted values of audit fees as expected audit fees and use the difference between actual audit fee and expected audit fees deflated by total engagement fees as abnormal audit fees. Among 10,040 (1,461) observations of Big N (non-Big N) accounting firms, 5,105 (754) observations are classified as

¹² Choi et al. (2010) split the total sample into Big N and non-Big N to check this inconsistency and find same result between office size and audit quality in both subsamples. This study also re-estimates the Equation (1) and (4) without variable *LOFFICE*, and the results are similar.

having positive values, whereas the remaining 4,935 (707) observations are classified as having negative values.



5. Results

5.1 Discretionary Accruals Model

Table 6 presents the results of estimating Equation (4) with full sample and two subsamples (Big N and non-Big N). In section A, *ADACCI* is used as the dependent variable, while *ADACC2* is used in Section B. First column (i.e., A1 and B1) in both sections indicates the result of full sample. Big N and non-Big N subsamples are reported in second (i.e., A2 and B2) and third column (i.e., A3 and B3), respectively. The adjusted R^2 for all regressions are over 23 percent.

For the results of full sample (i.e., A1), 10 of the 11 control variables are significant at 5 percent level or better. *GRSALES*, *BM*, *CFO*, *SDSALES*, *SDCFO*, *LOSS*, *ISSUE* and *IC* are significantly positive; *LAT*, *LAGROA* and *BIG* are significantly negative. Thus, for instance, firms with more sales growth, cash from operations, volatility of sales and cash and internal control weakness are more likely to have higher earning management. In contrast, firms with larger size and audited by Big N are not likely to control earnings.

In both sections, coefficients of *POABAFEE* are insignificant associated with *ADACC* that is inconsistent with prediction. Also, this result is inconsistent with Asthana et al. (2012) that positive abnormal audit fees are negatively related to discretionary accruals. The inconsistency may be attributable to an omitted variable of internal control quality in audit fee model (Blankley

et al. 2012). In addition, *NEABAFFEE* are positively related to *ADACC* at less than the 1 percent level, which coefficient in Column (A1) and (B1) both are around 0.01. These indicate that, all else equal, a one-decile increase in negative abnormal audit fees is associated with about 1 percent increase in discretionary accruals. Further, to obtain more insight into these results, this study partitions sample into two subsamples, one with income-increasing accruals denoted as the *DACC⁺* subsample and the other with income decreasing accruals denoted as the *DACC⁻* subsample, reported in Panel B and Panel C, respectively. When *DACC⁺* is used as the dependent variable, the coefficient of both *POABAFFEE* and *NEABAFFEE* are significantly positive in full sample. However, *POABAFFEE* is positively related to *DACC⁻* suggesting that higher audit fees may reduce the earning management of income decreasing, whereas *NEABAFFEE* is negative associated with *DACC⁻*. Overall, these results from regressions do not support hypothesis H1a but H1b. They may imply that, after SOX, the economic bonding may diminish through the independent audit committee. Also, auditors are likely to reduce audit effort that fail to detect clients' earning management while receiving abnormally low audit fees.

Moreover, as shown in Column (A2) and (B2), the results from regressions of Big N clients indicates that coefficient of *POABAFFEE* is insignificantly associated with *ADACC*, but *NEABAFFEE* is positively related to *ADACC* at least 0.05 significant level. Column (A3) and (B3) report the results of non-Big N clients that both *POABAFFEE* and *NEABAFFEE* are insignificant related to *ADACC*. Additionally, the coefficient of *POABAFFEE* is positively related to *DACC⁺* but negatively related to *DACC⁻* for Big N clients; meanwhile, all coefficients of *POABAFFEE* and *NEABAFFEE* are insignificant for non-Big N clients. These conclude that economic bonding for non-Big N clients may be diminished by audit committees as well as Big N although the results do not support H2a. Additionally, this study finds no associations that clients with greater

bargain power for non-Big N auditors are not likely to impair audit quality. This may be caused by different clienteles between Big N and non-Big firms.

Furthermore, Panel D reports that *NEABAFFEE* is positive and significant as predicted while the term of interactions of *NEABAFFEE* * *BIG* is negatively related to *ADACC1*. This may support H2b that Big N firms are less likely to reduce audit quality than non-Big N firms if clients pay lower audit fees.

5.2 Additional Testing

To convince the result not driven by any bias or model misspecification, there are several tests for robustness below.

Consistent with Choi et al. (2010) and Asthana et al. (2012), this study re-estimates Equation (4) using different measure of abnormal audit fees. First, since total engagement fees including both audit fees and non-audit service fees, abnormal audit fees are measured by difference between actual audit fees and expected audit fees in order to avoid the scaling of abnormal audit fee by the total engagement fees from the specific client that may introduce inflation (deflation) of the same numerator for smaller (larger) non-audit service. In Panel A of Table 7, the coefficient of *NEABAFFEE* for full sample and Big N firms continues to be positive and significant at a 0.05 level with discretionary accruals measurement (both *ADACC1* and *ADACC2*), and *POABAFFEE* remains insignificant. Next, the Panel B represents the abnormal audit fees deflated by actual audit fees instead of total engagement fees following Choi et al. 2010¹³. The results of using these alternative measures of abnormal audit fees are qualitatively similar. Finally, to capture the relative profitability of the engagement to the opining audit office

¹³ This study also uses the abnormal audit fees deflated by expected audit fees rather than actual audit fees and arrive at similar conclusions.

this study uses the measure of abnormal audit fees from Asthana et al. (2012)¹⁴. The results remain similar with full sample and non-Big N sample.

Second, to consider whether the discretionary accruals model of Kothari et al. (2005) differs in performance control, this paper adopts several proxies for this control. Following Francis and Yu (2009), the performance control uses operating income after depreciations because it excludes non-operating income, special items, and other items that are of a more discretionary nature. These results are robust to this alternative definition of income in Panel C. As a further sensitivity, this testing also examines net income although this measure might be noisier since it includes both extraordinary and non-operating items. However, when using net income as control performance the results are comparable. Thus, the conclusions do not change qualitatively by different proxies.

Third, to check whether these results remain similar when the sample consists of a cleaner and more homogenous class of audit clients, this testing repeats the main analyses after removing samples of non-accelerated filers, experience recent auditor changes and restated financial reports. As presented in Panel D, although the sample size decreases to 8,948 and 7,898 for full sample and Big N sample, respectively. *NEABAFFEE* is still positively related to *ADACCI* and *ADACC2* at 0.05 significant level or better, while *POABAFFEE* remains insignificant with audit quality. In addition, both *POABAFFEE* and *NEABAFFEE* for 1,050 of non-Big N sample are insignificant with *ADACC2*¹⁵.

¹⁴ Following Asthana et al. (2012), abnormal audit fees are measured by the actual audit fee paid by the client to its auditor minus the predicted audit fee, with the difference deflated by the total audit fee revenue of the audit office conducting the client's audit.

¹⁵ This study does not re-estimates non-Big N sample for *ADACCI* after eliminating the sample of non-accelerated filers, experience recent auditor changes and restated financial reports because of lack of observations.

Fourth, this paper considers an additional control variable as client important (*INFLU*), which is measured as audit fees paid to an auditor in a given year divided by that auditor's total audit revenue in the same year (Reynolds and Francis 2001; Asthana et al. 2012). These results are still robust even adding this variable in Equation (4) in Panel E.

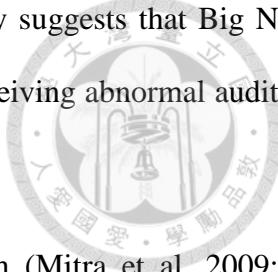
Fifth, this study tests the Equation (4) with signed discretionary accruals (*DACC*) presented in Panel A of Table 8. The results show that both *POABAFFEE* and *NEABAFFEE* are insignificant in all columns. The other panels indicate results of additional testing using signed discretionary accruals, in which *NEABAFFEE* are insignificant with *DACC* in most panels but *POABAFFEE* are positively related at significant level in Panel B and D.

6. Conclusion

This paper reconsiders the issue of how audit fees relate to audit quality because both audit fees and audit quality have dramatically changed after SOX. The sample data uses firms in the post-SOX period from 2005 and 2011, with absolute discretionary accruals as a proxy for audit quality. Positive abnormal audit fees result from the quasi-rent arising from a highly profitable audit engagement, while negative abnormal audit fees results from clients with stronger bargaining power.

Prior research finds that both economic bonding and client bargaining power may lead to a reduction of audit quality. However, this study finds that establishing independent audit committees can effectively diminish the economic bonding that encourages auditors to acquiesce to earnings management in post-SOX era. On the other hand, clients with greater bargaining power can request to pay reduced audit fees, leading to lower audit effort that may result in the

failure of detecting possible earning management. Additionally, this study suggests that Big N firms are less likely to reduce audit quality than non-Big N firms when receiving abnormal audit fees.



Comparing the differences between this study and prior research (Mitra et al. 2009; Asthana et al. 2012; Blankley et al. 2012), this paper uses discretionary accruals as a proxy for audit quality, and documents that audit quality may be reduced by more negative abnormal audit fees in post-SOX period. Also, this study finds that the price-quality associations differ with auditor size, which may be caused by different clientele compositions between these two groups of accounting firms.

This study also has several limitations. First, it is important to note that these results regarding both positive and negative abnormal audit fees could be attributable to factors other than economic bonding or bargaining power due to the unknown degree of misstatement within the audit fee model, and the omission of certain variables. Second, accruals can be affected by noise and may not be an accurate proxy for management's discretion over earnings. Thus, the associations in this study between audit fees and abnormal accruals could be the result of measurement error rather than solely a reflection of management behavior.

For further analysis, this study suggests that future research can consider real activities manipulation instead of accruals manipulations. Roychowdhury (2006) provides evidence of earning manipulations by the management of operational activities. Presence of abnormal audit fees may create different incentives for managers to control earnings through such real activities management. Second, the composition of the audit committee may influence the effects of abnormal audit fees on audit quality. Thus, including additional variables that can represent

different audit committees would provide a more complete understanding of the association between abnormal audit fees and audit quality during post-SOX.



Table 1
Prior Studies on Associations between Abnormal Audit Fees and Audit Quality

Literatures	Sample Period	Proxy for Audit Quality	Relationship of Abnormal Audit Fees with Proxy	
Krishnan et al. (2005)	2001	ERC		Negative
Hoitash et al. (2007)	2000 – 2003	Accrual quality metric and discretionary accruals		Positive
Hribar et al. (2010)	2000 – 2007	Accounting fraud, restatement and SEC comment letters		Positive
Blankley et al. (2012)	2004 – 2009 (Big N only)	Restatement		Negative
			Positive Fees	Negative Fees
Hope et al. (2009)	2000 – 2003	Equity discount rates	Positive	N/A
Choi et al. (2010)	2000 – 2003	Discretionary accruals	Positive	N/A
Asthana et al. (2012)	2000 – 2009	Discretionary accruals	Positive	Positive
Larcker and Richardson (2004)	2000 – 2001	Discretionary accruals	Negative	Positive
Higgs and Skantz (2006)	2000 – 2002	Earning response	Positive	N/A
Mitra et al. (2009)	2000 – 2005 (Big N only)	Discretionary accruals	Positive	Insignificant

Table 2
Sample Selection and Industry Composition



Panel A: Sample Selections

Procedure

	Observations
Public listed companies available on 2012 Audit Analytics database	38,586
Less:	
Firms in Financial industry	11,617
Firms in Utility industry	1,821
Foreign filers	2,980
No internal report	6,982
No audit fees	189
Firms having multiple auditors	308
Missing data on Compustat database	3,188
Sample Observations	<hr/> 11,501

Panel B: Industry Composition

Industry (Defined by SIC code)

	Big N	Non-Big N		
Agriculture, mining, and construction (0100–1999, excluding 1300–1399)	329	3.28%	55	3.76%
Food (2000–2111)	354	3.53%	31	2.12%
Textiles and printing/publishing (2200–2799)	575	5.73%	60	4.11%
Chemicals (2800–2824, 2840–2899)	402	4.00%	33	2.26%
Pharmaceuticals (2830–2836)	735	7.32%	155	10.61%
Extractive (1300–1399, 2900–2999)	594	5.92%	91	6.23%
Durable manufacturers (3000–3999, excluding 3570–3579, and 3670–3679)	2,422	24.12%	431	29.50%
Transportation (4000–4899)	144	1.43%	20	1.37%
Utilities (4900–4999)	583	5.81%	59	4.04%
Retail (5000–5999)	1,276	12.71%	148	10.13%
Services (7000–8999, excluding 7370–7379)	974	9.70%	156	10.68%
Computers (3570–3579, 3670–3679, 7370–7379)	1,652	16.45%	222	15.20%
<hr/> Total	<hr/> 10,040	<hr/> 100.00%	<hr/> 1,461	<hr/> 100.00%

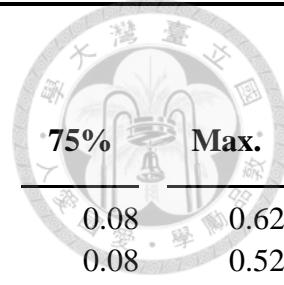
Table 3
Sample Descriptive Statistics

Panel A: Distributions of Variables for Full Sample

	Mean	Std. Dev.	Min.	25%	Median	75%	Max.
<i>ADACCI</i>	0.07	0.09	0.00	0.02	0.04	0.08	0.62
<i>ADACC2</i>	0.07	0.09	0.00	0.02	0.04	0.08	0.52
<i>POABAFFEE</i>	0.12	0.16	0.00	0.00	0.01	0.22	0.59
<i>NEABAFFEE</i>	0.19	0.32	0.00	0.00	0.00	0.28	1.68
<i>LAF</i>	7.26	1.02	5.01	6.55	7.17	7.91	9.99
<i>LAT</i>	13.81	1.73	10.10	12.55	13.69	14.97	17.90
<i>LBS</i>	0.76	0.91	0.00	0.00	0.69	1.39	3.14
<i>FTAX</i>	0.72	0.45	0.00	0.00	1.00	1.00	1.00
<i>CURRENT</i>	0.48	0.24	0.05	0.30	0.47	0.66	0.96
<i>INVREC</i>	0.24	0.16	0.00	0.11	0.22	0.34	0.71
<i>LEVE</i>	0.18	0.19	0.00	0.00	0.14	0.28	0.86
<i>LIQUID</i>	2.73	2.21	0.46	1.37	2.04	3.21	13.38
<i>LOSS</i>	0.25	0.43	0.00	0.00	0.00	0.00	1.00
<i>ROA</i>	0.01	0.18	-0.91	0.00	0.05	0.09	0.29
<i>CITY</i>	0.41	0.49	0.00	0.00	0.00	1.00	1.00
<i>LOFFICE</i>	17.54	1.59	12.65	16.76	17.77	18.73	19.71
<i>NCLIENT</i>	0.64	0.26	0.02	0.47	0.68	0.85	0.99
<i>BUSY</i>	0.63	0.48	0.00	0.00	1.00	1.00	1.00
<i>GC</i>	0.01	0.11	0.00	0.00	0.00	0.00	1.00
<i>IC</i>	0.08	0.41	0.00	0.00	0.00	0.00	3.00
<i>LDELAY</i>	4.73	0.55	4.01	4.42	4.59	4.76	6.18
<i>GRSALES</i>	0.09	0.24	-0.63	-0.01	0.07	0.18	0.98
<i>BM</i>	0.52	0.41	-0.46	0.26	0.44	0.69	2.19
<i>CFO</i>	0.08	0.14	-0.66	0.05	0.09	0.14	0.35
<i>SDSALES</i>	0.16	0.14	0.01	0.07	0.12	0.20	0.79
<i>SDCFO</i>	0.06	0.07	0.01	0.02	0.04	0.07	0.44
<i>LAGACCR</i>	-0.07	0.10	-0.51	-0.10	-0.06	-0.02	0.23
<i>LAGROA</i>	0.01	0.18	-0.90	0.00	0.05	0.09	0.29
<i>FINANCED</i>	0.45	0.50	0.00	0.00	0.00	1.00	1.00
<i>BIG</i>	0.87	0.33	0.00	1.00	1.00	1.00	1.00
No. of Obs.	11,501						

Each of the continuous variables is winsorized at 1 percent and 99 percent to mitigate outliers.
See the Appendix A for the definitions of variables.

(continued on next page)



Panel B: Comparing Big N Sample and Non-Big N Sample

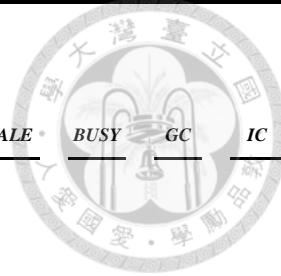
	Big N Sample		Non-Big Sample		Big N v.s. Non-Big N	
	Mean	Std. Dev.	Mean	Std. Dev.	Diff.	t-Stat.
<i>ADACCI</i>	0.06	0.08	0.08	0.11	-0.02 ^a	-6.89
<i>ADACC2</i>	0.06	0.08	0.09	0.13	-0.03 ^a	-9.83
<i>POABAFAEE</i>	0.12	0.16	0.13	0.16	-0.01 ^c	-1.87
<i>NEABAFAEE</i>	0.19	0.32	0.19	0.30	-0.00	0.10
<i>LAF</i>	7.41	0.97	6.24	0.81	1.16 ^a	50.41
<i>LAT</i>	14.05	1.66	12.16	1.20	1.89 ^a	53.32
<i>LBS</i>	0.77	0.92	0.66	0.81	0.11 ^a	4.70
<i>FTAX</i>	0.74	0.44	0.53	0.50	0.21 ^a	15.10
<i>CURRENT</i>	0.47	0.23	0.55	0.24	-0.08 ^a	-11.91
<i>INVREC</i>	0.24	0.16	0.26	0.18	-0.02 ^a	-4.75
<i>LEVE</i>	0.18	0.18	0.11	0.17	0.07 ^a	14.67
<i>LIQUID</i>	2.59	2.01	3.64	3.13	-1.05 ^a	-12.47
<i>LOSS</i>	0.23	0.42	0.33	0.47	-0.10 ^a	-7.66
<i>ROA</i>	0.01	0.16	-0.03	0.27	0.05 ^a	6.28
<i>CITY</i>	0.45	0.50	0.08	0.27	0.38 ^a	43.61
<i>LOFFICE</i>	17.92	1.21	14.95	1.48	2.97 ^a	75.67
<i>SCALE</i>	0.66	0.25	0.46	0.25	0.20 ^a	29.41
<i>BUSY</i>	0.63	0.48	0.62	0.48	0.00	0.28
<i>GC</i>	0.01	0.11	0.01	0.12	-0.00	-0.64
<i>IC</i>	0.08	0.40	0.13	0.50	-0.05 ^a	-3.69
<i>LDELAY</i>	4.71	0.55	4.85	0.56	-0.13 ^a	-8.59
<i>GRSALES</i>	0.09	0.23	0.10	0.27	-0.01	-0.72
<i>BM</i>	0.51	0.40	0.58	0.46	-0.06 ^a	-4.65
<i>CFO</i>	0.08	0.13	0.04	0.20	0.04 ^a	7.92
<i>SDSALES</i>	0.15	0.13	0.20	0.17	-0.05 ^a	-10.36
<i>SDCFO</i>	0.06	0.06	0.10	0.15	-0.04 ^a	-12.69
<i>LAGACCR</i>	-0.07	0.09	-0.07	0.20	0.01	0.87
<i>LAGROA</i>	0.01	0.16	-0.03	0.27	0.05 ^a	5.92
<i>ISSUE</i>	0.46	0.50	0.43	0.50	0.02	1.77
No. of Obs.	10,040		1,461			

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

Each of the continuous variables is winsorized at 1 percent and 99 percent to mitigate outliers.

See the Appendix A for the definitions of variables.

Table 4
Pearson Correlations among Regression Variable



Panel A: Variables in Audit Fees Model in Full Sample

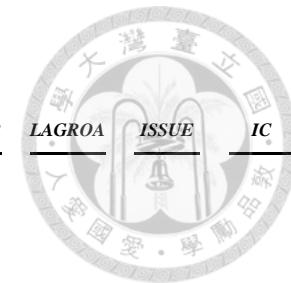
	<i>LAF</i>	<i>LAT</i>	<i>LBS</i>	<i>FTAX</i>	<i>CURRENT</i>	<i>INVREC</i>	<i>LEVE</i>	<i>LIQUID</i>	<i>LOSS</i>	<i>ROA</i>	<i>CITY</i>	<i>LOFFICE</i>	<i>SCALE</i>	<i>BUSY</i>	<i>GC</i>	<i>IC</i>
<i>LAT</i>	0.82 ^a															
<i>LBS</i>	0.31 ^a	0.26 ^a														
<i>FTAX</i>	0.43 ^a	0.32 ^a	0.16 ^a													
<i>CURRENT</i>	-0.25 ^a	-0.48 ^a	-0.11 ^a	-0.04 ^a												
<i>INVREC</i>	0.06 ^a	-0.08 ^a	0.09 ^a	0.11 ^a	0.45 ^a											
<i>LEVE</i>	0.22 ^a	0.30 ^a	0.05 ^a	0.00	-0.46 ^a	-0.18 ^a										
<i>LIQUID</i>	-0.35 ^a	-0.40 ^a	-0.16 ^a	-0.08 ^a	0.52 ^a	-0.07 ^a	-0.29 ^a									
<i>LOSS</i>	-0.19 ^a	-0.32 ^a	-0.11 ^a	-0.16 ^a	0.16 ^a	-0.12 ^a	0.05 ^a	0.14 ^a								
<i>ROA</i>	0.21 ^a	0.35 ^a	0.10 ^a	0.21 ^a	-0.18 ^a	0.15 ^a	-0.05 ^a	-0.12 ^a	-0.68 ^a							
<i>CITY</i>	0.23 ^a	0.24 ^a	0.05 ^a	0.06 ^a	-0.12 ^a	-0.06 ^a	0.10 ^a	-0.10 ^a	-0.06 ^a	0.04 ^a						
<i>LOFFICE</i>	0.37 ^a	0.25 ^a	0.01	0.17 ^a	0.05 ^a	-0.02	0.02 ^c	-0.01	-0.02	0.02 ^b	0.11 ^a					
<i>SCALE</i>	0.14 ^a	0.04 ^a	-0.04 ^a	0.11 ^a	0.14 ^a	-0.03 ^a	-0.07 ^a	0.11 ^a	0.07 ^a	-0.04 ^a	0.04 ^a	0.64 ^a				
<i>BUSY</i>	0.02 ^c	0.03 ^b	-0.01	-0.03 ^b	-0.10 ^a	-0.18 ^a	0.10 ^a	0.00	0.07 ^a	-0.08 ^a	0.05 ^a	0.01	0.01			
<i>GC</i>	-0.03 ^a	-0.09 ^a	-0.02	-0.07 ^a	0.01	-0.03 ^a	0.00	-0.05 ^a	0.18 ^a	-0.26 ^a	0.00	-0.02	-0.01	0.04 ^a		
<i>IC</i>	0.04 ^a	-0.08 ^a	0.00	0.00	0.04 ^a	0.04 ^a	-0.02	-0.01	0.10 ^a	-0.07 ^a	-0.01	-0.01	0.02	-0.04 ^a	0.08 ^a	
<i>LDELAY</i>	-0.09 ^a	-0.16 ^a	-0.04 ^a	-0.06 ^a	0.06 ^a	-0.03 ^b	-0.03 ^b	0.04 ^a	0.09 ^a	-0.09 ^a	-0.04 ^a	-0.04 ^a	-0.01	0.00	0.06 ^a	0.14 ^a
<i>BIG</i>	0.37 ^a	0.36 ^a	0.04 ^a	0.15 ^a	-0.11 ^a	-0.05 ^a	0.13 ^a	-0.15 ^a	-0.08 ^a	0.07 ^a	0.25 ^a	0.61 ^a	0.26 ^a	0.00	-0.01	-0.04 ^a
No. of Obs.	11,501															

^a, ^b, ^c Indicates significance at the 0.05, 0.01 and 0.001 level, respectively. t-statistics are presented in parentheses.

Each of the continuous variables is winsorized at 1 percent and 99 percent to mitigate outliers.

See the Appendix A for the definitions of variables.

(continued on next page)



Panel B: Variables in Discretionary Accruals Model in Full Sample

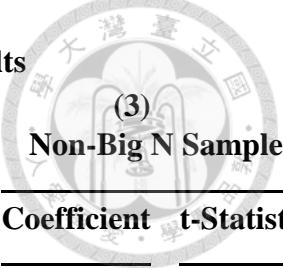
	<i>ADACC1</i>	<i>ADACC2</i>	<i>POABAFFEE</i>	<i>NEABAFFEE</i>	<i>LAT</i>	<i>GRSALES</i>	<i>BM</i>	<i>CFO</i>	<i>SDSALES</i>	<i>SDCFO</i>	<i>LEVE</i>	<i>LOSS</i>	<i>LAGACCR</i>	<i>LAGROA</i>	<i>ISSUE</i>	<i>IC</i>
<i>ADACC2</i>	0.66 ^a															
<i>POABAFFEE</i>	-0.01	-0.01														
<i>NEABAFFEE</i>	0.04 ^a	0.04 ^a	-0.45 ^a													
<i>LAT</i>	-0.25 ^a	-0.31 ^a	0.01	0.00												
<i>GRSALES</i>	0.03 ^b	0.05 ^a	-0.02 ^c	0.02 ^b	-0.02											
<i>BM</i>	-0.04 ^a	-0.06 ^a	-0.01	-0.02	0.01	-0.16 ^a										
<i>CFO</i>	-0.23 ^a	-0.27 ^a	-0.03 ^b	0.02 ^c	0.34 ^a	0.11 ^a	-0.02 ^c									
<i>SDSALES</i>	0.14 ^a	0.20 ^a	0.05 ^a	-0.03 ^b	-0.22 ^a	0.16 ^a	0.02	-0.03 ^a								
<i>SDCFO</i>	0.41 ^a	0.45 ^a	-0.01	0.03 ^b	-0.46 ^a	0.04 ^a	-0.14 ^a	-0.46 ^a	0.28 ^a							
<i>LEVE</i>	-0.05 ^a	-0.05 ^a	-0.01	-0.01	0.30 ^a	-0.06 ^a	-0.12 ^a	-0.01	-0.06 ^a	-0.15 ^a						
<i>LOSS</i>	0.26 ^a	0.35 ^a	0.00	0.00	-0.32 ^a	-0.23 ^a	0.13 ^a	-0.50 ^a	0.09 ^a	0.33 ^a	0.05 ^a					
<i>LAGACCR</i>	-0.12 ^a	-0.13 ^a	0.00	0.01	0.09 ^a	0.05 ^a	0.08 ^a	0.09 ^a	-0.01	-0.16 ^a	-0.05 ^a	-0.17 ^a				
<i>LAGROA</i>	-0.31 ^a	-0.34 ^a	-0.04 ^a	0.03 ^a	0.35 ^a	0.06 ^a	0.05 ^a	0.68 ^a	-0.04 ^a	-0.47 ^a	-0.04 ^a	-0.49 ^a	0.47 ^a			
<i>ISSUE</i>	0.05 ^a	0.05 ^a	0.02	-0.02 ^c	0.11 ^a	0.11 ^a	0.00	-0.10 ^a	0.00	0.00	0.25 ^a	0.03 ^a	-0.02 ^c	-0.07 ^a		
<i>IC</i>	0.04 ^a	0.06 ^a	0.05 ^a	0.05 ^a	-0.08 ^a	0.01	0.01	-0.05 ^a	0.03 ^a	0.03 ^b	-0.02	0.10 ^a	0.00	-0.04 ^a	0.02	
<i>BIG</i>	-0.10 ^a	-0.13 ^a	-0.02 ^c	-0.04 ^a	0.36 ^a	-0.01	-0.05 ^a	0.09 ^a	-0.11 ^a	-0.15 ^a	0.13 ^a	-0.08 ^a	-0.01	0.07 ^a	0.02	-0.04 ^a
No. of Obs.	11,501															

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively. t-statistics are presented in parentheses.

Each of the continuous variables is winsorized at 1 percent and 99 percent to mitigate outliers.

See the Appendix A for the definitions of variables.

Table 5
Audit Fees Model Regression Results



	Pre. Sign	(1) Full Sample		(2) Big N Sample		(3) Non-Big N Sample	
		Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
<i>LAT</i>	+	0.494 ^a	62.34	0.496 ^a	59.506	0.422 ^a	18.082
<i>LBS</i>	+	0.074 ^a	7.043	0.072 ^a	6.444	0.091 ^a	3.426
<i>FTAX</i>	+	0.242 ^a	10.618	0.256 ^a	10.393	0.137 ^a	2.590
<i>CURRENT</i>	+	0.535 ^a	7.660	0.597 ^a	7.616	0.220 ^c	1.741
<i>INVREC</i>	+	0.365 ^a	4.599	0.379 ^a	4.321	0.282 ^c	1.747
<i>LEVE</i>	+	0.181 ^a	3.561	0.175 ^a	3.254	0.287 ^a	2.770
<i>LIQUID</i>	-	-0.048 ^a	-9.916	-0.057 ^a	-9.880	-0.020 ^a	-2.788
<i>LOSS</i>	+	0.083 ^a	4.817	0.074 ^a	3.929	0.116 ^a	3.157
<i>ROA</i>	-	-0.375 ^a	-7.652	-0.384 ^a	-6.741	-0.246 ^a	-3.203
<i>CITY</i>	+	0.080 ^a	4.531	0.079 ^a	4.389	0.106	1.288
<i>LOFFICE</i>	+	0.118 ^a	13.152	0.110 ^a	10.811	0.197 ^a	9.963
<i>SCALE</i>	-	-0.234 ^a	-4.788	-0.233 ^a	-4.328	-0.188 ^c	-1.859
<i>BUSY</i>	+	0.038 ^c	1.840	0.039 ^c	1.829	0.034	0.631
<i>GC</i>	+	0.134 ^a	2.813	0.088	1.598	0.194 ^c	1.877
<i>IC</i>	+	0.211 ^a	11.903	0.232 ^a	11.954	0.125 ^a	3.923
<i>LDELAY</i>	+	0.046 ^a	4.350	0.044 ^a	3.955	0.062 ^b	2.269
<i>BIG</i>	+	-0.124 ^a	-3.617	-	-	-	-
Constant	?	-2.208 ^a	-13.50	-2.224 ^a	-11.214	-2.582 ^a	-6.694
Industry and year dummies		Included		Included		Included	
No. of Obs.		11,501		10,040		1,461	
adj. R ²		0.814		0.798		0.729	

All p-value in parentheses are on an adjusted basis, using robust standard errors corrected for heteroscedasticity and firm-level clustering.

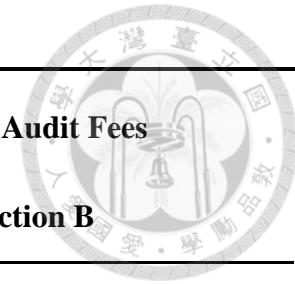
^a, ^b, ^c Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

Each of the continuous variables is winsorized at 1 percent and 99 percent to mitigate outliers.

See the Appendix A for the definitions of variables.

Table 6

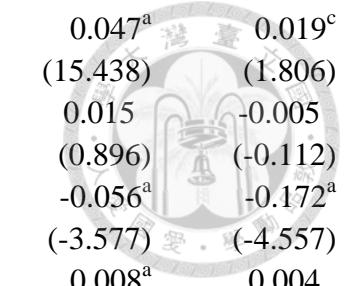
Empirical Results on the Association between Absolute Discretionary Accruals and Abnormal Audit Fees



Panel A: Absolute Discretionary Accruals

	Pre. Sign	Section A			Section B		
		ADACCI		(B1)	ADACC2		
		(A1) Full Sample	(A2) Big N		(A3) Non-Big N	(B2) Big N	(B3) Non-Big N
<i>POABAFAEE</i>	-	0.004 (0.713)	0.000 (0.050)	-0.012 (-0.771)	0.000 (0.015)	-0.002 (-0.404)	0.015 (0.693)
<i>NEABAFAEE</i>	+	0.010 ^a (3.412)	0.006 ^c (1.950)	-0.003 (-0.346)	0.010 ^a (3.122)	0.008 ^b (2.335)	0.014 (1.086)
<i>LAT</i>	-	-0.001 ^b (-2.452)	-0.002 ^a (-3.054)	-0.009 ^a (-3.368)	-0.003 ^a (-4.703)	-0.002 ^a (-3.195)	-0.016 ^a (-4.259)
<i>GRSALES</i>	+	0.028 ^a (5.878)	0.027 ^a (5.730)	0.001 (0.085)	0.025 ^a (5.336)	0.029 ^a (5.804)	0.005 (0.351)
<i>BM</i>	-	0.005 ^b (2.201)	0.004 ^c (1.690)	0.000 (0.060)	-0.010 ^a (-4.011)	-0.008 ^a (-3.107)	-0.014 ^b (-2.048)
<i>CFO</i>	-	0.075 ^a (4.407)	0.063 ^a (3.670)	0.047 (1.305)	0.059 ^a (3.602)	0.043 ^b (2.358)	0.133 ^a (3.292)
<i>SDSALES</i>	+	0.030 ^a (3.819)	0.026 ^a (3.290)	0.027 ^c (1.692)	0.050 ^a (5.682)	0.043 ^a (4.829)	0.070 ^a (2.893)
<i>SDCFO</i>	+	0.289 ^a (10.506)	0.254 ^a (9.870)	0.081 ^b (2.214)	0.302 ^a (11.568)	0.336 ^a (10.954)	0.132 ^a (2.614)
<i>LEVE</i>	+	0.003 (0.548)	-0.001 (-0.140)	0.003 (0.128)	0.001 (0.182)	-0.001 (-0.145)	-0.010 (-0.405)

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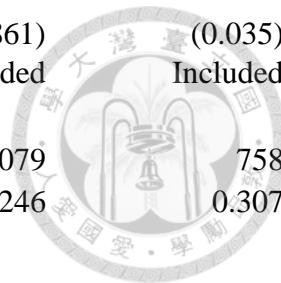
<i>LOSS</i>	-	0.018 ^a (5.776)	0.022 ^a (7.21)	0.004 (0.506)	0.041 ^a (13.925)	0.047 ^a (15.438)	0.019 ^c (1.806)
<i>LAGACCR</i>	-	0.019 (1.113)	0.022 (1.170)	-0.008 (-0.243)	0.015 (0.998)	0.015 (0.896)	-0.005 (-0.112)
<i>LAGROA</i>	-	-0.073 ^a (-4.928)	-0.054 ^a (-3.480)	-0.054 (-1.555)	-0.063 ^a (-4.521)	-0.056 ^a (-3.577)	-0.172 ^a (-4.557)
<i>ISSUE</i>	+	0.008 ^a (4.956)	0.007 ^a (4.730)	0.007 (1.356)	0.007 ^a (4.557)	0.008 ^a (4.738)	0.004 (0.665)
<i>IC</i>	+	0.006 ^b (2.406)	0.006 ^b (2.300)	-0.004 (-0.790)	0.004 ^c (1.703)	0.004 (1.499)	0.011 ^c (1.752)
<i>BIG</i>	-	-0.007 ^b (-2.511)			-0.009 ^a (-2.674)		
Constant	?	0.024 ^b (2.430)	0.029 ^a (3.079)	0.080 ^b (2.294)	0.063 ^a (5.549)	0.045 ^a (3.912)	0.200 ^a (3.891)
Industry and year dummies		Included	Included	Included	Included	Included	Included
No. of Obs.		11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²		0.266	0.238	0.296	0.292	0.309	0.263

Panel B: Positive Discretionary Accruals

	Section A			Section B		
	<i>DACCI</i> ⁺			<i>DACC2</i> ⁺		
	Full Sample (A1)	Big N (A2)	Non-Big N (A3)	Full Sample (B1)	Big N (B2)	Non-Big N (B3)
POABAFAEE	0.019 ^b (2.546)	0.017 ^b (2.373)	-0.021 (-0.989)	0.016 ^c (1.918)	0.014 ^c (1.860)	-0.001 (-0.021)
NEABAFAEE	0.005 ^c	0.001	-0.002	0.007 ^c	0.007 ^c	0.001

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Industry and year dummies	(1.784) Included	(0.451) Included	(-0.245) Included	(1.826) Included	(1.861) Included	(0.035) Included
No. of Obs.	6,139	5,334	741	5,732	5,079	758
adj. R ²	0.287	0.256	0.338	0.278	0.246	0.307



Panel C: Negative Discretionary Accruals

	Section A			Section B		
	<i>DACCI</i>			<i>DACC2</i>		
	Full Sample (A1)	Big N (A2)	Non-Big N (A3)	Full Sample (B1)	Big N (B2)	Non-Big N (B3)
POABAFAEE	0.011 (1.367)	0.019 ^b (2.466)	0.003 (0.128)	0.017 ^b (2.487)	0.019 ^a (2.622)	-0.021 (-0.791)
NEABAFAEE	-0.015 ^a (-3.204)	-0.009 ^b (-2.016)	-0.000 (-0.024)	-0.009 ^b (-2.128)	-0.006 (-1.249)	-0.025 (-1.447)
Industry and year dummies	Included	Included	Included	Included	Included	Included
No. of Obs.	5,362	4,706	720	5,769	4,961	703
adj. R ²	0.347	0.332	0.291	0.415	0.447	0.385

Panel D: Comparison of Big N and Non-Big N Firms

	<i>ADACCI</i>	<i>ADACC2</i>
<i>POABAFAEE</i>	0.014 (0.825)	0.013 (0.552)
<i>NEABAFAEE</i>	0.027 ^a (2.596)	0.017 ^c (1.702)
<i>POABAFAEE * BIG</i>	-0.011	-0.015

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<i>NEABAFEE * BIG</i>	(-0.632)	(-0.613)
	-0.020 ^c	-0.009
	(-1.861)	(-0.811)
<i>BIG</i>	-0.002	-0.005
	(-0.369)	(-0.965)
Control variables included but not reported for the sake of brevity.		
Industry and year dummies	Included	Included
No. of Obs.	11,501	11,501
adj. R ²	0.267	0.292

All p-value in parentheses are on an adjusted basis, using robust standard errors corrected for heteroscedasticity and firm-level clustering.

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

See the Appendix A for the definitions of variables.

Table 7
Additional Testing



Panel A: Alternative Measure of Abnormal Audit Fees by Difference between Actual Audit Fees and Expected Audit Fees

Pre. Sign	Section A (ADACC1)			Section B (ADACC2)		
	(A1) Full Sample	(A2) Big N	(A3) Non-Big N	(B1) Full Sample	(B2) Big N	(B3) Non-Big N
<i>POABAFAEE</i>	-	0.002 (0.669)	0.001 (0.208)	-0.012 (-0.771)	0.003 (0.653)	0.001 (0.314)
<i>NEABAFAEE</i>	+	0.010 ^a (2.855)	0.006 ^c (1.773)	-0.003 (-0.346)	0.012 ^a (3.148)	0.010 ^b (2.428)
<i>LAT</i>	-	-0.001 ^b (-2.436)	-0.002 ^a (-3.070)	-0.009 ^a (-3.368)	-0.003 ^a (-4.737)	-0.002 ^a (-3.230)
<i>GRSALES</i>	+	0.028 ^a (5.875)	0.027 ^a (5.726)	0.001 (0.085)	0.025 ^a (5.352)	0.029 ^a (5.816)
<i>BM</i>	-	0.005 ^b (2.175)	0.004 ^c (1.677)	0.000 (0.060)	-0.010 ^a (-4.015)	-0.008 ^a (-3.106)
<i>CFO</i>	-	0.075 ^a (4.417)	0.063 ^a (3.670)	0.047 (1.305)	0.059 ^a (3.615)	0.043 ^b (2.363)
<i>SDSALES</i>	+	0.029 ^a (3.780)	0.026 ^a (3.260)	0.027 ^c (1.692)	0.049 ^a (5.615)	0.042 ^a (4.770)
<i>SDCFO</i>	+	0.291 ^a (10.493)	0.254 ^a (9.890)	0.081 ^b (2.214)	0.303 ^a (11.582)	0.337 ^a (10.953)
<i>LEVE</i>	+	0.003 (0.541)	-0.001 (-0.151)	0.003 (0.128)	0.001 (0.190)	-0.001 (-0.146)
<i>LOSS</i>	-	0.018 ^a (5.788)	0.022 ^a (7.220)	0.004 (0.506)	0.042 ^a (13.957)	0.047 ^a (15.454)
						0.019 ^c (1.818)

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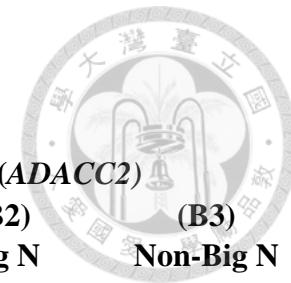
<i>LAGACCR</i>	-	0.019 (1.113)	0.022 (1.168)	-0.008 (-0.243)	0.015 (0.984)	0.014 (0.882)	-0.004 (-0.106)
<i>LAGROA</i>	-	-0.073 ^a (-4.927)	-0.054 ^a (-3.471)	-0.054 (-1.555)	-0.063 ^a (-4.507)	-0.056 ^a (-3.553)	-0.172 ^a (-4.575)
<i>ISSUE</i>	+	0.008 ^a (4.910)	0.007 ^a (4.708)	0.007 (1.356)	0.007 ^a (4.515)	0.008 ^a (4.701)	0.004 (0.667)
<i>IC</i>	+	0.006 ^b (2.479)	0.006 ^b (2.321)	-0.004 (-0.790)	0.004 ^c (1.721)	0.004 (1.504)	0.011 ^c (1.750)
<i>BIG</i>	-	-0.008 ^a (-2.595)			-0.009 ^a (-2.728)		
<i>Constant</i>	?	0.024 ^b (2.483)	0.030 ^a (3.085)	0.080 ^b (2.294)	0.063 ^a (5.540)	0.045 ^a (3.901)	0.198 ^a (3.848)
Industry and year dummies		Included	Included	Included	Included	Included	Included
No. of Obs.		11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²		0.266	0.238	0.296	0.292	0.309	0.263

All p-value in parentheses are on an adjusted basis, using robust standard errors corrected for heteroscedasticity and firm-level clustering.

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

See the Appendix A for the definitions of variables.

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Panel B: Alternative Measure of Abnormal Audit Fees Deflated by Actual Audit Fees

Dependent Variable

	Pre. Sign	Section A (ADACCI)			Section B (ADACC2)		
		(A1)	(A2)	(A3)	(B1)	(B2)	(B3)
		Full Sample	Big N	Non-Big N	Full Sample	Big N	Non-Big N
POABAFEE	-	0.004 (0.878)	0.000 (0.101)	-0.009 (-0.632)	0.002 (0.367)	-0.001 (-0.174)	0.016 (0.828)
NEABAFEE	+	0.008 ^a (3.291)	0.004 ^c (1.818)	-0.004 (-0.644)	0.008 ^a (3.180)	0.006 ^b (2.398)	0.009 (0.841)
LAT	-	-0.002 ^b (-2.486)	-0.002 ^a (-3.061)	-0.009 ^a (-3.378)	-0.003 ^a (-4.725)	-0.002 ^a (-3.211)	-0.016 ^a (-4.255)
GRSALES	+	0.028 ^a (5.891)	0.027 ^a (5.732)	0.001 (0.098)	0.025 ^a (5.353)	0.029 ^a (5.810)	0.006 (0.365)
BM	-	0.005 ^b (2.206)	0.004 ^c (1.689)	0.000 (0.079)	-0.010 ^a (-3.999)	-0.008 ^a (-3.100)	-0.014 ^b (-2.045)
CFO	-	0.075 ^a (4.416)	0.063 ^a (3.673)	0.047 (1.309)	0.059 ^a (3.612)	0.043 ^b (2.366)	0.133 ^a (3.296)
SDSALES	+	0.029 ^a (3.781)	0.026 ^a (3.265)	0.027 ^c (1.664)	0.049 ^a (5.634)	0.042 ^a (4.794)	0.070 ^a (2.873)
SDCFO	+	0.290 ^a (10.508)	0.254 ^a (9.886)	0.082 ^b (2.230)	0.302 ^a (11.571)	0.337 ^a (10.953)	0.132 ^a (2.605)
LEVE	+	0.003 (0.555)	-0.001 (-0.142)	0.003 (0.131)	0.001 (0.193)	-0.001 (-0.141)	-0.010 (-0.408)
LOSS	-	0.018 ^a (5.791)	0.022 ^a (7.219)	0.004 (0.505)	0.042 ^a (13.944)	0.047 ^a (15.447)	0.019 ^c (1.808)
LAGACCR	-	0.019	0.022	-0.008	0.015	0.015	-0.005

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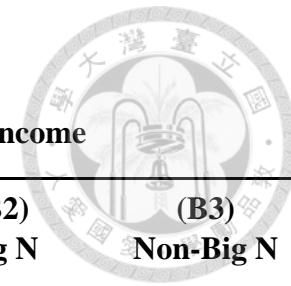
LAGROA	-	(1.107) (-4.927)	(1.168) (-3.477)	(-0.245) (-1.550)	(0.986) (-4.515)	(0.888) (-3.576)	(-0.116) (-4.558)
ISSUE	+	0.008 ^a (4.915)	0.007 ^a (4.712)	0.007 (1.357)	0.007 ^a (4.518)	0.008 ^a (4.709)	0.004 (0.659)
IC	+	0.006 ^b (2.436)	0.006 ^b (2.314)	-0.004 (-0.795)	0.004 ^c (1.710)	0.004 (1.505)	0.011 ^c (1.779)
BIG	-	-0.007 ^b (-2.518)			-0.009 ^a (-2.670)		
Constant	?	0.024 ^b (2.452)	0.030 ^a (3.085)	0.080 ^b (2.308)	0.062 ^a (5.552)	0.045 ^a (3.907)	0.200 ^a (3.885)
Industry and year dummies		Included	Included	Included	Included	Included	Included
No. of Obs.		11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²		0.266	0.238	0.296	0.292	0.309	0.262

All p-value in parentheses are on an adjusted basis, using robust standard errors corrected for heteroscedasticity and firm-level clustering.

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

See the Appendix A for the definitions of variables.

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Panel C: Alternative Performance Control for Discretionary Accruals Model of Kothari et al. (2005)

Dependent Variable	Pre. Sign	Operating Income after Depreciation			Net Income		
		(A1)	(A2)	(A3)	(B1)	(B2)	(B3)
		Full Sample	Big N	Non-Big N	Full Sample	Big N	Non-Big N
<i>POABAFAEE</i>	-	0.005 (1.058)	0.004 (0.846)	-0.004 (-0.304)	0.002 (0.367)	-0.002 (-0.404)	0.015 (0.693)
<i>NEABAFAEE</i>	+	0.008 ^a (3.829)	0.008 ^a (3.064)	-0.001 (-0.079)	0.008 ^a (3.180)	0.008 ^b (2.335)	0.014 (1.086)
<i>LAT</i>	-	-0.002 ^a (-3.963)	-0.002 ^a (-3.906)	-0.007 ^a (-3.214)	-0.003 ^a (-4.725)	-0.002 ^a (-3.195)	-0.016 ^a (-4.259)
<i>GRSALES</i>	+	0.024 ^a (5.661)	0.018 ^a (4.121)	0.006 (0.532)	0.025 ^a (5.353)	0.029 ^a (5.804)	0.005 (0.351)
<i>BM</i>	-	0.003 (1.358)	0.003 (1.570)	-0.004 (-0.805)	-0.010 ^a (-3.999)	-0.008 ^a (-3.107)	-0.014 ^b (-2.048)
<i>CFO</i>	-	0.052 ^a (3.401)	0.057 ^a (3.560)	0.023 (0.799)	0.059 ^a (3.612)	0.043 ^b (2.358)	0.133 ^a (3.292)
<i>SDSALES</i>	+	0.029 ^a (4.190)	0.028 ^a (3.897)	0.029 ^b (1.984)	0.049 ^a (5.634)	0.043 ^a (4.829)	0.070 ^a (2.893)
<i>SDCFO</i>	+	0.266 ^a (11.722)	0.244 ^a (11.205)	0.071 ^a (2.762)	0.302 ^a (11.571)	0.336 ^a (10.954)	0.132 ^a (2.614)
<i>LEVE</i>	+	-0.001 (-0.192)	-0.003 (-0.515)	0.006 (0.287)	0.001 (0.193)	-0.001 (-0.145)	-0.010 (-0.405)
<i>LOSS</i>	-	0.018 ^a (6.492)	0.021 ^a (7.276)	0.010 (1.370)	0.042 ^a (13.944)	0.047 ^a (15.438)	0.019 ^c (1.806)
<i>LAGACCR</i>	-	0.012	0.028 ^c	-0.011	0.015	0.015	-0.005

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		(0.800)	(1.665)	(-0.514)	(0.986)	(0.896)	(-0.112)
<i>LAGROA</i>	-	-0.057 ^a (-4.552)	-0.052 ^a (-3.779)	-0.038 (-1.569)	-0.063 ^a (-4.515)	-0.056 ^a (-3.577)	-0.172 ^a (-4.557)
<i>ISSUE</i>	+	0.007 ^a (4.561)	0.007 ^a (4.850)	0.009 ^c (1.929)	0.007 ^a (4.518)	0.008 ^a (4.738)	0.004 (0.665)
<i>IC</i>	+	0.005 ^b (2.056)	0.005 ^b (2.108)	-0.003 (-0.590)	0.004 ^c (1.710)	0.004 (1.499)	0.011 ^c (1.752)
<i>BIG</i>	-	-0.006 ^b (-2.211)			-0.009 ^a (-2.670)		
Constant	?	0.045 ^a (5.146)	0.039 ^a (4.438)	0.064 ^b (2.115)	0.062 ^a (5.552)	0.045 ^a (3.912)	0.200 ^a (3.891)
Industry and year dummies		Included	Included	Included	Included	Included	Included
No. of Obs.		11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²		0.255	0.223	0.302	0.292	0.309	0.263

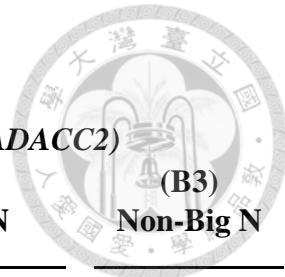
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Panel D: After Removing Samples of Non-Accelerated Filers, Experience Recent Auditor Changes and Restated Financial Reports



Dependent Variable	ADACC1				ADACC2				
	Pre. Sign	Full Sample		Big N Sample		Full Sample		Big N Sample	
		Coefficient	t-Statistics	Coefficient	t-Statistics	Coefficient	t-Statistics	Coefficient	t-Statistics
<i>POABAFFEE</i>	-	-0.002	-0.427	-0.000	-0.050	-0.002	-0.306	-0.003	-0.430
<i>NEABAFFEE</i>	+	0.005 ^b	1.998	0.005 ^c	1.883	0.008 ^a	2.595	0.007 ^b	1.968
<i>LAT</i>	-	-0.003 ^a	-4.902	-0.002 ^a	-4.874	-0.004 ^a	-5.415	-0.005 ^a	-6.367
<i>GRSALES</i>	+	0.023 ^a	5.173	0.019 ^a	4.294	0.032 ^a	6.280	0.026 ^a	5.415
<i>BM</i>	-	0.002	0.815	0.003	1.357	-0.012 ^a	-4.356	-0.007 ^a	-2.712
<i>CFO</i>	-	0.064 ^a	4.547	0.065 ^a	4.621	0.104 ^a	6.006	0.082 ^a	4.643
<i>SDSALES</i>	+	0.031 ^a	5.018	0.024 ^a	3.661	0.055 ^a	5.366	0.053 ^a	5.110
<i>SDCFO</i>	+	0.250 ^a	10.679	0.224 ^a	9.776	0.266 ^a	9.211	0.244 ^a	8.426
<i>LEVE</i>	+	0.003	0.697	-0.001	-0.124	0.006	0.928	0.004	0.641
<i>LOSS</i>	-	0.028 ^a	9.669	0.028 ^a	9.880	0.051 ^a	14.993	0.048 ^a	14.072
<i>LAGACCR</i>	-	0.001	0.077	0.015	0.938	0.003	0.189	0.010	0.545
<i>LAGROA</i>	-	-0.036 ^a	-3.003	-0.038 ^a	-2.993	-0.046 ^a	-2.972	-0.028 ^c	-1.733
<i>ISSUE</i>	+	0.006 ^a	4.057	0.006 ^a	4.444	0.003 ^c	1.829	0.005 ^a	3.008
<i>IC</i>	+	0.007 ^b	2.079	0.007 ^b	2.005	0.007 ^c	1.851	0.006	1.452
<i>BIG</i>	-	-0.005 ^c	-1.850			-0.016 ^a	-3.866		
Constant	?	0.040 ^a	4.661	0.040 ^a	4.775	0.077 ^a	6.002	0.077 ^a	6.146
Industry and year dummies		Included		Included		Included		Included	
N		8948		7898		8948		7898	
adj. R ²		0.231		0.211		0.269		0.263	

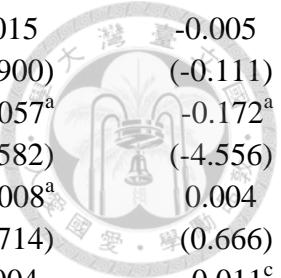
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Panel E: The Empirical Results with Client Importance as Additional Control Variable

Dependent Variable	Pre. Sign	Section A (ADACCI)			Section B (ADACC2)		
		(A1) Full Sample	(A2) Big N	(A3) Non-Big N	(B1) Full Sample	(B2) Big N	(B3) Non-Big N
<i>POABAFAEE</i>	-	0.003 (0.542)	-0.000 (-0.023)	-0.005 (-0.367)	0.000 (0.030)	-0.004 (-0.628)	0.014 (0.693)
<i>NEABAFAEE</i>	+	0.008 ^a (3.359)	0.006 ^b (1.978)	-0.000 (-0.027)	0.008 ^a (3.246)	0.008 ^b (2.408)	0.015 (1.080)
<i>INFLU</i>	+	0.010 ^c (1.946)	0.003 (0.631)	0.003 (0.439)	0.011 ^c (1.911)	0.009 (1.375)	0.001 (0.109)
<i>LAT</i>	-	-0.002 ^a (-2.846)	-0.002 ^a (-3.074)	-0.007 ^a (-3.165)	-0.004 ^a (-4.990)	-0.002 ^a (-3.342)	-0.016 ^a (-4.222)
<i>GRSALES</i>	+	0.028 ^a (5.845)	0.027 ^a (5.714)	0.006 (0.519)	0.025 ^a (5.315)	0.029 ^a (5.773)	0.005 (0.349)
<i>BM</i>	-	0.005 ^b (2.180)	0.004 ^c (1.686)	-0.005 (-0.841)	-0.010 ^a (-4.021)	-0.008 ^a (-3.116)	-0.014 ^b (-2.091)
<i>CFO</i>	-	0.075 ^a (4.447)	0.063 ^a (3.668)	0.023 (0.810)	0.059 ^a (3.644)	0.043 ^b (2.365)	0.133 ^a (3.290)
<i>SDSALES</i>	+	0.030 ^a (3.800)	0.026 ^a (3.294)	0.029 ^b (1.983)	0.050 ^a (5.648)	0.043 ^a (4.843)	0.070 ^a (2.891)
<i>SDCFO</i>	+	0.289 ^a (10.521)	0.254 ^a (9.859)	0.071 ^a (2.738)	0.302 ^a (11.561)	0.336 ^a (10.943)	0.131 ^a (2.624)
<i>LEVE</i>	+	0.003 (0.514)	-0.001 (-0.145)	0.005 (0.257)	0.001 (0.151)	-0.001 (-0.151)	-0.010 (-0.409)
<i>LOSS</i>	-	0.018 ^a (5.749)	0.022 ^a (7.190)	0.010 (1.369)	0.041 ^a (13.887)	0.047 ^a (15.382)	0.019 ^c (1.805)

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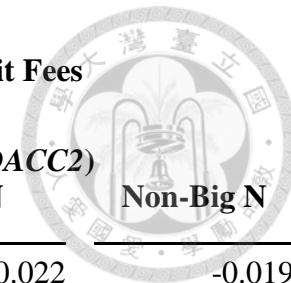
<i>LAGACCR</i>	-	0.019 (1.122)	0.022 (1.172)	-0.011 (-0.510)	0.015 (1.006)	0.015 (0.900)	-0.005 (-0.111)
<i>LAGROA</i>	-	-0.073 ^a (-4.932)	-0.054 ^a (-3.479)	-0.038 (-1.570)	-0.063 ^a (-4.518)	-0.057 ^a (-3.582)	-0.172 ^a (-4.556)
<i>ISSUE</i>	+	0.008 ^a (4.873)	0.007 ^a (4.722)	0.009 ^c (1.928)	0.007 ^a (4.475)	0.008 ^a (4.714)	0.004 (0.666)
<i>IC</i>	+	0.006 ^b (2.409)	0.006 ^b (2.291)	-0.003 (-0.580)	0.004 ^c (1.684)	0.004 (1.473)	0.011 ^c (1.756)
<i>BIG</i>	-	-0.005 (-1.536)			-0.006 ^c (-1.700)		
<i>Constant</i>	?	0.023 ^b (2.363)	0.030 ^a (3.102)	0.062 ^b (2.025)	0.062 ^a (5.479)	0.047 ^a (4.017)	0.199 ^a (3.753)
Industry and year dummies		Included	Included	Included	Included	Included	Included
No. of Obs.		11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²		0.267	0.238	0.301	0.292	0.309	0.262

All p-value in parentheses are on an adjusted basis, using robust standard errors corrected for heteroscedasticity and firm-level clustering.

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

See the Appendix A for the definitions of variables.

Table 8
Empirical Results on the Association between Discretionary Accruals and Abnormal Audit Fees



Panel A: Difference between Actual Audit Fees and Expected Audit Fees Deflated by Total Fees

Dependent Variable	Section A (DACC1)			Section B (DACC2)		
	Full Sample	Big N	Non-Big N	Full Sample	Big N	Non-Big N
POABAFEE	0.017	0.016	-0.019	0.017	0.022	-0.019
	(0.880)	(0.751)	(-0.908)	(0.685)	(0.802)	(-0.582)
NEABAFEE	-0.013	-0.015	-0.007	-0.007	0.001	-0.029
	(-1.634)	(-1.050)	(-0.640)	(-0.840)	(0.211)	(-1.310)
Control variables included but not reported for the sake of brevity.						
Industry and year dummies	Included	Included	Included	Included	Included	Included
No. of Obs.	11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²	0.045	0.040	0.101	0.052	0.049	0.123

Panel B: Alternative Performance Control for Signed Discretionary Accruals Model of Kothari et al. (2005)

Dependent Variable	Operating Income after Depreciations			Net Income		
	Full Sample	Big N	Non-Big N	Full Sample	Big N	Non-Big N
POABAFEE	0.009	0.016	-0.016	0.016 ^b	0.024 ^a	-0.021
	(0.426)	(0.751)	(-0.621)	(2.495)	(3.618)	(-1.149)
NEABAFEE	-0.014	-0.015	-0.013	-0.001	0.001	-0.009
	(-1.621)	(-1.050)	(-1.063)	(-0.344)	(0.292)	(-0.955)
Control variables included but not reported for the sake of brevity.						
Industry and year dummies	Included	Included	Included	Included	Included	Included
No. of Obs.	11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²	0.045	0.040	0.092	0.381	0.411	0.200

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Panel C: Removing Samples of Non-Accelerated Filers, Experience Recent Auditor Changes and Restated Financial Reports

Dependent Variable	Section A (DACC1)		Section B (DACC2)		Big N
	Full Sample	Big N	Full Sample	Big N	
POABAFEE	0.027 ^a (2.892)	0.036 ^a (3.781)	0.032 ^a (2.965)		0.042 ^a (3.844)
NEABAFEE	-0.002 (-0.377)	-0.002 (-0.515)	0.001 (0.151)		0.002 (0.232)
Control variables included but not reported for the sake of brevity.					
Industry and year dummies	Included	Included	Included	Included	Included
No. of Obs.	8,948	7,898	8,948		7,898
adj. R ²	0.222	0.267	0.217		0.227

Panel D: Additional Control Variable

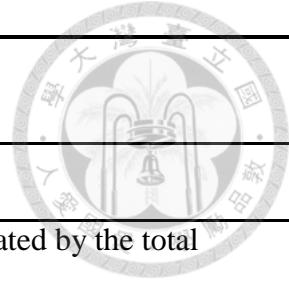
Dependent Variable	Section A (DACC1)			Section B (DACC2)		
	Full Sample	Big N	Non-Big N	Full Sample	Big N	Non-Big N
POABAFEE	0.018 (0.937)	0.028 (1.370)	-0.022 (-0.959)	0.019 (0.741)	0.022 (0.762)	-0.027 (-0.762)
NEABAFEE	-0.013 ^c (-1.662)	-0.015 (-1.320)	-0.014 (-1.070)	-0.007 (-0.864)	0.001 (0.244)	-0.047 ^c (-1.669)
Control variables included but not reported for the sake of brevity.						
Industry and year dummies	Included	Included	Included	Included	Included	Included
No. of Obs.	11,501	10,040	1,461	11,501	10,040	1,461
adj. R ²	0.045	0.048	0.101	0.052	0.049	0.123

All p-value in parentheses are on an adjusted basis, using robust standard errors corrected for heteroscedasticity and firm-level clustering.

^c, ^b, ^a Indicates significance at the 0.05, 0.01 and 0.001 level, respectively.

See the Appendix A for the definitions of variables.

Appendix A Variable Definitions



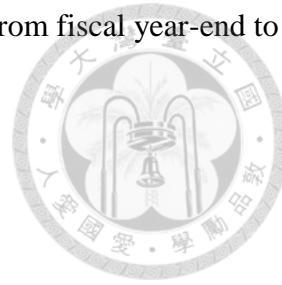
Variable	Definition
<i>ABAFFEE</i>	Actual audit fee minus expected audit fees deflated by the total engagement fees paid by the client.
<i>ADACCI</i>	Absolute discretionary accruals are calculated using the cross-sectional version of the Jones (1991) model as in Dechow et al. (1995) with performance adjustment (Kothari et al. 2005).
<i>ADACC2</i>	Absolute discretionary accruals are measured by Ball and Shivakumar's (2006) method.
<i>BM</i>	Book to market ratio, following Choi et al. (2010), winsorized at 1 percent.
<i>BUSY</i>	A dichotomous variable with value of 1 if a company's fiscal year is December 31 st , 0 otherwise.
<i>CFO</i>	Cash flow from operations divided by total assets.
<i>CITY</i>	Following Fung et al. (2012), a dichotomous variable with value of 1 if audit office has the highest total client audit fees in an industry within that city in a specific year, 0 otherwise.
<i>CURRENT</i>	Current assets deflated by total assets.
<i>FTAX</i>	A dichotomous variable with value of 1 if the firm pays any foreign income tax, and 0 otherwise.

(continued on next page)

<i>GC</i>	=	A dichotomous variable with value of 1 if the auditor issues a going concern audit opinion, 0 otherwise.
<i>GRSALES</i>	=	Sales change from the prior year divided by the prior year's beginning total assets.
<i>IC</i>	=	Number of material internal control weaknesses reported in Audit Analytics.
<i>INFLU</i>	=	Ratio of a client's total fee relative to the total annual fee of the practice office that audits the client following Reynolds and Francis (2001).
<i>INVREC</i>	=	Sum of accounts receivable and inventory divided by total assets.
<i>ISSUE</i>	=	A dichotomous variable with value of 1 if number of outstanding shares increased by at least 10 percent or long-term debt increased by at least 20 percent during the year (Geiger and North 2006; Asthana et al. 2012)
<i>NEABAFFEE</i>	=	If $ABAFFEE < 0$ then $NEABAFFEE = ABAFFEE $, and 0 otherwise.
<i>LAF</i>	=	Natural log of actual fees paid to auditors for their financial statement audit fees in thousands of dollars.
<i>LAGACCR</i>	=	One-year lagged total accruals.
<i>LAGROA</i>	=	One-year lagged return on assets.
<i>LAT</i>	=	Natural log of total assets in millions of dollars.
<i>LBS</i>	=	Natural log of the number of business segments.

(continued on next page)

<i>LDELAY</i>	=	Natural logarithm of number of calendar days from fiscal year-end to date of auditor's report.
<i>LEVE</i>	=	Total debt deflated by total assets.
<i>LIQUID</i>	=	Current assets deflated by current liabilities.
<i>LOFFICE</i>	=	Following Fung et al. (2012), natural log of aggregate audit fees for all firms audited by the company's auditor for each city.
<i>LOSS</i>	=	A dichotomous variable with value of 1 if the firm reported a loss during the year, and 0 otherwise.
<i>POABAfee</i>	=	If $ABAfee > 0$ then $POABAfee = ABAfee$, and 0 otherwise.
<i>ROA</i>	=	Income before extraordinary items divided by total assets.
<i>SCALE</i>	=	Following Fung et al. (2012), percentile rank of the city-industry number of audit clients for each firm.
<i>SDCFO</i>	=	Standard deviation of cash flow from operations deflated by total assets, calculated over the current and prior four years.
<i>SDSALES</i>	=	Standard deviation of sales deflated by total assets, calculated over the current and prior four years.



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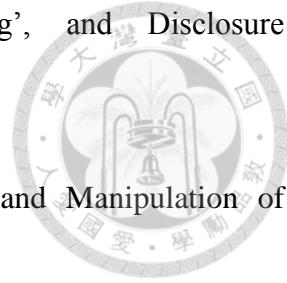
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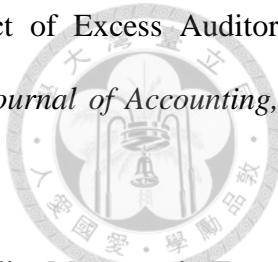
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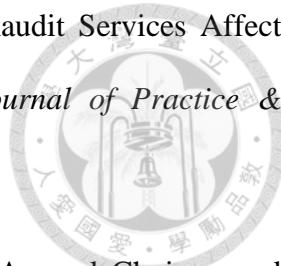
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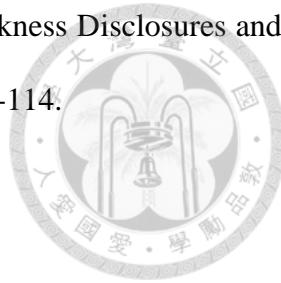
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