

The association between auditors' fees and earnings management in New  
Zealand

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## Dedication

In loving memory of my parents

To my beloved wife Suchitra and beloved daughters Ankita and Anandita

## STATEMENT OF ORIGINALITY

*"I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning."*

*Umapathy Ananthanarayanan*

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## **ABSTRACT**

This study provides evidence between auditors' fees and earnings management in New Zealand. The fee measures used in this study are audit fees, non-audit fees and total fees paid by a client to the audit firm. For each of the three fee measures, I derive client importance fee measures that reflect a client's economic importance to the auditor relative to other clients of the auditor at the city office and national levels. This study employs both performance adjusted discretionary accruals and current accruals as proxies for earnings management. Using a sample of 224 firm-years comprising firms listed on the New Zealand Stock Exchange (NZX) in fiscal years 2004 and 2005, the results of multivariate tests indicate an adverse association between non-audit fees and earnings management. In other words, non-audit fees paid by a client relative to fees paid by other clients, at the office and national levels, appear to impair the auditor's independence because clients generating relatively more non-audit fees report greater discretionary and current accruals. Such evidence is more pronounced for income increasing accrual proxies for earnings management. The results also show that audit fee is not related to earnings management. As the results in this study are consistent across both discretionary and current accruals, the validity of the results is strengthened. This study contributes to the literature by providing insight into how auditors' fee metrics indicating client importance affect earnings management in a legal and institutional environment of a small economy, and where the audit market is largely saturated with little room for growth. This study raises implications for relevant regulatory bodies in New Zealand pertaining to future developments of auditor independence and financial reporting regulations.

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# **1 Introduction**

This study investigates the association between fees paid to the auditor and earnings management in New Zealand. This is the first study to examine this association in New Zealand following worldwide reforms to corporate governance including auditor independence led by the introduction of the Sarbanes-Oxley Act in July of 2002 (SOX). There is a relatively long history of debate between regulators, auditors, and academic researchers on the potential threat auditor provided non-audit services bring to the quality of financial reporting.

There is a widespread belief that non-audit services provided by auditors affect their independence and increase the scope for biased accounting practices by their audit clients. Arthur Levitt, (former chairman) of the Securities and Exchange Commission (SEC) in the USA, argued that auditors use the audit service to attract the more lucrative consulting services and clients that pay high non-audit fees receive preferential financial reporting treatment from the auditors (Levitt 2000). Similarly, Martin (2002) highlights that two New Zealand accounting firms discounted audit fees for new clients to attract the more profitable consulting contracts. This practice is commonly known as “low-balling”.

Although the concern over non-audit services provided by the auditors to their audit clients dates back to 1961, it was not until the financial scandals led by the Enron debacle that convinced the US Congress to regulate non-audit services. The regulations over auditor independence and corporate governance are legislated in the SOX. The SOX bans the auditor from providing most non-

audit services to audit clients. It also mandates through the SEC, separate disclosure of audit and non-audit fees paid to the auditor.

Auditors and corporate executives have criticised the ban on non-audit services primarily on grounds of lack of persuasive and pervasive evidence. They argued that regulators failed to provide sufficient and necessary evidence that clearly showed auditor provided non-audit services impaired the auditor's independence for clients generating lucrative non-audit fees. They further argued that anecdotal evidence such as Enron, WorldCom and the like are peculiar to a single audit firm, Arthur Andersen. Empirical research in the US tends to support the dissenting voice of the auditors and executives. With the exception of Frankel, Johnson, and Nelson (2002), all other US research show non-audit fees generated from audit clients do not diminish the quality of reported earnings (Ashbaugh, Lafond, and Mayhew 2003; Chung and Kallapur 2003; DeFond, Raghunandan, and Subramanyam 2002; Larcker and Richardson 2004; Raghunandan, Read, and Whisenant 2003).

The SOX had a rippling effect on corporate governance regulations worldwide. For example, SOX style rules in the form of guidelines that are non-mandatory are encapsulated in the UK Combined Code, Australian Stock Exchange Principles of Good Governance (ASX), (2003), The Singapore Code of Corporate Governance (SCCG), (2005), and in the New Zealand Securities Commission's "Corporate Governance in New Zealand Principles and Guidelines" (SECNZ, 2004). Unlike the ban on most auditor provided non-audit services in the US, these jurisdictions are still debating the potential threats of non-audit services on auditor independence. This is probably because empirical results are less clear in relatively smaller capital markets.

In Australia, where the disclosure of fees paid to the auditor has a longer history than the US, research evidence on non-audit fees impairing auditor independence is unambiguously mixed. For example, Barkess and Simnett (1994) and Craswell (1999) find no significant association between non-audit services fee and audit quality, whereas Wines (1994), Sharma (2001), and Sharma and Sidhu (2001) report non-audit services fees reduce the quality of financial reporting. The potential threats deriving from auditor provided non-audit services may be greater in smaller capital markets than in larger capital markets because the scope for growth in the smaller audit and consulting market is limited. Close to Australia lies the twin island nation of New Zealand. New Zealand by comparison to the US and Australia has a very small and limited capital market. The total number of publicly listed companies trading on the main NZX board has yet to surpass the 300 mark. Moreover, close to 40% of publically listed companies in New Zealand are foreign companies.

Regulatory concerns over perceived auditor independence threats posed by the joint provision of audit and non-audit services in the small but growing New Zealand market led to the auditor's fees disclosure rules in 1979. That rule evolved to the current rule contained in the New Zealand International Accounting Standards (NZ IAS) 1 that echoes the requirements in the US. Principle 7 of the Corporate Governance New Zealand Securities Commission Principles and Guidelines (hereafter SECNZ principles), among other things, stresses the need for limiting non-audit services provided to audit clients, and to call for disclosure of non-audit fees according to the various types of non-audit work performed by the auditor. Principle 7 closely mimics SOX except that it is not mandatory. This study contributes to the recent policy making process of the

SECNZ dealing with disclosure of non-audit fees as a result of potential concerns over perceived auditor independence.

Despite the long history of potential concerns over non-audit services in New Zealand, there are only two studies to date that address these concerns. Hay, Knechel, and Li (2006) examine non-audit fees and going concern modifications in New Zealand. They report no adverse fee effects on the auditors' going concern opinion for a sample spanning 1999 to 2001. A recent study by Cahan, Emanuel, Hay, and Wong (2008) examines growth in non-audit fees and earnings management for New Zealand listed companies that remain in the sample period 1995 to 2001. They largely report no adverse effects of growth in non-audit fees and earnings management. For some tests, Cahan et al. (2008) show greater non-audit fees are positively related to earnings management. These studies, including their limitations, are discussed in more detail in the next chapter.

This study extends the limited New Zealand literature on the association between fees paid to auditors and earnings management, and contributes to policy making. Specifically, in a post-SOX and governance reform period, the study investigates the association between earnings management and (i) non-audit services fees paid to the auditor, (ii) audit fees paid to the auditor, and (iii) total fees paid to the auditor. Distinct from prior New Zealand research, (Hay et al. 2006; Cahan et al. 2008) each fee metric is derived as a client importance measure at the city office level and national office level.<sup>1</sup> City office level client importance empirical fee measures are used because regulators are concerned

<sup>1</sup> It is not clear from the non-audit services fee client importance definition in Cahan et al. (2008) whether their measure is at the city office or national level. It appears to be at the national level as no mention is made of a city office level measure.

about the economic rents a particular client generates that could result in the auditor colluding with a client to report biased financial information (Chung and Kallapur 2003). Moreover, in a small and saturated audit market like New Zealand, client importance fee measures provide more powerful and relevant tests because audit decisions are made at the office level. National office level fees are employed because in a small capital market, and small geographic country, the city offices and national head-office may have considerable interaction, and thus, share similar economic concerns about a client. Additional tests reported later, based on alternative fee measures, produce consistent results.

The second significant distinction between this study and prior research is that earnings management is proxied using two primary estimates. This study employs both performance adjusted discretionary accruals (Kothari, Leone, and Wasley 2005) and current accruals (Ashbaugh et al. 2003). In their replication of Frankel et al. (2002) who use performance adjusted discretionary accruals, Ashbaugh et al. (2003) challenge their findings on grounds that current accruals better capture the discretion management exercise to misreport financial reports. Current accruals are more direct and immediate proxy for management discretion whereas, discretionary accruals proxy indirect and long term discretion exercised by management (Ashbaugh et al. 2003). Using both proxies for earnings management enhances the validity of the results. Consistent results would strengthen the conclusions drawn from the statistical analyses.

Using 224 firm-years from the New Zealand Stock Exchange in fiscal 2004 and 2005, the results indicate non-audit services fees are significantly

associated with earnings management. Specifically, the results suggest that higher non-audit services increase earnings management. This association is stronger for income increasing accruals that diminish the quality of earnings. Moreover, the significant associations hold for both current and total discretionary accruals. The results show audit fee is not related to earnings management. The adverse effects of total fees generated by a client on earnings management is, therefore, attributed to non-audit services fees. The results are robust to various sensitivity tests that include alternative fee measures, change in fees, prior year fee effects, client size and auditor effects.

The remainder of this thesis is organized as follows. Chapter 2 reviews the background, prior literature and develops the empirically testable hypothesis. Chapter 3 describes the research method. Chapter 4 presents the results and chapter 5 discusses the results and concludes the study.

## **2 Background to the Audit Environment in New Zealand**

The New Zealand Companies Act of 1993 governs companies formed and registered in New Zealand. According to Section 133 of the Act, all public companies must have an annual audit. It also specifies that the audit is to be carried out only by members of the New Zealand Society of Accountants (NZSA) now known as the New Zealand Institute of Chartered Accountants (NZICA). This is so because NZICA regulates its members and its membership includes auditors. Unlike the US and Australia, where independent regulatory bodies like Public Company Accounting Oversight Board (PCAOB) and Financial Reporting Council (FRC), respectively regulate auditors, there is no such body in New Zealand. New Zealand has a self-regulatory process. Like most other countries, in New Zealand too, the auditor is selected by the board of directors and is ratified by the shareholders at the annual general meeting.

The development of public accounting services in New Zealand was largely influenced by those in the UK. Today, accounting firms in New Zealand render similar audit services like their counterparts in the US, Canada, and Australia. They audit all types of entities except government and municipal entities which are audited by the Government Audit Office. Normally, auditors of a company continuously audit the same company unless there is a merger or takeover which could result in a change of auditors. Given this norm, debates about the rotation of audit firms is gaining momentum in New Zealand following concerns arising from accounting scandals such as Enron and WorldCom in the US.<sup>2</sup> Accounting scandals in the US led to the passing of SOX in 2002 that bans most auditor provided non-audit services and calls for studies on the effect

<sup>2</sup> Unfortunately, the lack of audit tenure data in New Zealand, constrains research on audit tenure. Currently, the only feasible way to compute auditor tenure is to go through consecutive annual reports.

of auditor tenure on auditor independence. Such a ban is based on the belief that non-audit services are a lucrative revenue generator for the auditor that creates the auditor's economic dependence on the client. This economic dependence threatens the auditor's objectivity and independence which could result in the auditor ignoring or supporting material financial misstatements proposed by management. To assist users of financial statements to assess the auditor's perceived independence, the SOX require companies, through the SEC, to disclose fees paid to the auditor for audit and non-audit services. Fees paid for non-audit services are required to be disclosed in three categories; 'audit-related' fees, tax, and other non-audit fees. In New Zealand the disclosure of fees paid to the auditor dates back to 1979.

## **2.1 History of Audit Fee Disclosure in New Zealand**

In New Zealand, Statement of Standard Accounting Practices (SSAP)-9 paragraph 4.3 (b) required audit fees and expenses (a total amount) to be disclosed in a client's annual report since 1979 until the early 1990s. Separate disclosure of fees for audit services from fees for other services was advocated in the landmark Commission report entitled "Capital Structure and Financial Reporting in New Zealand" (1990). Paragraph 24.41.9(d) of the Report states that a company should disclose,

"Amounts paid to auditors (irrespective of amount) showing separately the amounts attributable to:

- (i) Auditing the financial statements showing separately, where the auditor of the parent company does not audit all the subsidiaries, the amount paid to the auditor of the parent and the amounts paid to other auditors;



(ii) Providing other services.”

The legal requirement to separately disclose fees paid to the auditor for other services provided was legislated in the Companies Act of 1993. The Companies Act 1993 (section 211(1)(j)) requires the annual report of a company to state the amounts paid or payable to the auditor of the company for audit fees and, as a separate item, fees for other services. In 1995, Financial Reporting Standards (FRS) amended the fee disclosure for financial periods ending on or after 1 July 1995. Paragraph 6.13 (e) of FRS-9 requires disclosure of fees paid to auditors, with separate disclosure of fees paid to the parent entity auditor, fees paid to the auditor of any other entity in the group, and fees paid to the parent entity auditor for any other services provided to group entities. Paragraph 6.15 explains that this also includes fees for consulting services and taxation advice.

The most recent change to the fee disclosure was made when New Zealand adopted the International Financial Reporting Standards (IFRS). Under New Zealand IFRS, more detailed disclosures are mandatory beginning 1<sup>st</sup> January, 2007. NZ IAS 1 (paragraph NZ 94.1(a)(ii-iv)) requires separate disclosure of fees paid or payable to each auditor of the parent entity for audit fees, audit-related fees, tax fees and all other fees. This paragraph also requires description of the nature of the services provided. This disclosure rule mimics the disclosure rule introduced by the SEC in US. The rationale for more detailed disclosure of fees paid to the audit firm is to foster transparency and inform users of financial statements about the auditor's objectivity and independence. However, a recent review by the SECNZ (REVIEW OF FINANCIAL REPORTING BY ISSUERS – CYCLE 6), (2006) found some

issuers still did not follow the fee disclosure rules. Such inadequate disclosure limits market participants from assessing the potential auditor independence threats fee revenues may create.

## **2.2 Literature Review**

### **2.2.1 Audit Quality and Non-Audit Fees**

It is a general regulatory belief that non-audit services provided by auditors to their audit clients compromise audit quality and audit independence. DeAngelo (1981) defines audit quality as the joint probability of the auditor discovering, observing and reporting financial statement errors. Auditors of higher quality are less willing to accept questionable accounting methods and are more likely to report errors and irregularities uncovered during the audit. External auditors have market based incentives to maintain their integrity and objectivity. The auditors have a client base which they can potentially lose in the event of a loss of reputation. The economic consequences of reputation loss provides incentives to auditors to maintain and exhibit high independence standards. At the least, they are to appear independent to the capital market because independence in fact (of mind) cannot be observed (Mautz and Sharaf 1961).

Regulators allege that the lucrative non-audit services fees could impair the auditors' independence. Such threats arguably manifest in biased financial reporting. The extent to which non-audit services threatens the integrity of financial reporting has been the subject of much research in the US and to a lesser extent elsewhere. The literature to date is reviewed next and summarised in Exhibit 1.

*(Insert Exhibit 1 here)*

### 2.2.2 US Research

DeFond et al. (2002) examine the auditor's association between non-audit fees and the going concern opinion decision. They use FEERATIO, logTOTALFEE, logAUDITFEE, and logNON\_AUDIT FEE as their fee metrics.<sup>3</sup> Their sample comprises 2,428 US firms including 100 firms with a first time going concern opinion during the year 2001. Their results show no significant association between non-audit fees and the auditors' going concern opinion decision. Therefore, they conclude that the auditor's independence is not impaired by non-audit services fees.

Frankel et al. (2002) examine the association between earnings management and non-audit fees. They define audit fees as aggregate fees billed for professional services rendered for the audit of the annual financial statements and the reviews of the quarterly financial statements; non-audit fees as the total of IS and OTHER where IS equals aggregate fees billed for financial information systems design and implementation. The components of OTHER fees are as follows: audit-related, e.g., audits of employee benefit plans, regulatory audits, and preparation of registration statements and other SEC filings; tax, e.g., preparation and filing of tax forms, and tax-related consulting; combined audit-related and tax, consisting of fees from both of the previous categories; and other advisory, e.g., general consulting services, and information technology consulting for systems not associated with the financial statements. They use FEERATIO, RANKNON, and RANKAUD as measures of

<sup>3</sup> Fee ratio is the proportion of non-audit fees to total fees; logTOTALFEE is the natural logarithm of total fees; logAUDITFEE is the natural logarithm of audit fees; and logNON\_AUDIT FEE is the natural logarithm of non-audit fees.

non-audit fees. FEERATIO is the ratio of non-audit fees to total fees. RANKNON and RANKAUD are the percentile rank of non-audit and audit fees for clients of a given auditor. They measure earnings management using discretionary accruals estimated using a cross-sectional modified Jones (1991) model. Discretionary accruals (DACC) are equal to:

$$DACC = TA - (\alpha + \beta_1[\Delta REV - \Delta REC] + \beta_2 PPE)$$

where TA is total accruals, defined as net income less cash from operations,  $\Delta REV$  is the change in net revenues,  $\Delta REC$  is the change in net receivables, and PPE is gross property, plant, and equipment. The estimates of  $\alpha$ ,  $\beta_1$ , and  $\beta_2$  are obtained from estimating the following model at the industry level, where industry membership is identified using two-digit SIC codes:

$$TA = \alpha + \beta_1 \Delta REV + \beta_2 PPE + \varepsilon$$

They use the following empirical model to test the fee effects:

$$\begin{aligned} ABSDACC = & \alpha + \beta_1 FEEVAR + \beta_2 BIGFIVE + \beta_3 AUDTEN + \beta_4 CFO + \\ & \beta_5 ABSCFO + \beta_6 ACC + \beta_7 ABSACC + \beta_8 LEVERAGE + \\ & \beta_9 LITIGATION + \beta_{10} M/B + \beta_{11} LOGMVE + \beta_{12} \%INST + \beta_{13} LOSS \\ & + \beta_{14} FIN/ACQ + \beta_{15} ANNRET + \varepsilon \end{aligned}$$

Their sample comprises 3,074 US companies during the year 2001. The OLS regression showed significant positive associations between non-audit fees and discretionary accruals, and negative association between audit fees and discretionary accruals. There is no association between total fees and discretionary accruals, suggesting that combining audit and non-audit fees into a single measure masks their differential incentive effects. Frankel et al. (2002), therefore, conclude that higher non-audit fees threaten the independence of the auditor.

Ashbaugh et al. (2003) challenge the findings of Frankel et al. (2002). They use current accruals as a measure of earnings management and argue that management has greater discretion over current accruals than over discretionary accruals. They use FEERATIO, AUDIT, NON\_AUDIT, and TOTAL fee metrics. FEERATIO is the ratio of non-audit fees to total fees. AUDIT fee is the audit fee paid to the auditor. NON\_AUDIT is the non-audit fees paid to the auditor, and TOTAL is the sum of AUDIT and NON\_AUDIT. For earnings management they use PADCA (Portfolio Performance Adjusted Discretionary Current Accruals) where they control for firm performance through a portfolio technique), and REDCA (lagged *ROA* included in Estimation of Discretionary Current Accruals). To calculate PADCA, they partition the sample firms using the two-digit SIC code and estimate the following regression:

$$CA = \alpha_1 + (1/lag\_1asset) + \alpha_2(\Delta Rev)$$

where current accruals (CA) is net income before extraordinary items plus depreciation and amortization minus operating cash flows scaled by beginning of year total assets, *lag\_1asset* is total assets at the beginning of the fiscal year, and  $\Delta Rev$  is equal to net sales in year  $t$  less net sales in year  $t-1$  scaled by beginning of year total assets.

Then ECA (Expected Current Accruals) was calculated using the above parameter estimates.

$$ECA = \alpha_1 + (1/lag\_1asset) + \alpha_2(\Delta Rev - \Delta AR)$$

where  $\Delta AR$  is equal to accounts receivable in year  $t$  less accounts receivable in year  $t-1$  scaled by beginning of year total assets. A firm's Discretionary Current Accrual (DCA) is equal to CA minus ECA. The calculation of REDCA is

estimated by the following cross-sectional current accrual regression by each two-digit SIC code partition:

$$CA = \beta_1 + (1 / \text{lag\_1asset}) + \beta_2(\Delta \text{Rev}) + \beta_3 \text{Lag1ROA} + \varepsilon$$

The parameters from the above equation was used to calculate expected current accruals estimated with a performance control (ECAPC):

$$\text{ECAPC} = \beta_1 + (1 / \text{lag\_1asset}) + \beta_2(\Delta \text{Rev} - \Delta \text{AR}) + \beta_3 \text{Lag1ROA}$$

REDCA is equal to CA minus ECAPC. In contrast to PADCA, which controls for relative firm performance within two-digit SIC classes, the REDCA estimate of discretionary current accruals controls for performance on a firm-specific basis. They test the fee effects using the following equation:

$$\begin{aligned} \text{DCA\_PA} = & \alpha + \beta_1 \text{FEE} + \beta_2 \text{BIG5} + \beta_3 \text{L1ACCRUAL} + \beta_4 \ln \text{MVE} + \beta_5 \text{FIN/ACQ} \\ & + \beta_6 \text{FINANCING} + \beta_7 \text{LEVERAGE} + \beta_8 \text{MB} + \beta_9 \text{LITIGATION} + \\ & \beta_{10} \text{INST\_HOLDING} + \beta_{11} \text{LOSS} + \beta_{12} \text{CFO} + \varepsilon \end{aligned}$$

Using a sample of 3,170 US firms in 2001, they find no association between fee metrics and their current accrual measures. Their results challenge those of Frankel et al. (2002).

Chung and Kallapur (2003) study the association between earnings management and client importance measured by client's fees vis-à-vis other clients' fees. They examine the following client importance ratios: client / rev stands for ratio of total client fees (audit + non-audit) to audit firm's total US revenues; non\_aud / rev is the ratio of non-audit fees from the client to audit firm's total US revenues; client / officerev is the ratio of total client fees to revenues of the audit firm office through which the audit was conducted; and non\_aud / officerev is the ratio of non-audit fees from the client to revenues of the audit firm office through which the audit was conducted. Earnings management is measured using the cross sectional modified Jones-model:

$$ACC = \alpha_0 1/TA + \alpha_1(\Delta SALES - \Delta AR)/TA_{-1} + \alpha_2 PPE/TA_{-1} + \varepsilon$$

where ACC is total accruals deflated by  $TA_{-1}$  and accruals is the difference between earnings (before extraordinary items and discontinued operations) and cash from operations,  $1/TA_{-1}$  is total assets at the beginning of the year,  $\Delta SALES$  is the change in sales over the prior year,  $\Delta AR$  is the change in accounts receivable over the prior year, and PPE is property, plant, and equipment deflated by total assets at the beginning of the year. Their OLS model to test the fee effects is:

$$|DACC| = \sum_j \alpha_j D_j + \beta_1 \log(TA) + \beta_2 OCF + \beta_3 OCF_{t-1} + \beta_4 ACC_{t-1} + \beta_5 ACC_{t-1} + \beta_6 ROA_{t-1} + \beta_7 ROA_{t-1} + \beta_8 ACQ + \beta_9 ISSUE + \beta_{10} TENURE + \beta_{11} CLIENT\_IMP + \varepsilon$$

Using a sample of 1,871 US firms in the year 2000, they find no significant association between client importance measures and abnormal accruals. They conclude that auditor independence is not impaired by non-audit fees at the office level. This is the second study that contradicts Frankel et al. (2002) but is consistent with Ashbaugh et al. (2003).

Kinney, Palmrose, and Scholz (2004) investigate the relationship between earnings restatements and the provision of non-audit services. They define FEERATIO as the ratio of non-audit services fees to total fees. Their sample consists of 617 restating registrants from 1995 to 2000. They did not find any evidence of a positive association between audit firm fees for non-audit services and restatements.

Larcker and Richardson (2004) study the association between earnings management and fees. Earnings management is measured as abnormal accruals. Their sample consists of 5,103 US firm-years for fiscal years 2000 and

2001. They use FEERATIO defined as the ratio of non-audit fees to total fees (the sum of audit and non-audit fees) paid to the auditor, and client importance measures such as NONAUDFEE (defined as the ratio of non-audit fees paid by the client to the total revenue of the auditor for that year), and TOTFEE (defined as the ratio of total fees paid by the client to the total revenue of the auditor for that year). They conclude there is a positive association between non-audit fees and abnormal accruals for a very small percentage (8.5%) of firms that have relatively poor corporate governance structures.

Sharma (2006) takes a closer look at non-audit fees in financial restatements in the US. She finds for her sample, in the year in which the accounts were first misstated, that non-audit fees are positively related to financial restatements. She also finds that the firms most likely to restate and pay their auditors high non-audit fees are those with poor quality audit committee. In summary, the majority of the evidence in the US suggests non-audit fees do not impair the auditor's independence.

### **2.2.3 Australian Research**

Barkess and Simnett (1994) investigate the association between the going concern opinion decision and non-audit fees. Their sample consists of 371 publically listed companies in 1986, 403 in 1987, 466 in 1988, 463 in 1989, and 391 in 1990. They define AUDQUAL as a dummy variable taking the value (0) for a non-qualified opinion or (1) for a qualified opinion. They define OTHFEES (other fees) as the dollar amounts paid to auditors for other services. They find that non-audit services fees are not related to the audit opinion decision. However, in this study, the dependent variable is not the audit opinion.



Rather, it is non-audit fees and the authors are interested in determinants of non-audit fees where the auditor's opinion is one of the factors.

Wines (1994) also investigates the association between the going concern opinion decision and non-audit fees. His sample comprises 76 Australian companies over a period of 10 years from 1980 to 1989. He defines non-audit service fee as the percentage of non-audit fees to total fees. Going concern opinion is a dichotomous variable taking the value (0) for a non-qualified opinion, and (1) for a qualified opinion. His logistic regression results leads to the conclusion that auditor independence is impaired for clients generating higher levels of non-audit services fees.

Craswell (1999) investigates the association between non-audit services fees and auditor independence for a sample consisting of 885 Australian listed companies in 1984, 1,477 in 1987 and 1,079 in 1994, using logit regression. His fee variable is non-audit services fee to total fees paid to the auditor and audit opinion is categorised as clean or qualified. He finds non-audit services fees are not related to the audit opinion decision.

Sharma (2001) and Sharma and Sidhu (2001) argue that for an effective test of threats to auditor independence, there is a need to study the opinion the auditor ought to have given relative to the actual opinion given. If it is determined that the auditor ought to have given a qualified audit opinion but had given a clean opinion then reasons for the deviation could be attributed to independence impairment after controlling for other explanations. Consequently, Sharma (2001) and Sharma and Sidhu (2001) examine the association between non-audit services fees and going concern opinion for a sample 49 Australian bankrupt companies between 1989 and 1996 that

declared involuntary bankruptcy. Their results provide evidence of significant associations between non-audit services fees and the propensity of the auditor to issue a qualified going concern opinion that suggest potential independence threats.

#### **2.2.4 Other Countries' Research**

Clive (1999) investigates the effect of non-audit services fees on audit quality. The sample consists of 2,266 UK firms in the period 1988 to 1994. NAF is the level of non-audit fees and NAFR is the ratio of non-audit fees to total (audit and non-audit) fees paid by a company to its auditor. Audit quality is set to 1 if the auditor discloses a fundamental uncertainty or gives a qualified audit report due to going-concern issues, and 0 otherwise. Using a probit model he concludes that non-audit fee measures do not affect audit quality.

Antle, Gordon, Narayanamoorthy, and Zhui (2006) investigate the association between earnings management and total fees paid to the auditor. Their sample consists of 2,294 UK firms from 1994 to 2000 and 1,570 US firms in the year 2000. They define RATIO as the ratio of non-audit to audit fees or to total fees to study economic bonding in the auditor-client relationship. Earnings management is measured using the absolute value of discretionary accruals estimated from the modified Jones model. They report that non-audit fees decrease abnormal accruals in both the US and the UK.

Gore, Pope, and Singh (2001) investigate the association between earnings management and non-audit fees. They use the simple Jones model to measure discretionary working capital accruals. They define NAS as non-audit fees to total audit fees. Using a sample of 4,779 UK companies in the period

1992 to 1998, they report a positive association between non-audit fees and earnings management for non-Big5 clients but not for Big5 clients.

### 2.2.5 New Zealand Research

Hay et al. (2006) examine the effect of non-audit fees on the auditor's going concern opinion decision. They are the first researchers to empirically examine the fee effects on audit opinion decisions in New Zealand. They define NAF/AF as the ratio of non-audit fees to audit fees, FEEDEP as a client's audit fee plus non-audit fee divided by total audit fees and non-audit fees of the auditor. Audit opinion is defined as firms receiving a qualified or modified report (1), and others (0). Their sample consists of 177 companies in 1999, 224 companies in 2000, and 243 companies in 2001. They use the following model to test the hypothesis of a negative association between the level of non-audit fees and the frequency of qualified or modified audit reports.

$$\text{OPINION} = \alpha + \beta_1 \text{NAF/AF} + \beta_2 \text{Ln(TA)} + \beta_3 \text{INVREC} + \beta_4 \text{FEEDEP} + \beta_5 \text{ROA} + \beta_6 \text{TD/TA} + \beta_7 \text{BIG5} + \beta_8 \text{LISTED} + \beta_9 \text{SQRTSUB} + \varepsilon$$

Their results show that there is no significant association between audit qualification or modification and non-audit fees. This was a surprising result because in a small and limited growth market for audit and consulting services, their expectation was for auditors to acquiesce to client pressure in order to preserve their client base and fee revenues. A probable explanation for their results is the low power of their analysis. The total number of companies with a going concern qualification is 28 and this constitutes less than 5% of their sample.

Cahan et al. (2008) examine the association between growth in non-audit fees, client importance measures and earnings management. They use a

measure of discretionary accruals estimated using the cross sectional Jones (1991) model for each industry with 10 or more firms.

$$TAC/A = \beta_1(1/A) + \beta_2(\Delta SALES/A) + \beta_3(PPE/A) + \varepsilon$$

where  $TAC$  is earnings less operating cash flows for firm  $i$  in year  $t$ ;  $A$  is total assets for firm  $i$  in year  $t - 1$ ;  $\Delta SALES$  is the change in sales revenues for firm  $i$  in year  $t$ ; and  $PPE$  is gross property, plant and equipment for firm  $i$  in year  $t$ . The residuals from the above equation is their proxy for earnings management and is the dependent variable in the following model:

$$DAC = \beta_1 + \beta_2 NAF + \beta_3 CLIENT + \beta_4 NAF \times CLIENT + \beta_5 SIZE + \beta_6 INDGROW + \beta_7 CFO + \beta_8 AUDTYPE + \beta_9 BKMKT + \beta_{10} LOSS + \beta_{11-12} INDUSTRY + \beta_{13-16} YEAR + \varepsilon$$

The independent variable  $NAF$  is a measure of non-audit services fees and  $CLIENT$  is a measure for client importance. They derive various fee metrics to evaluate their hypotheses for a more robust analysis.

Cahan et al. (2008) report mixed results for their sample covering the period 1995 to 2001. They find client importance is associated with discretionary accruals in some regressions and not in others. They also report that clients that create significant growth in non-audit fees for the auditor over an extended period of time exhibit lower discretionary accruals. However, the latter result is not reliable because the OLS yields a negative adjusted  $R^2$  suggesting the OLS is mis-specified. When they use auditor's growing reliance on a client's non-audit fees, measured using three proxies, they find two of these proxies are positively associated with discretionary accruals.

Cahan et al. (2008) make an important contribution to the literature. Their study suggests that incorporating measures of a client's economic importance to the auditor over time is a potentially useful proxy for evaluating threats to

auditor independence. However, this approach requires longitudinal data for the same set of firms which inherently introduces multivariate limitations such as survivorship bias, serial auto-correlation problems, and sample size problems. Another issue not addressed by Cahan et al. (2008) is that over time discretionary accruals reverse and how this affects their results is not clear. These multivariate issues together with small sample size problem (ranging from 31 to 64 for most of their OLS) are possible explanations for the mixed results in Cahan et al. (2008). Finally, since the NZX cross lists large foreign companies, Hay et al. (2006) and Cahan et al. (2008) do not disclose whether they eliminated foreign companies from their samples. This is an important issue because foreign companies are subject to different disclosure regulations and their corporate offices usually fix the fees to be paid to the auditor. In this study, foreign companies cross-listed on the NZX are excluded from the sample.

#### **2.2.6 Hypothesis Development**

Watts and Zimmerman (1983, 1986) define auditor independence as the probability of an auditor reporting a discovered breach in the financial reports. This indicates that auditor independence is synonymous with auditor objectivity and the ability to withstand client pressure to assent to substandard reporting. Jensen and Meckling (1976) posit that managers of companies hire independent auditors to reduce agency costs. This view has been endorsed by Watts and Zimmerman (1983) who report that 84% of New York Stock Exchange (NYSE) companies voluntarily engaged independent auditors in 1926, several years before the Securities Acts mandated external auditing. Thus, the appointment of independent auditors has both theoretical and empirical support as a mechanism to reduce agency costs.

Benston (1975) speculates that auditors' reputation concerns are likely to create incentives for independence, and Watts and Zimmerman (1983) cite several examples of auditors taking costly actions to protect their reputation capital. The fall of Enron and subsequent collapse of Arthur Andersen gives present and prospective clients an excuse to flee and avoid shareholder litigation and less scrutiny from regulators if the auditor's independence is questionable. In the US capital market, the problem of class action lawsuits provides another incentive for auditors to uphold their independence. Antle, Griffen, Teece, and Williamson (1997) observe that Big5 auditors incurred more than \$1 billion in litigation related costs in 1993 alone. External auditors have market-based incentives to remain independent of their publicly held clients. Reputation and litigation concerns motivate auditors to uphold their independence by constraining manager's discretion over reported earnings (e.g., Palmrose 1988; Francis, Maydew, and Sparks 1999a; Becker, DeFond, Jiambalvo, and Subramanyam 1998). Breach of independence has led to litigation against auditors and loss of fee revenue from clients switching over to reputable auditors (Antle et al. 1997). Shu (2000) reports that auditors are proactive and take steps to disassociate themselves from clients that pose higher litigation risk. Such actions have become more prominent following the discovery of accounting scandals orchestrated by Arthur Andersen and its clients such as Enron. The then Big5 firms such as KPMG, PWC, Ernst & Young, and Deloitte resigned from audits of risky clients in the aftermath of the indictment of Arthur Andersen (Turner, Williams and Weirich 2005).

Despite such proactive precautionary measures taken by audit firms, regulators are still concerned about at least two effects of non-audit services provided by auditors. First, non-audit service fees make auditors financially

dependent on their clients. Regulators believe that auditors become financially dependent on their clients if they derive higher economic rents from non-audit services fee as compared to audit fees. Regulators fear that auditors will perceive the benefits from retaining clients that generate significant economic rents will outweigh the expected costs (reputation loss and litigation costs) of sacrificing their independence. As a result of this economic bonding, they are less likely to stand up to management pressure for financial misreporting (DeAngelo 1981). The second effect is the consulting nature of many non-audit services which places auditors in managerial roles hence potentially threatening their objectivity about the transactions they audit (Kida 1980).

Non-audit fees foster the client-auditor economic bond by increasing the portion of audit-firm wealth derived from a client (e.g., Simunic 1984; Beck et al. 1988). Magee and Tseng (1990) posit that while contingent fees are explicitly prohibited by audit standards, clients can still manage to create contingent fees by keeping back profitable non-audit services when the auditor does not allow the client to report its preferred accounting treatments. Simunic (1984) contends that when an auditor provides consulting services, economic rent is generated due to “knowledge spillovers.” Knowledge spillovers arising from the joint provision of audit and consulting services can produce economic rents by reducing the cost of the audit (Simunic 1984).

The accounting profession has rebutted regulatory allegations about the economic bonding effects on the quality of the audit. The President of the American Institute of Certified Public Accountants (AICPA) Barry C. Melancon, argues that the joint provision of audit and non-audit services provides the audit firm valuable “inside” knowledge about the client. Such knowledge enhances

the quality of the audit. Recent research by Knechel and Sharma (2008) support this view. These authors provide evidence of higher quality financial reporting for clients generating higher levels of non-audit services fee for the auditor. The rationale is that auditor provided non-audit services create knowledge spillovers that enhance the auditor's knowledge about the client including more timely recognition of potential accounting problems.

The preceding discussion suggests that the effect of non-audit services fees on audit quality is either positive or negative. In a small economy such as New Zealand, non-audit services fees could compromise audit quality. This may be so because the smaller New Zealand economy offers a limited number of clients, concentrated in four cities, to be shared amongst the Big4 and non-Big4 auditors. Such competitive pressures could create room for clients to influence the outcome of the audit. However, given the intense competition in a small economy, an audit failure could result in significant loss of reputation and clients. The desire to protect their reputation and avoid consequent economic losses would motivate the auditors to provide high quality audits such that earnings management is constrained. Accordingly, the following hypothesis is stated in the null form.

H1: There is no association between non-audit fees and earnings management.



### **3 Sample Selection**

The sample is selected from the firms listed on the New Zealand Stock Exchange (NZX) in fiscal years 2004 and 2005. These years are selected because corporate governance guidelines were effective in New Zealand since January 1, 2004. The idea is to investigate how any heightened focus on auditor independence in more developed and regulated economies such as the US and Australia influence the New Zealand self-regulatory auditor independence environment.

The initial sample comprises 264 firms for 2004 and 250 firms for 2005, a total of 514 firms. From this total, 98 foreign firms cross-listed on the NZX are eliminated because they are subject to different reporting regulations. A further 47 firms on New Zealand Alternative Market (NZAX) and 88 firms on the New Zealand Debt market (NZDX) are excluded because these firms are smaller, not actively traded, and not subject to the same governance regulations. Fifteen firms in the finance industry and 10 firms in the utility industry are eliminated because these firms have different income measurement rules and unique capital structure which results in fundamentally different accrual process that are not captured by the modified-Jones model to estimate discretionary accruals (Klein 2002). Seven firms are eliminated because of dual listing. Nineteen firms were eliminated because the observations were less than five in their respective industry category. A minimum of five firms per industry is required to estimate discretionary accruals (Dechow, Sloan, and Sweeney 1995). Six firms that have their audit office located outside New Zealand are excluded. The final sample, therefore, consists of 224 firm-years. Table 1 summarises the sample selection procedure.

*(Insert Table 1 here)*

The NZX industry descriptors are used to classify firms into their respective industry groups. The sample distribution in Table 2 shows that the greatest proportion of the sample is in the Consumer industry 23.21% (n=52). The Property industry accounts for 12.05% (n=27) and the Intermediate and Durable industry represents 11.61% (n=26) of the sample. Agriculture & Fishing comprises 10.71% (n=24) and Bio-technology constitutes 9.82% (n=22) of the sample. Nineteen firms are from the Media and Communication industries and 18 from the Ports and Transport industry representing 8.48% and 8.04%, respectively. The Leisure and Tourism industry makes up the least number of sample firms (n = 9) (4.02%) for the study, while the Food industry has 14 firms (6.25%), and Health services has 13 firms (5.8%). All data used in this study is hand collected from the annual reports filed with the NZX.

*(Insert Table 2 here)*

### **3.1 Empirical Model and Variables**

#### **3.1.1 Dependant Variable: Earnings Management**

There are several proxies for earnings management such as the assessment of accounting policy changes (Healy 1985; Sweeney 1994), specific accounting transactions (McNichols and Wilson 1988), discretionary and current accruals (Jones 1991; Kothari et al. 2005), and changes in profits (Holland and Ramsay 2003). Some studies use financial restatements (e.g., Raghunandan et al. 2003; Sharma 2006) but I cannot use this because financial

restatements are not disclosed in New Zealand. I use discretionary and current accruals as the proxies for earnings management because these are common measures which facilitates comparison with prior research.

Earnings management research follows the general discretionary accruals framework proposed by McNichols and Wilson (1988). That framework portions accruals into non-discretionary and discretionary components and argues that high levels of discretionary accruals indicate that the firm is engaged in earnings management. The Jones model or the modified-Jones model is widely used to estimate discretionary accruals (Dechow et al. 1995; Beneish and Press 1998; Bartov, Gul, and Tsui 2000). Kothari et al. (2005) compare the results of various models for the estimation of discretionary accruals, including the Jones Model, the modified-Jones Model, and alternative forms of these models by controlling for performance. They detect that controlling for performance, either by matching on performance or by including a lagged performance variable in the regression equation, reduces type 1 error rejection rates.

I use both discretionary and current accruals as proxies for earnings management for several reasons. First, the controversy in the literature (Frankel et al. 2002; Ashbaugh et al. 2003) on the association between non-audit fees and earnings management is centered on the proxy for earnings management. Ashbaugh et al. (2003) argue discretionary accrual is a noisy proxy for earnings management. They argue managers have more discretion over current accruals and therefore current accrual is a better proxy for earnings management. Second, discretionary accruals capture both long-term and short-term accruals whereas current accruals capture only short-term accruals. Nelson, Elliott, Tarpley, and Gibbins (2002) discover auditors believe management engages

both in short-term and long-term accruals management. Finally, by using multiple measures of the dependant variable, both discretionary and current accruals, enhances the robustness of the analysis. I use the Jones model adjusted for performance (Kothari et al. 2005) to estimate discretionary accruals.

$$DACC = \alpha + \beta_1 1/TA_{t-1} + \beta_2 \Delta REVENUE + \beta_3 PPE/TA_{t-1} + \beta_4 ROA_{t-1} + \varepsilon \quad (1)$$

where DACC stands for discretionary accruals,  $1/TA_{t-1}$  indicates 1 divided by total assets last year,  $\Delta Revenue$  indicates change in revenue,  $PPE/TA_{t-1}$  indicates property, plant & equipment divided by total assets last year, and  $ROA_{t-1}$  stands for return on assets last year. The estimates of  $\alpha$ ,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  are obtained from estimating the following model at the industry level.

$$TA = \alpha + \beta_1 \Delta REVENUE + \beta_2 PPE/TA_{t-1} + \beta_3 ROA_{t-1} + \varepsilon \quad (2)$$

I estimate the following model to test the association between discretionary accruals and fees paid to the auditor. This model was used by Frankel et al. (2002).<sup>4</sup> I define the variables in equation (3) in the next subsection.

$$DACC = \alpha + \beta_1 FEEVAR + \beta_2 Big4 + \beta_3 ABSCFO + \beta_4 ABSACC + \beta_5 LEVERAGE + \beta_6 LITIGATION + \beta_7 MKTBOOK + \beta_8 MVE + \beta_9 INSTITUTION + \beta_{10} LOSS + \beta_{11} FIN/ACQ + \varepsilon \quad (3)$$

I use the accrual model for estimating current accruals employed by Ashbaugh et al. (2003). Kothari et al. (2005) report that matching on lagged ROA, as opposed to contemporaneous ROA, eliminates any mechanical relation between the current period's accrual estimate and the performance

<sup>4</sup> Since ANNRET and TENURE data are not available for my sample, I omit these two variables from the model.

metric. The calculation of CA\_MOD\_ROA begins by estimating the following cross-sectional current accrual regression estimated with a performance control for each industry:

$$ECAPC = \beta_1 1/TA + \beta_2(\Delta REV - \Delta AR) + \beta_3 ROA_{t-1} \quad (4)$$

The parameters from Equation (4) are used to calculate expected current accruals adjusted for performance control as shown in equation (5):

$$CA\_MOD\_ROA = \beta_1(1/TA_{t-1}) + \beta_2(\Delta REV - \Delta AR) + \beta_3 ROA_{t-1} + \varepsilon \quad (5)$$

where  $1/TA_{t-1}$  indicates total assets at the beginning of the year,  $\Delta REV$  stands for revenue in current year minus revenue last year,  $\Delta AR$  is accounts receivable in current year minus accounts receivable last year and  $ROA_{t-1}$  is ROA last year.

I estimate the following model to test the association between current accruals and fees paid to the auditor. I define the variables in equation (6) in the next sub-section.

$$\begin{aligned} CA\_MOD\_ROA = & \alpha + \beta_1 FEEVAR + \beta_2 Big4 + \beta_3 CFOTA + \beta_4 FINANCE \\ & + \beta_5 CURACC + \beta_6 LEVERAGE + \beta_7 LITIGATION \\ & + \beta_8 MKTBOOK + \beta_9 MVE + \beta_{10} INSTITUTION + \\ & \beta_{11} LOSS + \beta_{12} FIN/ACQ + \varepsilon \end{aligned} \quad (6)$$

For equations 3 and 6, I test the hypothesis H1 for signed, positive, and negative discretionary and current accruals. That is, I test six different proxies for earnings management. The variables in equations (3) and (6) are explained in sections 3.3 and 3.4 below.

## **3.2 Independent Variable: Unit of Analysis**

### **3.2.1 Client Importance Effects**

The literature reports various fee measures to study auditor independence. These range from the magnitude of non-audit services fees, audit fees, and total fees paid by the client to the auditor, ratio of non-audit services fees to total fees or audit fees, percentile rank of fees, unexpected fees, and client importance fee measures. In a competitive environment, the economic importance of a client could significantly influence the auditor's economic dependence on the client. Clients that are economically more important may receive preferential treatment over clients that are relatively less economically important. The fee variables in this study are, therefore, measures of client importance.

Francis, Stokes, and Anderson (1999b) posit that the national audit firms represent associations of semi independent units under a central administration. Appointment of staff and client reporting decisions are usually made at the office level. The distinction between office level decisions and firm level decisions is an important one, particularly for the Big4. Nationally, Big4 firms are usually not affected by the loss of a single client. However, the office which has the primary responsibility for the lost engagement can experience a substantial loss in revenue. Hence, the local offices strategically invest significant resources in building strong relationships with their clients. Therefore, the individual practice office is the most suitable unit of analysis for measuring economic dependence and evaluating its potential effect on auditor reporting decisions (AICPA 1997; Walkman 1996).

Similarly, Reynolds and Francis (2001) posit that client importance should be assessed at the local office level if the audit firms care more about

their revenues at the city office level rather than the entire nation. The differentiation between the firms and office level is important when economic dependence is analysed. For the Big4 accounting firms, no single client is a significant source of firm-wide revenue because they have a large client base. However, for an individual practice office, a single client can be very crucial and constitute a large portion of office-level revenues (Francis et al. 1999b). Further, the individual practice office is also a decision-making unit of the firm. If auditors tend to report more favorably for larger clients generating significant revenue, then it would compromise independence and objectivity. I use three proxies for client importance, client audit fees, non-audit fees, and total fees as a proportion of the signing office total revenues. The signing office is identified in the auditors' report.<sup>5</sup>

The fee measures used in this study are audit fees, non-audit fees and total fees paid by a client to the audit firm. The fee data is reported in the client's annual report. For each of the three fee measures, I determine a client's relative component of the accumulated fees at the city office and national levels. This procedure is consistent with Chung and Kallapur (2003). Chung and Kallapur (2003) estimate client importance by allocating audit firm revenues to audit offices in proportion to the sum of log (sales) of each office's clients because their data cannot identify which specific audit office conducted the audit. I am able to identify the actual fees clients paid to a specific audit office. One caveat to using this approach is that the relative fee measures are based on data for the sample in this study. Audit firms also provide services to private companies but data on fees for such clients are not available. My calculations are based on

<sup>5</sup> From the annual report, I identified the actual fees clients paid to a specific audit office.

the total fees collected from the sample companies.<sup>6</sup> The idea of measuring fees this way is to proxy the client's relative economic importance to the audit firm at the office and national levels.

### **3.3 Independent Variables**

The Independent variable of interest, FEEVAR, in equations (3) and (6) comprises various fee measures and these are described in this section.

CAUFEE (City Audit Fees): This variable is measured as the proportion of the audit fee paid by an individual client to the total fees (sum of audit and non-audit fee) for all clients at the city office through which the audit was conducted.

CNASFEE (City Non-Audit Fee): This variable is measured as the proportion of the non-audit fee paid by an individual client to the total fees (sum of audit and non-audit fee) for all clients at the city office through which the audit was conducted.

CTOTFEE (audit fees and non-audit fees): This variable is measured as the proportion of the total fee paid by an individual client to the total fees (sum of audit and non-audit fee) for all clients at the city office through which the audit was conducted.

NAUFEE (National Audit Fee): This variable is measured as the proportion of the audit fee paid by an individual client to the total fees (sum of audit and non-audit fee) for all clients at the national level of the auditor.

NNASFEE (National Non-Audit Fee): This variable is measured as the proportion of the non-audit fee paid by an individual client to the total fees (sum of audit and non-audit fee) for all clients at the national level of the auditor.

NTOTFEE (audit and non-audit fee): This variable is measured as the proportion of the total fee paid by an individual client to the total fees (sum of audit and non-audit fee) for all clients at the national level of the auditor. The

<sup>6</sup> In New Zealand, the Big4 firms play a significant role as they audit the majority of the companies. They audit 98% of the capital market of the NZX. The Big4 audit 94% of the Top 230 New Zealand companies (SECNZ. 2007).



national level fees are computed as a client's importance to the audit firm at the country level where the denominator is total fees of an audit firm (e.g., KPMG, PWC, Deloitte, and Ernst & Young, Grant Thornton, BDO Spicers, etc) in New Zealand.

### **3.4 Control Variables**

The control variables in equations (3) and (6) are selected based on prior studies. I include Big4 as a control variable because prior research suggests that Big4 auditors are less likely to permit earnings management compared to non-Big4 auditors (e.g., DeFond and Jiambalvo 1991, 1993; Becker et al. 1998; Francis et al. 1999b). I include leverage (LEVERAGE), measured as the ratio of total liabilities to total assets, because prior research finds leverage is associated with discretionary accruals (DeFond and Jiambalvo 1994; DeAngelo, DeAngelo, and Skinner 1994; Becker et al. 1998). Litigation risk (LITIGATION) is an indicator variable equal to 1 if the company operates in a high-risk industry and such firms exhibit greater tendency to engage in earnings manipulation, and 0 otherwise (Frankel et al. 2002). To determine an industry as risky in New Zealand, I identify the industry from the SIC codes used by Frankel et al. (2002) and compare that to industry descriptions of the NZX. Accordingly, Food, Intermediate and Durables, Consumer, Media and Communication, Health Services, and Bio Technology industries are considered to pose greater litigation risk.

Matsumoto (2002) reports that firms with high growth prospects are more likely to be associated with earnings management. Growth is the market-to-book ratio (MKTBOOK). I include institutional ownership (INSTITUTION), measured as the percentage of shares held by institutions because it has been shown to affect the quality of financial reporting in relatively smaller markets

(Sharma 2004). Consistent with Frankel et al. (2002), I also control for firm size using the log of the market value of equity (MVE). In addition, Brown (2001) finds that loss firms are less likely to report positive earnings surprises, and thus the regression model includes an indicator variable (LOSS) equal to 1 if the firm reported a loss in the current year, and 0 otherwise. Acquisition and financing activity and poor performance are additional determinants used in prior research (Firth 1997). Thus, the model includes an indicator variable (FIN/ACQ) equal to 1 if the firm issued securities or made an acquisition in the current year, and 0 otherwise.<sup>7</sup> I include cash flow (ABSCFOTA and CFOTA) and total accruals (TOTACC),<sup>8</sup> as control variables because prior research shows that discretionary and current accruals models do not completely extract non discretionary accruals that are correlated with firm performance (e.g., Dechow et al. 1995; McNichols 2000; Frankel et al. 2002).

<sup>7</sup> For current accruals study (Ashbaugh et al. 2003) I include FINANCE as a separate variable apart from FIN/ACQ.

<sup>8</sup> TOTACC is used only when the proxy for earnings quality is discretionary accruals. I include current accruals (CURACC) instead of TOTACC when the dependant variable is current accruals (Ashbaugh et al. 2003). Similarly ABSCFOTA is used only for discretionary accruals tests and CFOTA for current accruals tests.

## 4 Results

### 4.1 Descriptive Data

Table 3 provides the descriptive statistics. The average city level audit fees (CAUFEE) as a proportion of total fees paid to the auditor is 0.22 (median 0.05). This suggests that on an average (median), a client contributes audit fees of 22% (5%) towards the total fee revenue of the city office through which the audit was conducted. The average city level non-audit fees (CNASFEE) as a proportion of total fees paid to the auditor is 0.07 (median 0.01). This suggests that on an average (median), a client contributes non-audit services fees of 7% (1%) towards the total fee revenue of the city office through which the audit was conducted. The average city level total audit fees (CTOTFEE) as a proportion of total fees paid to the auditor is 0.29 (median 0.08). This suggests that on an average (median), a client contributes total audit fees of 29% (8%) towards the total fee revenue of the city office through which the audit was conducted. The average national level audit fees (NAUFEE) as a proportion of total revenue earned by the auditor is 0.14 (median 0.02) which suggests that on an average (median), a client contributes audit fees of 14% (2%) towards the total fee revenue at the national level. The average national level non-audit fee (NNASFEE) as a proportion of total revenue earned by the auditor is 0.04 (median 0.00). This suggests that on an average (median), a client contributes non-audit fee of 4% (0%) towards the total fee revenue at the national level. The average national level total fee (NTOTFEE) as a proportion of total revenue earned by the auditor is 0.18 (median 0.02). This suggests that on an average (median), a client contributes total fee of 18% (2%) towards the total fee revenue at the national level.

The mean (median) value for Big4 is 0.77 (1.00) which suggests that 77% of the sample firm-year observations have big four auditors and 23% of the sample are audited by a non-Big4 auditor. The ABSCFOTA has a mean of 0.33 (median 0.09) and TOTACC has an average of 0.36 (median 0.07). The CFOTA has an average of -0.15 (median 0.06). FINANCE has an average of 0.19 (median 0). The CURACC has an average of -2.8 (median 0.08). The average firm has LEVERAGE of 0.55 (median 0.41). The mean (median) value for LITIGATION is 0.60 (1.00) which suggests that 60% of the sample firm-year observations operate in a risky industry. The MKTBOOK average is 4.10 (median 1.64). This is interesting to note as the variation in MKTBOOK is between -45.02 and 197.23 indicating the presence of very small and large companies, and limited and thin trading which is not surprising for New Zealand. The average of MVE is 0.86 (median 0.65). The average of INSTITUTION is 23% (median 12%). The mean (median) value for LOSS is 0.24 (0.00) and this suggests that 24% of the sample reported a loss during the financial year. The mean (median) value for FIN/ACQ is 0.20 (0.00) which suggests that 20% of the sample firms either issued securities or was involved in an acquisition.

*(Insert Table 3 here)*

## **4.2 Correlation Analysis**

Table 4 provides the Pearson and Spearman correlations between the independent variables. The Pearson correlations are reported above the diagonal and Spearman correlations below the diagonal. There are several high and significant Pearson and Spearman correlations between the fee variables where the correlations are greater than 0.80 and significant at the 5% level.

These correlations are between CAUFEE and CTOTFEE, CAUFEE and NAUFEE, CNASFEE and NNASFEE, NAUFEE and NTOTFEE, ABSCFOTA and CFOTA, TOTACC and CFOTA, ABSCFOTA and FINANCE, TOTACC and FINANCE, and CFOTA and FINANCE. Gujarati (2003), and Hair, Anderson, Tatham and Black (1995) recommend 0.80 as the threshold at which multicollinearity concerns may threaten the Ordinary Least Squares (OLS) regression analysis. While these significant correlations may present multicollinearity threats, none of these highly correlated variables are included together in a single multivariate model because they are measures for the same construct. Further, the Variance-Inflation-Factors (VIF) reported in the multiple regression results (Tables 5 to 16) are well below 10, the threshold at multicollinearity may be a problem.

*(Insert Table 4 here)*

### **4.3 Test of Hypothesis: Discretionary Accruals**

Before discussing the hypothesis test results, I discuss the results for the control variables. Across the OLS models reported in Tables 5 to 10, several control variables are significant as follows. Firms in a high litigation risk industries (LITIGATION) generally exhibit greater earnings management. Firms with high growth (MKTBOOK) tend to report less income increasing accruals. Larger firms (MVE) also exhibit greater income increasing accruals. Although institutional shareholding (INSTITUTION) has a negative coefficient suggesting it curbs earnings management, it is significant only in the income increasing current accruals model. LEVERAGE also is negative and significant in some regressions suggesting that debt providers monitor earnings management.

Other significant control variables include CFOTA, TOTACC, and CURACC. Generally, the results for the control variables are consistent with prior research (Frankel et al. 2002; Ashbaugh et al. 2003; Chung and Kallapur 2003).

The first test of this study examines the association between discretionary accruals as an indicator of earnings management and fees paid to the auditor. Table 5 reports the OLS estimate of discretionary accruals (DACC) on fees. The adjusted  $R^2$  across all models are similar to prior research (e.g., Frankel et al. 2002) and the models are significant ( $p < 0.10$ ).

In Model 1, the coefficient on CAUFEE is not significant suggesting that client importance based on audit fee at the city office level is not associated with discretionary accruals. However, CNASFEE is positive and significant ( $\beta = 0.969$ ,  $t = 1.805$ ,  $p < 0.10$ ). This indicates that when a client is a source of increasing levels of non-audit fees in relation to the total client base revenues at the office level, the level of discretionary accruals increases. In Model 2, the coefficient on CTOTFEE is positive but not significant suggesting no association between the total fee generated by a client relative to the total client base revenues at the office level and the level of discretionary accruals. In Model 3, the coefficient on NAUFEE is not significant suggesting that client importance based on the audit fee of the client at the national level is not associated with discretionary accruals. However, the coefficient on NNASFEE is positive and significant ( $\beta = 1.138$ ,  $t = 1.790$ ,  $p < 0.10$ ). This suggests that when a client generates relatively higher levels of non-audit fees at the national level, the level of discretionary accruals increases. In Model 4, the coefficient on NTOTFEE is positive but not significant. Overall, the results tend to suggest that clients that are a significant source of revenues for the audit firm, particularly fees from non-audit services, appear to report higher discretionary accruals. The next series of

tests examines how fees are related to positive and negative accruals because in the signed accruals test, the positive and negative accruals may counter-balance each other and mask any potential fee effects.

*(Insert Table 5 here)*

Table 6 reports the OLS estimate of signed positive (income increasing) discretionary accruals (DACC +) on fees. The adjusted  $R^2$  across all models are similar to prior research (e.g., Frankel et al. 2002) and the models are significant ( $p < 0.01$ ). This OLS is more powerful than the signed OLS and is indicative of the counter-balancing effect mentioned above.

In Model 1, the coefficient on CAUFEE is not significant suggesting that client importance based on audit fee at the city office level is not associated with income increasing discretionary accruals. However, the coefficient on CNASFEE is positive and significant ( $\beta = 1.460$ ,  $t = 3.249$ ,  $p < 0.01$ ). This suggests that when a client provides a relatively higher proportion of non-audit fees in relation to the total client base at the office level, the level of positive discretionary accruals increases. In Model 2, the coefficient on CTOTFEE is positive and significant ( $\beta = 0.331$ ,  $t = 2.364$ ,  $p < 0.05$ ) suggesting that as the total fee generated by a client relative to other clients at the office level increases, the level of positive discretionary accruals also increases. In Model 3, the coefficient on NAUFEE is not significant suggesting client importance based on audit fee of the client at the national level is not associated with positive discretionary accruals. However, the coefficient on NNASFEE is positive and significant ( $\beta = 1.974$ ,  $t = 3.800$ ,  $p < 0.01$ ). This suggests that when a client is a greater source of non-audit fees at the national level compared to other clients,

the level of positive discretionary accruals increases. In Model 4, the coefficient on NTOTFEE is positive and significant ( $\beta=0.394$ ,  $t=2.538$ ,  $p<0.05$ ) suggesting that as the level of total fees paid to the auditor by a client relative to other clients at the national level increases, the level of positive discretionary accruals also increases. The results in Table 6 suggest that clients that are significant source of non-audit fees are permitted more income increasing discretionary accruals by the auditor.

*(Insert Table 6 here)*

Table 7 reports the OLS estimate of signed negative (income decreasing) discretionary accruals (DACC -) on fees. The adjusted  $R^2$  across all models are similar to prior research (e.g., Frankel et al. 2002) and the models are significant ( $p<0.01$ ).

In Model 1, the coefficients on both CAUFEE and CNASFEE are not significant suggesting that client importance based on audit fee or non-audit fee at the city office level is not associated with negative discretionary accruals. In Model 2, the coefficient on CTOTFEE is positive but also not significant suggesting that the total fee generated by a client relative to other clients at the office level is not related to the level of negative discretionary accruals. Similarly, in Models 3 and 4, the coefficients on NAUFEE, NNASFEE, and NTOTFEE are not significant. Overall, the negative discretionary accruals tests suggest that non-audit fees are not related to earnings management.

*(Insert Table 7 here)*



#### 4.4 Test of Hypothesis: Current Accruals

The second test of this study examines the association between current accruals as an indicator of earnings management and fees. Table 8 reports the OLS regression of current accruals (CA\_MOD\_ROA) on fees. The adjusted  $R^2$  across all models are similar to prior research (e.g., Ashbaugh et al. 2003) and the models are significant ( $p < 0.01$ ).

In Model 1, the coefficient on CAUFEE is negative but not significant suggesting that client importance based on audit fee at the city office level is not associated with current accruals. However, the coefficient on CNASFEE is positive and significant ( $\beta = 1.557$ ,  $t = 2.991$ ,  $p < 0.01$ ). This suggests that when a client is a source of increasing levels of non-audit fees relative to the total client base revenues at the office level, the level of current accruals increases. In Model 2, the coefficient on CTOTFEE is positive and significant ( $\beta = 0.310$ ,  $t = 1.834$ ,  $p < 0.10$ ) suggesting that as the relative total fee generated by a client at the office level increases, the level of current accrual increases. In Model 3, the coefficient on NAUFEE is not significant suggesting that client importance based on the audit fee of the client at the national level is not associated with current accruals. However, the coefficient NNASFEE is positive and significant ( $\beta = 1.940$ ,  $t = 3.165$ ,  $p < 0.01$ ). This suggests that when a client generates relatively higher levels of non-audit fees compared to fees from all other clients of the audit firm at the national level, the level of current accruals increases. In Model 4, the coefficient on NTOTFEE is positive and significant ( $\beta = 0.419$ ,  $t = 2.128$ ,  $p < 0.05$ ) suggesting that as the level of total fees paid to the auditor by a client relative to other clients at the national level increases, the level of current accruals also increases. Generally, the results suggest that clients that

are a significant source of revenues for the audit firm, particularly fees from non-audit services, report higher current accruals.

*(Insert Table 8 here)*

Table 9 reports the OLS estimate of signed positive (income increasing) current accruals (CA\_MOD\_ROA +) on fees. The adjusted  $R^2$  across all models are similar to prior research (e.g., Ashbaugh et al. 2003) and the models are significant ( $p < 0.01$ ).

In Model 1, the coefficient on CAUFEE is not significant suggesting that client importance based on audit fee at the city office level is not associated with signed positive current accruals. However, CNASFEE is positive and significant ( $\beta = 1.406$ ,  $t = 2.313$ ,  $p < 0.05$ ). This suggests that when a client provides a relatively higher proportion of non-audit fees to total clients fees at the office level, the level of positive current accruals increases. In Model 2, the coefficient on CTOTFEE is positive and significant ( $\beta = 0.610$ ,  $t = 3.124$ ,  $p < 0.01$ ) suggesting that as the total fee generated by a client relative to other clients at the office level increases, the level of positive current accruals also increases. In Model 3, the coefficient on NAUFEE is positive but not significant. Also, the coefficient on NNASFEE is positive and significant ( $\beta = 1.831$ ,  $t = 2.554$ ,  $p < 0.05$ ). This suggests that when a client is a greater source of non-audit fees compared to other clients at the national level, the level of positive current accruals increases. In Model 4, the coefficient on NTOTFEE is positive and significant ( $\beta = 0.856$ ,  $t = 3.795$ ,  $p < 0.01$ ) suggesting that as the level of total fees paid to the auditor by a client relative to other clients at the national level increases, the level of positive current accruals also increases. Overall, the results suggest

that non-audit fees are positively associated with income increasing current accruals.

*(Insert Table 9 here)*

Table 10 reports the OLS estimate of signed negative (income decreasing) current accruals (CA\_MOD\_ROA - ) on fees. The adjusted  $R^2$  across all models are similar to prior research (e.g., Ashbaugh et al. 2003) and the models are significant ( $p < 0.05$ ,  $p < 0.10$ ). In all models in Table 10, none of the fee variables are significant suggesting that fees paid to auditors are not associated with income decreasing current accruals.

*(Insert Table 10 here)*

Collectively, the results from the above analyses suggest that non-audit fees at the office and national levels are significantly associated with income increasing earnings management. The finding that non-audit fees are not associated with income decreasing earnings management together with the positive association between non-audit fees and income increasing earnings management, suggest that clients generating lucrative non-audit fees are given more discretion by the auditor to report higher earnings. In the next section, the robustness of the preceding analyses is tested.

## **4.5 Sensitivity tests**

### **4.5.1 Alternative Fee Measures**

Regulators such as the SEC (SEC 2000) are concerned about the proportion of non-audit fees to total fees a client generates because of the belief that greater non-audit fees create economic bonding between the client and the auditor. Prior research also uses proportion measures (e.g., Sharma and Sidhu 2001; DeFond et al. 2002; Frankel et al. 2002). Re estimating the OLS in Tables 5–10 using the proportion of non-audit fees to total fees produces qualitatively similar results.

However, the proportion measure of fees is affected by both audit and non-audit fees, and therefore, proportion measures can sometimes be difficult to interpret. For example, assume client A pays \$300,000 for non-audit services and \$300,000 for audit services, and client B pays \$100,000 for non-audit services and \$50,000 for audit services. The proportion measure would regard client B as more lucrative. However, client A is possibly more valuable because it generates greater fees and a loss of client A would mean a loss in fees of \$600,000. To address this problem, two other measures based on the levels of fees and percentile ranks are used. The natural logarithm of non-audit, audit, and total fees are employed in the OLS and the results are consistent with the client importance results in Tables 5–10. Similarly, rank non-audit fees, rank audit fees, and rank total fees that are percentile ranks produce similar results. The consistency of the results using different fee measures enhances the robustness of the results.

#### **4.5.2 Change in Fees**

Cahan et al. (2008) argue that significant growth in non-audit fees creates an economic bond between the auditor and the client such that the auditor does not challenge management's reporting decisions. To minimise loss in sample size, I obtain fees for 2003 in order to construct growth in audit, non-audit and total fees. I compute the simple percentage growth in fees between 2003 and 2004, 2004 and 2005, and 2003 and 2005. In all cases, I find that growth in fees is not significant, although the sign of the coefficients are as expected. The non-significance is attributed to lower power because the computation of change in fees requires a company remain in the sample for all three years. The sample size limitation of change in fees is also recognised by Cahan et al. (2008).

#### **4.5.3 Prior Year Fees**

The manner in which economic incentive effects manifest in a bonding between the auditor and the client is arguably one based on fees received this year and the future action to be taken by the auditor. For instance, if the auditor receives lucrative fees in the current year, then to maintain the fee revenues the auditor may be influenced to acquiesce with management's reporting behaviour in the following year. That is, the economic incentives have a lead effect on earnings management. I test this conjecture using prior year fees in place of current year or contemporaneous fees in the OLS reported in Tables 5-10. I compute the same fee metrics as explained in the method section except these are for the year prior. Current year and prior year fees cannot be included together in the OLS because of high multicollinearity. The results of the tests are reported in Tables 11-16.

Consistently, across all results, the fee coefficients are significant and in the direction reported for current year fee results in Tables 5-10. Further, the prior year fee coefficients appear to be more significant in some cases, especially for non-audit services. Overall, the prior year results suggest that economic incentives are not limited to current year effects on the financial statements but that the enduring nature of the relationship between the auditor and the client may manifest in more discretion afforded to management. I acknowledge the prior year results are limited to a short window, and therefore, further research is required to better understand how fees from a client on a longer term basis affects auditors' decision making.

(Insert Tables 11 to 16 here)

#### **4.5.4 Client Size**

Using the median of total assets to partition client size into small and large firms, separate OLS regressions are estimated for small and large clients. The fee results are not significantly different with most non-audit fee results being consistent with the results in Tables 5–10. The loss of significance for some fee variables such as total fees is attributable to the smaller sample size due to the partitioning.

#### **4.5.5 Auditor Effect**

The composition of fees can differ across auditors which could affect the results. To address this potential effect, four categorical variables are included for each of the Big4 auditor with the non-Big4 in the constant term, and the OLS in Tables 5-10 are repeated by removing one Big4 auditor at a time. A separate analyses for each Big4 auditor is not performed because of sample size

limitations. Collectively, the results show that with the exception of Deloitte, the coefficient on the non-audit services fees is significant and consistent with those reported in Tables 5–10 when the remaining Big4 (KPMG, PWC, and Ernst & Young) are included in the sample. If we remove non-Big4 auditors, the coefficient on non-audit services fees are consistently more significant for the Big4 sample as a whole.

## 5 Discussion of Results

In this section, I discuss the results. The results show that CAUFEE is not significant in all discretionary accruals tests suggesting that the relative audit fee paid by an individual client to the total revenues (sum of audit and non-audit fee) of the audit firm's city office through which the audit was conducted is not associated with earnings management. This observation is similar to Chung and Kallapur (2003). However, CNASFEE is positive and significant in discretionary accruals and signed positive accruals models suggesting that when a client is a source of increasing levels of non-audit fees relative to the total client fee revenue at the office level, the level of discretionary accruals increases. Likewise, NNASFEE is positive and significant in signed and positive accruals tests suggesting that when a client is a greater source of non-audit fees compared to other clients at the national level, the level of positive discretionary accruals increases.

These client importance based findings are contrary to US evidence in Chung and Kallapur (2003) probably because of contextual differences. The context of this study is the small New Zealand capital market that has limited growth opportunities for audit firms. In addition, the New Zealand environment is less litigious than the US, and therefore, New Zealand auditors may be taking greater risks. Compared to capital markets relatively smaller than the US but similar in institutional framework such as Australia, the non-audit fee results are consistent with Wines (1994), Sharma (2001) and Sharma and Sidhu (2001). These studies report that auditors are more willing to issue favourable audit opinions to clients that generate greater non-audit fees.

The results show that CTOTFEE is positive in signed and income increasing discretionary accruals tests but significant only in the income



increasing discretionary accruals tests. The reason for no significance in the signed discretionary accruals test is likely due to the counter-balancing effects of fees on positive and negative accruals. The CTOTFEE result for income increasing discretionary accruals tests suggest that as the relative total fee generated by a client at the office level increases, earnings management increases. Similar results are observed for NTOTFEE. The results for non-audit fees and total fees together suggest that threats to auditor independence in New Zealand arise mainly due to greater economic bonding associated with higher non-audit services fees rather than audit services at the city office and national levels.

In the second set of tests conducted on current accruals as a proxy for earnings management, CAUFEE is not significant in all tests suggesting that audit fee is not associated with current accruals measure of earnings management. CNASFEE is positive and significant in the signed and income increasing current accruals tests suggesting that when a client is a source of increasing levels of non-audit fees in relation to the aggregate of all client fees at the office level, auditors afford such clients greater discretion over financial reporting. CTOTFEE is also positive and significant in signed and income increasing current accruals tests suggesting that as the relative total fee generated by a client at the office level increases, the level of income increasing current accruals increases. When the tests are repeated for fees at the national level, again NNASFEE and NTOTFEE are positive and significant in the signed and income increasing current accrual tests. These results collectively suggest that when a client is a significant source of fees for an auditor, such clients likely receive preferential treatment. In addition, the non-audit fee and total fee results suggest that the discretion auditors' permit over current accruals is greater for

clients that generate lucrative non-audit fees. Audit fees do not appear to create economic bonding effects over financial reporting.

The results in this study are consistent across both discretionary and current accruals proxies for earnings management. The results of sensitivity tests are also largely consistent with the main results. The consistency in the results strengthens the validity of the results and inferences drawn thereupon. For the purposes of hypothesis testing, the results of this study suggest rejection of the null hypothesis.

## 5.1 Conclusion

This study investigates the association between fees paid to auditors and earnings management in New Zealand. The motivation for the study stems from the unique institutional environment and small capital market in New Zealand. In New Zealand, the institutional governance of the capital market is less litigious than the US, but similar to Australia, New Zealand's neighbouring economy that is larger than her but smaller than the US economy. Although governance developments prior to and since SOX became effective in the US has had the effect of concerns over auditor independence and led to regulation of auditors in the US and Australia, New Zealand still believes no such requirement is warranted. The basis for such a position is the lack of evidence that auditors impair their independence when clients generate lucrative economic rents for the auditor. Recently, two studies investigated if non-audit fees in New Zealand were associated with more favourable audit opinions (Hay et al. 2006) and earnings management (Cahan et al. 2008). Together, the results of these studies are unable to conclude that non-audit services may affect the auditor's independence.

Since New Zealand does have a history of requiring companies to disclose fees paid to auditors, and recently with the adoption of NZ IAS 1, requires companies to separately report fees for audit, audit-related, non-audit and other services (NZ IAS 1 (paragraph NZ 94.1(a)(ii-iv))). Such disclosure is to allow users to make some evaluation of the auditor's perceived independence. The fee disclosures are important in New Zealand because the audit market is saturated, small and highly competitive, and corporate governance codes are voluntary. Together, these conditions create an environment that could be

conducive to opportunities for management to exercise greater discretion over financial reporting.

However, because the market for audit services is saturated, small and highly competitive, auditors have incentives to hold onto their clients, and attract new ones. One way of achieving this is to maintain a good reputation because when there is a loss of reputation, clients switch to more reputable auditors to protect their credibility in the capital market. Given these alternative perspectives, a null hypothesis is advanced on the association between fees paid to auditors and earnings management.

To test the hypothesis, a sample of 224 firm-years in New Zealand for fiscal years 2004 and 2005 is used. Two common earnings management estimates are used to ensure robust analyses. These two estimates are discretionary accruals and current accruals. The fees measures used in the analyses are client importance measures for audit, non-audit and total fees at the city office and national levels. The results of multivariate tests suggest an association between non-audit fees and earnings management. Non-audit fees at the office and national levels, paid by a client relative to total fees paid by all clients, appear to impair the auditor's independence because clients generating relatively more non-audit fees report greater discretionary and current accruals.

This study contributes to the literature and practice as follows. First, the study contributes to the literature by providing insight into how auditors' fee metrics indicating client importance affect earnings management in a legal and institutional environment of a small economy like New Zealand. Most prior studies are based in larger capital markets that have a more robust institutional environment where regulators actively oversee audit firms such as the PCAOB

in the US and FRC in Australia. The results are interesting and help understand that in a competitive audit services market and small economy, audit firms may become economically bonded to a client. Such bonding has the potential to affect the quality of reported earnings.

Second, the study has potential implications for relevant regulatory bodies in New Zealand and may assist them develop auditor independence and prudent financial reporting practices. New Zealand regulators believe regulation of the audit profession like that in the US and Australia is not necessary because there is no evidence that fees paid to auditors impair their independence. The results of this study suggest there may be some cause for concern over fees potentially impairing the auditor's independence. Clearly, more research using larger samples over a longer period is required before any firm conclusions can be made. The implications of this study are also subject to the following limitations.

First, the results are based on a small sample (224) which is not surprising for a small country like New Zealand. A larger sample over an extended period of time could yield different results. The data for the sample were all collected manually from company annual reports which limit a large sample study. Second, the use of discretionary and current accruals are noisy measures of managerial discretion over earnings because (a) the accruals metrics employed may be incomplete, (b) eliminating all the effects of performance differences on accruals may be unsuccessful even after controlling for performances, and accruals may be used by management to signal private information (Menon and Williams 2004). However, in New Zealand, the disclosure of restatements which is a less noisy proxy for financial misreporting, is not available and thus cannot be used. In addition, going concerns opinions

cannot be used because they are too few for a robust analyses. To minimise measurement error, two different measures for earnings management are used.

Third, the study has not investigated how corporate governance plays a role in the earnings management process in New Zealand. New Zealand has a voluntary governance system, and recent research shows that audit committees that comprise mostly of independent directors may curb excessive earnings management (Sharma and Kuang 2007). Future research could investigate how governance monitors the assurance process because Sharma (2006) shows that in the US, fees paid to auditors threaten the auditor's independence in conditions where the audit committee is of poor quality (e.g., lack independence, lack expertise, not meeting frequently, busy directors on the audit committee, etc).

Finally, the study does not evaluate how different types of non-audit fees are related to earnings management because separate disclosure of types of non-audit fees is not required until 1<sup>st</sup> January, 2007. Future research can investigate how different types of non-audit fees are associated with earnings management when such data is available for a large sample over time.

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**Table 1**  
**Summary of Sample Selection**

<b>Observations</b>	<b>2004</b>	<b>2005</b>	<b>Total</b>
Total listed in Stock exchange and other exchanges in NZ	264	250	514
Less: Foreign companies	(54)	(42)	(96)
Less: Alternative listing in NZAX	(22)	(25)	(47)
Less: Alternative listing in NZDX	(43)	(45)	(88)
Less: Finance companies	(10)	(7)	(17)
Less: Utility sector	(5)	(5)	(10)
Less: Dual Listing	(3)	(4)	(7)
Less: Audit office located outside New Zealand	(3)	(3)	(6)
Less: Companies having less than five observations in the industry	(12)	(7)	(19)
<b>Total sample size</b>	<b>112</b>	<b>112</b>	<b>224</b>

Table 2

## Industry Distribution for the Sample

Industry	Two-digit SIC	Number 2005	Number 2004	Total Number of Firms	Percentage
Agriculture & Fishing	01	12	12	24	10.71
Food	06	7	7	14	6.25
Intermediate & Durables	08	13	13	26	11.61
Property	09	13	14	27	12.05
Ports & Transport	11	9	9	18	8.04
Leisure & Tourism	12	5	4	9	4.02
Consumer	13	26	26	52	23.21
Media & Communications	14	9	10	19	8.48
Health Services	15	7	6	13	5.80
Bio Technology	16	11	11	22	9.82
<b>Total</b>		<b>112</b>	<b>112</b>	<b>224</b>	<b>100.00</b>

**Table 3**  
**Descriptive Statistics**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
CAUFEE	224	0.22	0.05	0.31	0.00	1.00
CNASFEE	224	0.07	0.01	0.13	0.00	0.59
CTOTFEE	224	0.29	0.08	0.38	0.00	1.00
NAUFEE	224	0.14	0.02	0.28	0.00	1.00
NNASFEE	224	0.04	0.00	0.11	0.00	0.58
NTOTFEE	224	0.18	0.02	0.33	0.00	1.00
BIG4	224	0.77	1.00	0.42	0.00	1.00
ABSCFOTA	224	0.33	0.09	1.48	0.00	18.58
TOTACC	224	0.36	0.07	2.04	0.00	29.39
CFOTA	224	-0.15	0.06	1.51	-18.58	0.54
FINANCE	224	0.19	0.00	0.39	0.00	1.00
CURACC	224	-2.80	0.08	44.66	-670.78	17.79
LEVERAGE	224	0.55	0.41	1.64	0.00	24.88
LITIGATION	224	0.60	1.00	0.49	0.00	1.00
MKTBOOK	224	4.10	1.64	15.02	-45.02	197.23
MVE	224	0.86	0.65	0.74	0.00	4.97
INSTITUTION	224	0.23	0.12	0.27	0.00	0.94
LOSS	224	0.24	0.00	0.43	0.00	1.00
FIN/ACQ	224	0.20	0.00	0.40	0.00	1.00
DACC	224	-0.01	0.00	1.02	-10.29	6.65
CA_MOD_ROA	224	0.00	-0.02	0.98	-9.08	5.48

**Table 3 (continued)**

**Descriptive Statistics**

CAUFEE	Proportion of the audit fee paid by an individual client to the total revenues (sum of audit and non-audit fee) of the audit firm's city office through which the audit was conducted;
CNASFEE	Proportion of the non-audit fee paid by an individual client to the total revenues (sum of audit and non-audit fee) of the audit firm's city office through which the audit was conducted;
CTOTFEE	Proportion of the total fee paid by an individual client to the total revenues (sum of audit and non-audit fee) of the audit firm's city office through which the audit was conducted;
NAUFEE	Proportion of the audit fee paid by an individual client to the total revenues (sum of audit and non-audit fee) for all clients of the audit firm at the national level;
NNASFEE	Proportion of the non-audit fee paid by an individual client to the total revenues (sum of audit and non-audit fee) for all clients of the audit firm at the national level;
NTOTFEE	Proportion of the total fee paid by an individual client to the total revenues (sum of audit and non-audit fee) for all clients of the audit firm at the national level;
BIG4	1 if the firm is audited by the Big4 (KPMG, Deloitte, Ernst & Young or PWC), and 0 otherwise;
ABSCFOTA	Absolute value of cash from operations deflated by average total assets;
TOTACC	Absolute value of total accruals, equal to net income minus cash from operations, deflated by average total assets;
CFOTA	Cash from operations, deflated by average total assets;
FINANCE	1 if FIN/ACQ is not equal to 1 and number of shares outstanding increased by at least 10 percent either in 2004 or 2005, and 0 otherwise;
CURACC	Last year's total current accruals equal to net income before extraordinary items plus depreciation and amortization minus operating cash flows scaled by last year total assets;
LEVERAGE	Ratio of total liabilities to total assets;
LITIGATION	1 if the firm is in a high litigation risk industry identified using NZ industry codes (06-Food, 08 – Intermediate and Durables, 13 – Consumer, 14 – Media and Communication, 15 – Health Services, and 16 – Bio Technology), and 0 otherwise;
MKTBOOK	Market value of the firm divided by book value of total assets;
MVE	Natural log of the firm's market value of equity derived as the firm's price per share at fiscal year end (2004 or 2005) multiplied by the number of shares outstanding in dollar value;
INSTITUTION	Cumulative percentage of shares held by institutions;
LOSS	Variable equal to 1 if the firm reports a net loss, and 0 otherwise;
FIN/ACQ	1 if the firm issued securities or acquired another company in year 2004 or 2005, and 0 otherwise;
DACC	Discretionary accruals estimated using Jones model adjusted for prior year performance (Kothari et al. 2005); and
CA_MOD_ROA	Current accruals estimated as per Ashbaugh et al. (2003).

Table 4

## Pearson (Spearman) Correlation Above (Below) Diagonal

Variable name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
CAUFEE (1)	1.00	<b>0.38</b>	<b>0.95</b>	<b>0.80</b>	<b>0.28</b>	<b>0.73</b>	<b>-0.30</b>	-0.02	0.01	0.01	0.02	-0.04	-0.01	0.01	0.02	-0.09	-0.04	0.01	0.04
CNASFEE (2)	<b>0.45</b>	1.00	<b>0.65</b>	<b>0.25</b>	<b>0.79</b>	<b>0.48</b>	0.03	-0.07	-0.11	0.08	0.06	0.06	-0.01	-0.04	-0.03	-0.04	<b>-0.14</b>	-0.06	0.02
CTOTFEE (3)	<b>0.99</b>	<b>0.57</b>	1.00	<b>0.74</b>	<b>0.50</b>	<b>0.76</b>	<b>-0.23</b>	-0.04	-0.03	0.04	0.03	-0.01	-0.01	0.00	0.01	-0.09	-0.08	-0.01	0.04
NAUFEE (4)	<b>0.67</b>	<b>0.35</b>	<b>0.67</b>	1.00	<b>0.40</b>	<b>0.93</b>	<b>-0.36</b>	-0.02	0.07	0.01	0.02	0.01	0.00	0.07	0.06	-0.05	-0.04	0.12	-0.01
NNASFEE (5)	<b>0.29</b>	<b>0.87</b>	<b>0.41</b>	<b>0.50</b>	1.00	<b>0.67</b>	-0.05	-0.03	-0.07	0.06	0.06	0.09	-0.01	0.07	-0.02	0.00	-0.10	0.03	-0.06
NTOTFEE (6)	<b>0.65</b>	<b>0.47</b>	<b>0.68</b>	<b>0.98</b>	<b>0.62</b>	1.00	<b>-0.29</b>	-0.02	0.02	0.02	0.03	0.05	-0.01	0.07	0.05	-0.04	-0.05	0.11	-0.02
BIG4 (7)	<b>-0.18</b>	<b>0.23</b>	<b>-0.15</b>	<b>-0.15</b>	<b>0.24</b>	-0.12	1.00	<b>-0.07</b>	<b>-0.14</b>	0.10	0.12	-0.08	-0.13	-0.06	<b>-0.15</b>	-0.03	-0.04	<b>-0.20</b>	0.09
ABSCFOTA (8)	0.05	-0.07	0.04	0.04	-0.03	0.02	<b>0.15</b>	1.00	<b>0.84</b>	<b>-0.99</b>	<b>-0.82</b>	-0.02	0.10	<b>0.13</b>	-0.10	<b>0.13</b>	0.00	<b>0.24</b>	-0.06
TOTACC (9)	-0.04	<b>-0.22</b>	-0.07	0.02	<b>-0.17</b>	-0.01	<b>-0.19</b>	<b>0.36</b>	1.00	<b>-0.83</b>	<b>-0.95</b>	-0.03	0.02	0.10	0.00	0.01	-0.05	<b>0.19</b>	-0.05
CFOTA (10)	0.02	0.11	0.05	0.09	<b>0.16</b>	0.10	<b>0.25</b>	<b>0.36</b>	0.04	1.00	<b>0.81</b>	0.01	-0.10	-0.12	0.10	-0.11	0.00	<b>-0.27</b>	0.05
FINANCE (11)	0.06	<b>0.22</b>	0.10	0.12	<b>0.25</b>	<b>0.15</b>	0.04	<b>0.19</b>	0.02	<b>0.32</b>	1.00	<b>0.03</b>	0.02	-0.05	0.01	0.03	0.06	-0.12	0.04
CURACC (12)	-0.02	0.05	-0.02	0.05	0.05	0.06	-0.08	-0.02	-0.03	-0.11	-0.12	1.00	<b>-0.03</b>	-0.04	0.00	0.01	0.06	<b>0.14</b>	<b>-0.24</b>
LEVERAGE (13)	<b>0.24</b>	<b>0.26</b>	<b>0.25</b>	<b>0.24</b>	<b>0.23</b>	<b>0.24</b>	0.01	-0.05	-0.01	0.05	0.04	0.03	1.00	<b>0.06</b>	-0.04	<b>0.25</b>	-0.07	-0.02	<b>0.15</b>
LITIGATION (14)	0.05	-0.07	0.03	0.03	-0.06	0.00	-0.06	<b>0.21</b>	<b>0.30</b>	-0.05	0.01	-0.04	0.06	1.00	<b>0.09</b>	<b>0.25</b>	0.02	<b>0.17</b>	0.00
MKTBOOK (15)	-0.06	-0.04	-0.06	0.02	-0.03	0.02	0.06	<b>0.31</b>	<b>0.19</b>	<b>0.26</b>	-0.02	0.12	0.11	<b>0.22</b>	1.00	<b>0.43</b>	-0.07	0.12	-0.04
MVE (16)	<b>-0.16</b>	<b>-0.17</b>	<b>-0.17</b>	-0.08	<b>-0.14</b>	-0.10	0.02	<b>0.39</b>	<b>0.26</b>	0.12	-0.04	0.05	<b>-0.22</b>	<b>0.26</b>	<b>0.78</b>	1.00	-0.05	<b>0.21</b>	0.02
INSTITUTION (17)	-0.06	-0.09	-0.08	0.03	0.01	0.04	-0.02	0.09	0.07	-0.03	0.02	0.06	-0.08	0.05	0.03	0.09	1.00	0.01	0.11
LOSS (18)	-0.08	<b>-0.26</b>	-0.11	-0.08	<b>-0.24</b>	-0.11	<b>-0.22</b>	0.12	<b>0.33</b>	<b>-0.45</b>	<b>-0.26</b>	<b>0.14</b>	-0.08	<b>0.17</b>	0.09	0.13	0.01	1.00	0.00
FIN/ACQ (19)	0.05	0.06	0.04	0.09	0.05	0.09	0.09	-0.09	0.06	-0.02	-0.01	<b>-0.24</b>	<b>0.15</b>	0.00	0.02	0.05	<b>0.16</b>	0.00	1.00

Correlations in **bold** are significant at  $p < 0.05$ .

All variables are defined in Table 3.

Table 5

## OLS Regressions of Discretionary Accruals on Fee Variables

DACC =	$\alpha + \beta_1 \text{FEEVAR} (\beta_1 \text{CAUFEE} + \beta_2 \text{CNASFEE} \text{ or } \beta_1 \text{CTOTFEE} \text{ or } \beta_1 \text{NAUFEE} + \beta_2 \text{NNASFEE} \text{ or } \beta_1 \text{NTOTFEE}) + \beta_2 \text{BIG4} + \beta_3 \text{ABSCFO} + \beta_4 \text{ABSACC} + \beta_5 \text{LEVERAGE} + \beta_6 \text{LITIGATION} + \beta_7 \text{MKTBOOK} + \beta_8 \text{MVE} + \beta_9 \text{INSTITUTION} + \beta_{10} \text{LOSS} + \beta_{11} \text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
<b>Experimental variables (predicted sign)</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>
CAUFEE (?)	0.017	0.071	1.365									
CNASFEE (?)	0.969	1.805*	1.248									
CTOTFEE (?)				0.245	1.417	1.094						
NAUFEE (?)							-0.028	-0.104	1.451			
NNASFEE (?)							1.138	1.790*	1.253			
NTOTFEE (?)										0.258	1.283	1.121
<b>Control variables (predicted sign)</b>												
BIG4 (-)	-0.030	-0.180	1.283	0.028	0.172	1.207	-0.024	-0.141	1.313	0.030	0.179	1.229
ABSCFO (+)	0.172	2.006**	1.449	0.165	1.922**	1.444	0.174	2.031**	1.444	0.169	1.968**	1.442
TOTACC (?)	-0.345	-3.428***	1.210	-0.358	-3.555***	1.202	-0.346	-3.422***	1.216	-0.361	-3.588***	1.200
LEVERAGE (-)	0.023	0.557	1.225	0.024	0.599	1.224	0.022	0.544	1.224	0.023	0.574	1.223
LITIGATION (+)	0.212	1.609*	1.106	0.206	1.560*	1.105	0.188	1.421*	1.112	0.198	1.493*	1.108
MKTBOOK (?)	0.003	0.520	1.445	0.002	0.458	1.443	0.003	0.572	1.450	0.002	0.457	1.443
MVE (?)	-0.084	-0.787	1.650	-0.073	-0.684	1.641	-0.088	-0.830	1.647	-0.077	-0.720	1.637
INSTITUTION (-)	-0.057	-0.241	1.062	-0.092	-0.389	1.051	-0.086	-0.363	1.048	-0.109	-0.461	1.043
LOSS (?)	-0.155	-0.976	1.200	-0.155	-0.977	1.200	-0.173	-1.085	1.202	-0.178	-1.113	1.203
FIN/ACQ (?)	-0.018	-0.112	1.091	-0.032	-0.195	1.088	.008	0.048	1.089	-0.017	-0.104	1.078
Intercept	-0.079	-0.384		-0.112	-0.544		-0.032	-0.159		-0.072	-0.363	
N	224			224			224			224		
Adjusted R <sup>2</sup> / F value	0.043	1.823*		0.038	1.795*		0.042	1.794*		0.037	1.760*	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 6

## OLS Regressions of Signed Positive Discretionary Accruals on Fee Variables

DACC (+) =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEE} + \beta_2\text{CNASFEE or } \beta_1\text{CTOTFEE or } \beta_1\text{NAUFEE} + \beta_2\text{NNASFEE or } \beta_1\text{NTOTFEE}) + \beta_2\text{BIG4} + \beta_3\text{ABSCFO} + \beta_4\text{ABSACC} + \beta_5\text{LEVERAGE} + \beta_6\text{LITIGATION} + \beta_7\text{MKTBOOK} + \beta_8\text{MVE} + \beta_9\text{INSTITUTION} + \beta_{10}\text{LOSS} + \beta_{11}\text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEE (?)	0.024	0.133	1.422									
CNASFEE (?)	1.460	3.249***	1.282									
CTOTFEE (?)				0.331	2.364**	1.182						
NAUFEE (?)							-0.014	-0.071	1.475			
NNASFEE (?)							1.974	3.800***	1.272			
NTOTFEE (?)										0.394	2.538**	1.152
Control variables (predicted sign)												
BIG4 (-)	0.022	0.174	1.342	0.103	0.831	1.260	0.024	0.190	1.357	0.106	0.856	1.251
CFOTA (+)	0.100	1.574*	1.389	0.099	1.508*	1.389	0.097	1.547*	1.389	0.101	1.539*	1.388
TOTACC (?)	-0.052	-0.778	1.304	-0.062	-0.904	1.300	-0.051	-0.771	1.301	-0.067	-0.975	1.293
LEVERAGE (-)	-0.023	-0.914	1.467	-0.022	-0.854	1.467	-0.024	-0.996	1.457	-0.024	-0.954	1.456
LITIGATION (+)	0.177	1.737**	1.099	0.188	1.807**	1.097	0.145	1.440*	1.119	0.179	1.720**	1.104
MKTBOOK (?)	-0.007	-2.286**	1.621	-0.007	-2.426**	1.611	-0.007	-2.383**	1.622	-0.008	-2.568**	1.612
MVE (?)	0.245	3.111***	1.854	0.255	3.147***	1.850	0.248	3.184***	1.868	0.262	3.243***	1.858
INSTITUTION (-)	-0.064	-0.338	1.125	-0.106	-0.544	1.117	-0.093	-0.499	1.107	-0.122	-0.633	1.097
LOSS (?)	0.114	0.955	1.190	0.111	0.910	1.190	0.100	0.853	1.185	0.083	0.686	1.184
FIN/ACQ (?)	-0.284	-2.393**	1.119	-0.277	-2.274**	1.118	-0.252	-2.173**	1.109	-0.265	-2.197**	1.108
Intercept	-0.154	-1.005		-0.203	-1.300		-0.103	-0.708		-0.168	-1.143	
N	121			121			121			121		
Adjusted R <sup>2</sup> / F value	0.203	3.501***		0.158	3.020***		0.230	3.938***		0.165	3.117***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.



Table 7

## OLS Regressions of Signed Negative Discretionary Accruals on Fee Variables

DACC (-) =	$\alpha + \beta_1 \text{FEEVAR} (\beta_1 \text{CAUFEE} + \beta_2 \text{CNASFEE} \text{ or } \beta_1 \text{CTOTFEE} \text{ or } \beta_1 \text{NAUFEE} + \beta_2 \text{NNASFEE} \text{ or } \beta_1 \text{NTOTFEE}) + \beta_2 \text{BIG4} + \beta_3 \text{ABSCFO} + \beta_4 \text{ABSACC} + \beta_5 \text{LEVERAGE} + \beta_6 \text{LITIGATION} + \beta_7 \text{MKTBOOK} + \beta_8 \text{MVE} + \beta_9 \text{INSTITUTION} + \beta_{10} \text{LOSS} + \beta_{11} \text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
<b>Experimental variables (predicted sign)</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>
CAUFEE (?)	0.497	1.227	1.579									
CNASFEE (?)	0.044	0.055	1.317									
CTOTFEE (?)				0.368	1.341	1.145						
NAUFEE (?)							0.700	1.405	1.763			
NNASFEE (?)							-0.049	-0.052	1.368			
NTOTFEE (?)										0.423	1.285	1.194
<b>Control variables (predicted sign)</b>												
BIG4 (-)	-0.235	-0.829	1.347	-0.262	-0.954	1.281	-0.196	-0.687	1.379	-0.247	-0.888	1.310
CFOTA (+)	0.450	1.645**	6.056	0.466	1.726**	5.948	0.502	1.845**	6.029	0.527	1.972**	5.839
TOTACC (?)	-1.375	-5.987***	1.366	-1.350	-6.101***	1.279	-1.412	-5.991***	1.445	-1.346	-6.084***	1.276
LEVERAGE (-)	-0.125	-0.390	1.676	-0.130	-0.408	1.674	-0.152	-0.474	1.690	-0.153	-0.479	1.689
LITIGATION (+)	0.120	0.571	1.165	0.130	0.626	1.151	0.114	0.550	1.147	0.115	0.553	1.147
MKTBOOK (?)	0.019	0.729	3.578	0.019	0.763	3.562	0.022	0.882	3.590	0.025	0.990	3.489
MVE (?)	-0.393	-1.422	3.616	-0.415	-1.534	3.494	-0.439	-1.610	3.534	-0.475	-1.784*	3.376
INSTITUTION (-)	-0.264	-0.709	1.114	-0.232	-0.639	1.072	-0.301	-0.810	1.117	-0.255	-0.698	1.081
LOSS (?)	-0.280	-0.980	1.562	-0.283	-0.997	1.560	-0.330	-1.158	1.562	-0.335	-1.178	1.561
FIN/ACQ (?)	0.142	0.502	1.127	0.157	0.563	1.109	0.168	0.595	1.133	0.190	0.680	1.108
Intercept	0.229	0.578		0.250	0.639		0.276	0.725		0.322	0.855	
N	103			103			103			103		
Adjusted R <sup>2</sup> / F value	0.296	4.502***		0.302	4.940***		0.300	4.569***		0.301	4.919***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 8

## OLS Regressions of Current Accruals on Fee Variables

CA_MOD_ROA =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEE} + \beta_2\text{CNASFEE or } \beta_1\text{CTOTFEE or } \beta_1\text{NAUFEE} + \beta_2\text{NNASFEE or } \beta_1\text{NTOTFEE}) + \beta_2\text{BIG4} + \beta_3\text{CFOTA} + \beta_4\text{FINANCE} + \beta_5\text{CURACC} + \beta_6\text{LEVERAGE} + \beta_7\text{LITIGATION} + \beta_8\text{MKTBOOK} + \beta_9\text{MVE} + \beta_{10}\text{INSTITUITON} + \beta_{11}\text{LOSS} + \beta_{12}\text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEE (?)	-0.083	-0.365	1.371									
CNASFEE (?)	1.557	2.991***	1.256									
CTOTFEE (?)				0.310	1.834*	1.096						
NAUFEE (?)							-0.028	-0.107	1.447			
NNASFEE (?)							1.940	3.165***	1.259			
NTOTFEE (?)										0.419	2.128**	1.133
Control variables (predicted sign)												
BIG4 (-)	-0.005	-0.031	1.285	0.096	0.600	1.208	0.039	0.240	1.318	0.121	0.751	1.234
CFOTA (-)	-0.380	-5.005***	1.317	-0.364	-4.751***	1.308	-0.387	-5.113***	1.318	-0.370	-4.843***	1.309
FINANCE (+)	-0.023	-0.144	1.144	0.025	0.154	1.128	-0.028	-0.177	1.141	0.011	0.070	1.131
CURACC (+)	0.030	0.454	1.178	0.033	0.493	1.177	0.020	0.299	1.187	0.027	0.393	1.185
LEVERAGE (-)	-0.018	-0.443	1.301	-0.016	-0.394	1.300	-0.016	-0.404	1.300	-0.016	-0.394	1.299
LITIGATION (+)	0.203	1.600*	1.098	0.192	1.490*	1.097	0.160	1.257	1.105	0.176	1.368*	1.102
MKTBOOK (?)	0.008	1.793*	1.417	0.008	1.660*	1.414	0.009	1.900*	1.423	0.008	1.661*	1.414
MVE (?)	-0.237	-2.346**	1.590	-0.218	-2.138**	1.581	-0.239	-2.381**	1.588	-0.220	-2.162**	1.577
INSTITUTION (-)	-0.001	-0.005	1.075	-0.068	-0.293	1.061	-0.038	-0.165	1.059	-0.083	-0.360	1.053
LOSS (?)	-0.212	-1.328	1.291	-0.221	-1.369	1.290	-0.246	-1.545	1.298	-0.258	-1.598	1.298
FIN/ACQ (?)	-0.001	-0.009	1.148	-0.010	-0.061	1.148	0.032	0.196	1.143	0.003	0.019	1.139
Intercept	-0.030	-0.150		-0.101	-0.495		-0.012	-0.062		-0.080	-0.410	
N	224			224			224			224		
Adjusted R <sup>2</sup> / F value	0.103	2.937***		0.080	2.582***		0.111	3.105***		0.085	2.692***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 9

## OLS Regressions of Signed Positive Current Accruals on Fee Variables

CA_MOD_ROA (+) =	$\alpha + \beta_1 \text{FEEVAR} (\beta_1 \text{CAUFEE} + \beta_2 \text{CNASFEE} \text{ or } \beta_1 \text{CTOTFEE} \text{ or } \beta_1 \text{NAUFEE} + \beta_2 \text{NNASFEE} \text{ or } \beta_1 \text{NTOTFEE}) + \beta_2 \text{BIG4} + \beta_3 \text{CFOTA} + \beta_4 \text{FINANCE} + \beta_5 \text{CURACC} + \beta_6 \text{LEVERAGE} + \beta_7 \text{LITIGATION} + \beta_8 \text{MKTBOOK} + \beta_9 \text{MVE} + \beta_{10} \text{INSTITUTION} + \beta_{11} \text{LOSS} + \beta_{12} \text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEE (?)	0.290	0.959	1.585									
CNASFEE (?)	1.406	2.313**	1.547									
CTOTFEE (?)				0.610	3.124***	1.155						
NAUFEE (?)							0.509	1.438	1.781			
NNASFEE (?)							1.831	2.554**	1.695			
NTOTFEE (?)										0.856	3.795***	1.182
Control variables (predicted sign)												
BIG4 (-)	0.076	0.409	1.227	0.104	0.554	1.214	0.149	0.821	1.249	0.120	0.662	1.207
CFOTA (-)	-0.447	-5.687***	1.328	-0.446	-5.654***	1.328	-0.466	-6.127***	1.339	-0.463	-5.990***	1.339
FINANCE (+)	0.272	1.508*	1.144	0.264	1.455*	1.142	0.262	1.505*	1.140	0.246	1.396*	1.138
CURACC (+)	0.249	1.415*	2.154	0.263	1.490*	2.146	0.174	1.013	2.191	0.207	1.198	2.162
LEVERAGE (-)	-0.175	-3.529***	3.432	-0.180	-3.621***	3.413	-0.162	-3.365***	3.487	-0.175	-3.600***	3.423
LITIGATION (+)	0.180	1.172	1.178	0.152	0.994	1.158	0.068	0.455	1.208	0.074	0.486	1.188
MKTBOOK (?)	-0.048	-1.914*	2.633	-0.049	-1.929*	2.632	-0.046	-1.874*	2.638	-0.048	-1.944*	2.631
MVE (?)	0.650	3.315***	3.561	0.680	3.469***	3.517	0.647	3.399***	3.597	0.686	3.585***	3.518
INSTITUTION (-)	-0.427	-1.495*	1.235	-0.503	-1.784**	1.189	-0.329	-1.184	1.253	-0.428	-1.541*	1.211
LOSS (?)	0.082	0.459	1.313	0.096	0.534	1.309	-0.051	-0.295	1.345	-0.032	-0.183	1.339
FIN/ACQ (?)	-0.118	-0.593	1.168	-0.142	-0.712	1.159	-0.120	-0.624	1.163	-0.141	-0.725	1.159
Intercept	-0.333	-1.366		-0.341	-1.391		-0.285	-1.280		-0.251	-1.137	
N	93			93			93			93		
Adjusted R <sup>2</sup> / F value	0.409	5.854***		0.403	6.113***		0.449	6.715***		0.402	6.777***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two tailed otherwise.

Table 10

## OLS Regressions of Signed Negative Current Accruals on Fee Variables

CA_MOD_ROA (-) =	$\alpha + \beta_1 \text{FEEVAR} (\beta_1 \text{CAUFEE} + \beta_2 \text{CNASFEE or } \beta_1 \text{CTOTFEE or } \beta_1 \text{NAUFEE} + \beta_2 \text{NNASFEE or } \beta_1 \text{NTOTFEE}) + \beta_2 \text{BIG4} + \beta_3 \text{CFOTA} + \beta_4 \text{FINANCE} + \beta_5 \text{CURACC} + \beta_6 \text{LEVERAGE} + \beta_7 \text{LITIGATION} + \beta_8 \text{MKTBOOK} + \beta_9 \text{MVE} + \beta_{10} \text{INSTITUTION} + \beta_{11} \text{LOSS} + \beta_{12} \text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
<b>Experimental variables (predicted sign)</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>	<b>Estimate</b>	<b>T value</b>	<b>VIF</b>
CAUFEE (?)	-0.166	0.610	1.369									
CNASFEE (?)	1.105	1.560	1.264									
CTOTFEE (?)				0.086	0.398	1.141						
NAUFEE (?)							-0.154	-0.500	1.436			
NNASFEE (?)							0.971	1.174	1.197			
NTOTFEE (?)										0.072	0.289	1.205
<b>Control variables (predicted sign)</b>												
BIG4 (-)	-0.259	-1.239	1.418	-0.166	0-.829	1.296	-0.234	-1.098	1.463	-0.168	-0.813	1.366
CFOTA (-)	-0.487	-3.611***	2.197	-0.458	-3.410***	2.150	-0.473	-3.511***	2.168	-0.459	-3.415***	2.150
FINANCE (+)	-0.168	-0.786	1.299	-0.091	0-.435	1.225	-0.142	-0.666	1.282	-0.093	-0.443	1.230
CURACC (+)	-0.069	-0.991	1.141	-0.069	0-.990	1.140	-0.069	-0.985	1.153	-0.069	-0.985	1.152
LEVERAGE (-)	-0.486	-1.798**	1.561	-0.456	-1.681**	1.553	-0.446	-1.656**	1.535	-0.448	-1.660**	1.536
LITIGATION (+)	0.060	0.378	1.131	0.068	0.421	1.130	0.048	0.300	1.141	0.067	0.415	1.130
MKTBOOK (?)	0.013	2.504**	1.760	0.012	2.387**	1.750	0.012	2.479**	1.762	0.012	2.387**	1.750
MVE (?)	-0.455	-3.307***	2.192	-0.428	-3.120***	2.155	-0.445	-3.232***	2.172	-0.430	-3.131***	2.152
INSTITUTION (-)	-0.060	-0.208	1.104	-0.101	-0.347	1.095	-0.100	-0.343	1.101	-0.109	-0.373	1.101
LOSS (?)	-0.523	-2.404**	1.464	-0.552	-2.537**	1.452	-0.525	-2.394**	1.478	-0.556	-2.549**	1.456
FIN/ACQ (?)	0.280	1.384	1.234	0.299	1.473	1.229	0.313	1.553	1.212	0.306	1.518	1.212
Intercept	0.458	1.614		0.355	1.280		0.438	1.563		0.367	1.339	
N	131			131			131			131		
Adjusted R <sup>2</sup> / F value	0.094	2.008**		0.083	1.963**		0.085	1.911*		0.083	1.956*	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 11

## OLS Regressions of Discretionary Accruals on Last Year Fee Variables

DACC =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEELY} + \beta_2\text{CNASFEELY or } \beta_1\text{CTOTFEELY or } \beta_1\text{NAUFEELY} + \beta_2\text{NNASFEELY or } \beta_1\text{NTOTFEELY}) + \beta_2\text{BIG4} + \beta_3\text{ABSCFO} + \beta_4\text{ABSACC} + \beta_5\text{LEVERAGE} + \beta_6\text{LITIGATION} + \beta_7\text{MKTBOOK} + \beta_8\text{MVE} + \beta_9\text{INSTITUTION} + \beta_{10}\text{LOSS} + \beta_{11}\text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEELY (?)	-0.099	-0.380	1.302									
CNASFEELY (?)	0.981	2.120**	1.311									
CTOTFEELY (?)				0.239	1.373	1.034						
NAUFEELY (?)							-0.067	-0.199	1.558			
NNASFEELY (?)							0.477	0.906	1.571			
NTOTFEELY (?)										0.222	1.135	1.053
Control variables (predicted sign)												
BIG4 (-)	-0.085	-0.531	1.162	-0.038	-0.240	1.128	-0.054	-0.339	1.155	-0.057	-0.357	1.150
ABSCFO (+)	0.170	1.985**	1.455	0.161	1.875**	1.449	0.170	1.971**	1.443	0.167	1.947**	1.443
TOTACC (?)	-0.356	-3.541***	1.213	-0.349	-3.453***	1.211	-0.361	-3.568***	1.206	-0.356	-3.525***	1.204
LEVERAGE (-)	0.024	0.601	1.222	0.023	0.562	1.222	0.023	0.551	1.223	0.022	0.527	1.221
LITIGATION (+)	0.189	1.430*	1.110	0.204	1.542*	1.105	0.192	1.430*	1.127	0.188	1.406*	1.124
MKTBOOK (?)	0.003	0.548	1.459	0.002	0.395	1.447	0.002	0.507	1.475	0.002	0.390	1.450
MVE (?)	-0.099	-0.927	1.661	-0.076	-0.718	1.636	-0.093	-0.860	1.673	-0.080	-0.754	1.633
INSTITUTION (-)	-0.092	-0.391	1.048	-0.130	-0.551	1.039	-0.117	-0.491	1.049	-0.138	-0.584	1.041
LOSS (?)	-0.134	-0.841	1.207	-0.149	-0.935	1.203	-0.148	-0.917	1.214	-0.160	-1.006	1.198
FIN/ACQ (?)	-0.018	-0.111	1.087	-0.029	-0.176	1.085	-0.003	-0.020	1.088	-0.019	-0.113	1.080
Intercept	-0.001	-0.004		-0.044	-0.235		0.026	0.141		0.016	0.086	
N	224			224			224			224		
Adjusted R <sup>2</sup> / F value	0.047	1.899*		0.038	1.783*		0.029	1.545		0.035	1.734*	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 12

## OLS Regressions of Signed Positive Discretionary Accruals on Last Year Fee Variables

DACC (+) =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEELY} + \beta_2\text{CNASFEELY or } \beta_1\text{CTOTFEELY or } \beta_1\text{NAUFEELY} + \beta_2\text{NNASFEELY or } \beta_1\text{NTOTFEELY}) + \beta_2\text{BIG4} + \beta_3\text{ABSCFO} + \beta_4\text{ABSACC} + \beta_5\text{LEVERAGE} + \beta_6\text{LITIGATION} + \beta_7\text{MKTBOOK} + \beta_8\text{MVE} + \beta_9\text{INSTITUTION} + \beta_{10}\text{LOSS} + \beta_{11}\text{FIN/ACQ} +$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEELY (?)	-0.305	-1.522	1.329									
CNASFEELY (?)	1.282	3.502***	1.384									
CTOTFEELY (?)				0.180	1.299	1.047						
NAUFEELY (?)							-0.261	-0.955	1.704			
NNASFEELY (?)							0.549	1.260	1.785			
NTOTFEELY (?)										0.177	1.130	1.071
Control variables (predicted sign)												
BIG4 (-)	-0.052	-0.443	1.188	0.017	0.141	1.149	-0.006	-0.045	1.180	0.002	0.014	1.162
ABSCFO (+)	0.105	1.634*	1.394	0.099	1.475*	1.392	0.106	1.580*	1.391	0.100	1.501*	1.390
TOTACC (?)	-0.077	-1.151	1.309	-0.067	-0.955	1.306	-0.083	-1.186	1.304	-0.071	-1.012	1.298
LEVERAGE (-)	-0.021	-0.829	1.462	-0.027	-1.022	1.454	-0.026	-0.982	1.459	-0.028	-1.063	1.451
LITIGATION (+)	0.181	1.770**	1.102	0.197	1.852**	1.100	0.209	1.928**	1.134	0.188	1.737**	1.131
MKTBOOK (?)	-0.006	-2.052**	1.648	-0.008	-2.459**	1.611	-0.007	-2.140**	1.680	-0.008	-2.490***	1.616
MVE (?)	0.204	2.541**	1.909	0.250	3.033***	1.849	0.226	2.679***	1.918	0.247	3.003***	1.847
INSTITUTION (-)	-0.082	-0.433	1.104	-0.183	-0.939	1.074	-0.150	-0.752	1.120	-0.186	-0.953	1.074
LOSS (?)	0.122	1.018	1.195	0.105	0.841	1.193	0.107	0.850	1.198	0.095	0.764	1.185
FIN/ACQ (?)	-0.238	-2.016**	1.103	-0.245	-1.992**	1.102	-0.229	-1.840*	1.111	-0.235	-1.902*	1.105
Intercept	-0.015	0.139		-0.704	0.144		-0.007	0.139		-0.032	0.138	
N	121			121			121			121		
Adjusted R <sup>2</sup> / F value	0.199	3.441***		0.128	2.578***		0.120	2.338**		0.125	2.532**	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 13

## OLS Regressions of Signed Negative Discretionary Accruals on Last Year Fee Variables

DACC (-) =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEELY} + \beta_2\text{CNASFEELY or } \beta_1\text{CTOTFEELY or } \beta_1\text{NAUFEELY} + \beta_2\text{NNASFEELY or } \beta_1\text{NTOTFEELY}) + \beta_2\text{BIG4} + \beta_3\text{ABSCFO} + \beta_4\text{ABSACC} + \beta_5\text{LEVERAGE} + \beta_6\text{LITIGATION} + \beta_7\text{MKTBOOK} + \beta_8\text{MVE} + \beta_9\text{INSTITUTION} + \beta_{10}\text{LOSS} + \beta_{11}\text{FIN/ACQ} +$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEELY (?)	0.178	0.423	1.349									
CNASFEELY (?)	0.514	0.713	1.312									
CTOTFEELY (?)				0.285	1.002	1.134						
NAUFEELY (?)							0.215	0.400	1.553			
NNASFEELY (?)							0.477	0.576	1.532			
NTOTFEELY (?)										0.307	0.964	1.157
Control variables (predicted sign)												
BIG4 (-)	-0.369	-1.342*	1.255	-0.357	-1.317*	1.237	-0.389	-1.398*	1.285	-0.391	-1.413*	1.283
ABSCFO (+)	0.474	1.732**	6.012	0.470	1.728**	6.002	0.521	1.924**	5.869	0.525	1.955**	5.839
TOTACC (?)	-1.300	-5.889***	1.249	-1.295	-5.909***	1.243	-1.307	-5.915***	1.249	-1.303	-5.946***	1.242
LEVERAGE (-)	-0.122	-0.376	1.686	-0.111	-0.346	1.671	-0.151	-0.463	1.704	-0.144	-0.446	1.689
LITIGATION (+)	0.122	0.574	1.168	0.130	0.620	1.153	0.095	0.450	1.171	0.101	0.484	1.152
MKTBOOK (?)	0.019	0.754	3.614	0.019	0.758	3.614	0.023	0.922	3.525	0.024	0.954	3.488
MVE (?)	-0.450	-1.659*	3.446	-0.446	-1.653*	3.438	-0.488	-1.816*	3.376	-0.487	-1.824*	3.375
INSTITUTION (-)	-0.249	-0.675	1.086	-0.251	-0.682	1.086	-0.272	-0.729	1.106	-0.270	-0.727	1.106
LOSS (?)	-0.285	-0.989	1.578	-0.297	-1.043	1.556	-0.301	-1.028	1.630	-0.315	-1.107	1.554
FIN/ACQ (?)	0.132	0.459	1.156	0.123	0.432	1.147	0.135	0.469	1.158	0.128	0.449	1.142
Intercept	0.388	0.379		0.370	0.374		0.475	0.374		0.471	0.372	
N	103			103			103			103		
Adjusted R <sup>2</sup> / F value	0.289	4.390***		0.296	4.826***		0.288	4.373***		0.296	4.815***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Table 14

## OLS Regressions of Current Accruals on Last Year Fee Variables

CA_MOD_ROA =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEELY} + \beta_2\text{CNASFEELY or } \beta_1\text{CTOTFEELY or } \beta_1\text{NAUFEELY} + \beta_2\text{NNASFEELY or } \beta_1\text{NTOTFEELY}) + \beta_2\text{BIG4} + \beta_3\text{CFOTA} + \beta_4\text{FINANCE} + \beta_5\text{CURACC} + \beta_6\text{LEVERAGE} + \beta_7\text{LITIGATION} + \beta_8\text{MKTBOOK} + \beta_9\text{MVE} + \beta_{10}\text{INSTITUITON} + \beta_{11}\text{LOSS} + \beta_{12}\text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEELY (?)	-0.309	-1.244	1.296									
CNASFEELY (?)	1.851	4.193***	1.318									
CTOTFEELY (?)				0.366	2.168**	1.025						
NAUFEELY (?)							-0.172	-0.528	1.557			
NNASFEELY (?)							1.123	2.198**	1.576			
NTOTFEELY (?)										0.448	2.361**	1.050
Control variables (predicted sign)												
BIG4 (-)	-0.083	-0.549	1.161	0.009	0.057	1.128	-0.034	-0.216	1.155	-0.032	-0.209	1.150
CFOTA (-)	-0.380	-5.100***	1.314	-0.363	-4.744***	1.308	-0.371	-4.849***	1.309	-0.368	-4.825***	1.308
FINANCE (+)	-0.004	-0.027	1.135	0.036	0.226	1.129	0.015	0.092	1.133	0.033	0.208	1.129
CURACC (+)	0.032	0.494	1.175	0.036	0.535	1.174	0.038	0.570	1.173	0.038	0.567	1.174
LEVERAGE (-)	-0.015	-0.380	1.297	-0.018	-0.436	1.297	-0.018	-0.452	1.297	-0.021	-0.504	1.295
LITIGATION (+)	0.156	1.249	1.103	0.190	1.481*	1.097	0.157	1.210	1.119	0.155	1.202	1.115
MKTBOOK (?)	0.009	1.933**	1.427	0.007	1.580	1.416	0.008	1.770*	1.444	0.007	1.523	1.420
MVE (?)	-0.266	-2.672***	1.599	-0.222	-2.187**	1.575	-0.252	-2.453**	1.613	-0.224	-2.215**	1.574
INSTITUTION (-)	-0.039	-0.171	1.060	-0.118	-0.510	1.051	-0.084	-0.364	1.061	-0.134	-0.580	1.052
LOSS (?)	-0.179	-1.142	1.297	-0.207	-1.284	1.294	-0.192	-1.188	1.304	-0.223	-1.390	1.289
FIN/ACQ (?)	0.003	0.018	1.144	-0.009	-0.056	1.144	0.030	0.185	1.145	0.001	0.006	1.139
Intercept	0.063	0.342		-0.034	-0.181		0.079	0.436		0.054	0.299	
N	224			224			224			224		
Adjusted R <sup>2</sup> / F value	0.136	3.656***		0.086	2.708***		0.085	2.569**		0.089	2.790***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.



Table 15

## OLS Regressions of Signed Positive Current Accruals on Last Year Fee Variables

CA_MOD_ROA (+) =	$\alpha + \beta_1 \text{FEEVAR} (\beta_1 \text{CAUFEELY} + \beta_2 \text{CNASFEELY or } \beta_1 \text{CTOTFEELY or } \beta_1 \text{NAUFEELY} + \beta_2 \text{NNASFEELY or } \beta_1 \text{NTOTFEELY}) + \beta_2 \text{BIG4} + \beta_3 \text{CFOTA} + \beta_4 \text{FINANCE} + \beta_5 \text{CURACC} + \beta_6 \text{LEVERAGE} + \beta_7 \text{LITIGATION} + \beta_8 \text{MKTBOOK} + \beta_9 \text{MVE} + \beta_{10} \text{INSTITUTION} + \beta_{11} \text{LOSS} + \beta_{12} \text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEELY (?)	-0.603	-1.835*	1.622									
CNASFEELY (?)	2.331	4.685***	1.735									
CTOTFEELY (?)				0.484	2.413**	1.131						
NAUFEELY (?)							-0.698	-1.567	1.974			
NNASFEELY (?)							2.746	3.811***	2.177			
NTOTFEELY (?)										0.698	2.918***	1.276
Control variables (predicted sign)												
BIG4 (-)	-0.059	-0.342	1.164	0.004	0.022	1.155	-0.113	-0.633	1.164	-0.045	-0.244	1.147
CFOTA (-)	-0.448	-6.043***	1.329	-0.444	-5.497***	1.329	-0.454	-5.901***	1.331	-0.444	-5.590***	1.327
FINANCE (+)	0.221	1.288*	1.158	0.275	1.476*	1.151	0.194	1.079	1.185	0.305	1.657**	1.163
CURACC (+)	0.130	0.773	2.208	0.215	1.183	2.173	0.118	0.670	2.245	0.204	1.140	2.174
LEVERAGE (-)	-0.136	-2.833***	3.614	-0.170	-3.308***	3.497	-0.156	-3.169***	3.535	-0.163	-3.199***	3.527
LITIGATION (+)	0.098	0.672	1.187	0.105	0.665	1.187	0.028	0.179	1.316	0.004	0.025	1.308
MKTBOOK (?)	-0.043	-1.796*	2.649	-0.050	-1.911*	2.636	-0.054	-2.194**	2.646	-0.046	-1.800*	2.653
MVE (?)	0.497	2.646***	3.665	0.642	3.194***	3.529	0.587	3.056***	3.562	0.596	2.992***	3.575
INSTITUTION (-)	-0.285	-1.046	1.262	-0.605	-2.128**	1.154	-0.400	-1.436*	1.225	-0.505	-1.773**	1.195
LOSS (?)	0.111	0.659	1.323	0.121	0.660	1.323	0.153	0.873	1.325	0.103	0.571	1.311
FIN/ACQ (?)	-0.176	-0.935	1.161	-0.159	-0.775	1.160	-0.092	-0.472	1.166	-0.137	-0.680	1.159
Intercept	-0.037	-0.175		-0.136	-0.593		0.082	0.394		-0.015	-0.072	
N	93			93			93			93		
Adjusted R <sup>2</sup> / F value	0.475	7.321***		0.375	5.550***		0.434	6.362***		0.394	5.395***	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise

Table 16

## OLS Regressions of Signed Negative Current Accruals on Last Year Fee Variables

CA_MOD_ROA (-) =	$\alpha + \beta_1\text{FEEVAR} (\beta_1\text{CAUFEELY} + \beta_2\text{CNASFEELY or } \beta_1\text{CTOTFEELY or } \beta_1\text{NAUFEELY} + \beta_2\text{NNASFEELY or } \beta_1\text{NTOTFEELY}) + \beta_2\text{BIG4} + \beta_3\text{CFOTA} + \beta_4\text{FINANCE} + \beta_5\text{CURACC} + \beta_6\text{LEVERAGE} + \beta_7\text{LITIGATION} + \beta_8\text{MKTBOOK} + \beta_9\text{MVE} + \beta_{10}\text{INSTITUTION} + \beta_{11}\text{LOSS} + \beta_{12}\text{FIN/ACQ} + \varepsilon$											
	Model 1			Model 2			Model 3			Model 4		
Experimental variables (predicted sign)	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF	Estimate	T value	VIF
CAUFEELY (?)	-0.014	-0.047	1.219									
CNASFEELY (?)	0.780	1.249	1.264									
CTOTFEELY (?)				0.182	0.815	1.096						
NAUFEELY (?)							0.044	0.116	1.505			
NNASFEELY (?)							0.277	0.481	1.420			
NTOTFEELY (?)										0.192	0.780	1.129
Control variables (predicted sign)												
BIG4 (-)	-0.254	-1.276	1.275	-0.208	-1.075	1.212	-0.215	-1.085	1.254	-0.224	-1.134	1.260
CFOTA (-)	-0.467	-3.463***	2.177	-0.453	-3.376***	2.155	-0.458	-3.393***	2.159	-0.455	-3.397***	2.152
FINANCE (+)	-0.102	-0.488	1.230	-0.087	-0.420	1.224	-0.091	-0.434	1.225	-0.091	-0.438	1.224
CURACC (+)	-0.066	-0.953	1.130	-0.067	-0.974	1.129	-0.066	-0.956	1.130	-0.067	-0.976	1.130
LEVERAGE (-)	-0.492	-1.815**	1.560	-0.465	-1.724**	1.545	-0.453	-1.675**	1.535	-0.455	-1.692**	1.534
LITIGATION (+)	0.076	0.473	1.147	0.082	0.511	1.145	0.066	0.412	1.132	0.072	0.448	1.131
MKTBOOK (?)	0.012	2.382**	1.783	0.012	2.300**	1.768	0.012	2.304**	1.826	0.011	2.267**	1.783
MVE (?)	-0.440	-3.178***	2.199	-0.422	-3.073***	2.164	-0.429	-3.064***	2.228	-0.420	-3.059***	2.170
INSTITUTION (-)	-0.131	-0.450	1.103	-0.123	-0.422	1.103	-0.123	-0.415	1.123	-0.144	-0.489	1.132
LOSS (?)	-0.553	-2.541**	1.458	-0.562	-2.581***	1.456	-0.557	-2.524**	1.484	-0.572	-2.615***	1.470
FIN/ACQ (?)	0.300	1.489	1.218	0.295	1.462	1.217	0.309	1.525	1.216	0.301	1.495	1.211
Intercept	0.421	1.560		0.363	1.376		0.400	1.513		0.398	1.519	
N	131			131			131			131		
Adjusted R <sup>2</sup> / F value	0.088	1.941**		0.087	2.014**		0.077	1.819*		0.087	2.009**	

\*\*\*, \*\*, \* represent significance at 0.01, 0.05 and 0.10 levels, respectively.

All Variables are defined in Table 3. Directional tests are one-tailed, and two-tailed otherwise.

Exhibit 1: Summary of Studies Investigating the Relationship between Auditor Independence and Financial Reporting Quality

Study	Dependent Variable	Independent Variables	Sample	Test Technique	Main Findings
Antle et al. (2006).	Earnings management(abnormal accruals using modified Jones model)	Total fees (audit and non-audit fees) Ratio of NAF to AF And AF to NAF	Sample consists of 2294 firms from UK from 1994 to 2000 and 1570 US firms in the year 2000.	OLS regression	No support for fees for non-audit service increase abnormal accruals and audit fees increase abnormal accruals due to auditor client relations.
Ashbaugh et al. (2003)	Earnings management(discretionary current accruals using Portfolio Performance Adjusted Discretionary Current Accruals (PADCA) and ROA in Estimation Discretionary Current Accruals (REDCA )	Non audit service fees (ratio of non-audit fees to total fees (FEERATIO)	Sample of 3,170 US firms proxy statements during November and December 2001.	OLS regression	No relation between positive discretionary accruals and any of the auditor fee metrics (when discretionary accruals are adjusted for firm performance and sample firms are partitioned by income-increasing versus income-decreasing accruals). No support for FJN's conclusion (that firms purchasing non-audit services manage earnings to a greater extent than other firms).
Barkess and Simnett (1994)	Audit fees (non-audit fees using the dollar amounts paid to auditors for other services)	Audit independence (Auditee size , audit qualification and type of auditor)	Sample consisted of 371 Australian companies in 1986, 403 in 1987, 466 in 1988, 463 in 1989 and 391 in 1990.	OLS regression	Positive relationship between fees paid for other services and audit fees. No relationship between the level of other services and the type of audit report issued or audit tenure (audit independence is not affected by provision of the other services).
Cahan et al. (2008)	Earnings management measured using Modified Jones (1991) cross-sectional discretionary accruals model.	Non-audit fees growth and client importance (NAFGROW2,NAFGROW4,CLIENT1 and CLIENT2)	Sample of 237 NZ firms during the period 1995-2001	OLS regression	No relationship between growth in non-audit fees and earnings management. Interaction of the non-audit fee time-period measures and client importance is positive and significantly related to discretionary accruals.

Exhibit 1: Summary of Studies Investigating the Relationship Auditor Independence and Financial Reporting Quality (continued)

Chung and Kallapur (2003)	Audit Independence (Earnings management by abnormal accruals using modified Jones model)	Client importance (measured by clients fees vis a vis other client fees in the same office)	Sample consists of 1871 clients of big five US audit firms (client importance at the audit firm level and 1778 firms at local audit office level.	OLS regression	No significant relation between client measures importance and abnormal accruals. The same holds true for subsets of client importance.
Craswell (1999)	Audit independence (Reporting opinions -clean or qualified using disagreement with management or Conflict over GAAP or significant uncertainty)	Non- audit services (using audit fees and other fees paid to the group auditor and other auditors of group companies)	Samples consist of 885 Australian listed companies for 1984, 1,477 for 1987 and 1079 for 1994	Logit regression	Decision to qualify opinion is not related to provision of non-audit services
DeFond et al. (2002)	Going concern opinion	Non-audit services fees (% of non-audit fees to total fees)	Sample consists of 2,428 US firms, including 100 with first-time going concern opinions from between February 5, 2001, and Oct 31, 2001	OLS regression	No significant association between non-audit service fees and impaired auditor independence. No association between going concern opinions and either total fees or audit fees.
Frankel et al. (2002)	Earnings management(absolute discretionary accruals using Jones cross sectional model)	Non-audit services fees (measured by FEERATIO and RANKNON)	Sample of 3074 US proxy statements between February 5, 2001 and June 15, 2001.	OLS regression	Positive association between non-audit fees and reporting a small earnings surprise, for absolute discretionary accruals, and positive and negative discretionary accruals. Negative association between audit fees and earnings management
Gore et al. (2001)	Earnings management measured using Jones (1991) discretionary working capital accruals	Non-audit fees (NAS- non-audit fees to total audit fee)	Sample of 4,778 UK companies between 1992 to 1998	OLS regression	Positive relation between non-audit fees and earnings management for non-Big5 clients but not for Big5 clients
Hay et al. (2006)	Audit opinion (report qualification or modification ,going concern qualification)	Non -audit services fees. (ratio of non-audit fees to total fees (FEERATIO))	Sample consists of 177 NZ companies in 1999, 224 companies in 2000, and 243 companies in 2001.	OLS regression	Auditors impair their independence in appearance when auditors provide non-audit services but no impact on independence of mind

Exhibit 1: Summary of Studies Investigating the Relationship between Auditor Independence and Financial Reporting Quality (continued)

Kinney et al. (2004)	Restatements	Audit fees and non-audit fees FEERATIO (ratio of non-audit fees to total fees)	Sample consists of 617 restating registrants ( with multiple effects 979 fee years)from 1995 to 2000	OLS regression	No significant positive relation between audit fees paid for financial systems design (small sample size) and implementation or internal audit services. Some association between unspecified audit services and restatements. Significant negative association between tax services fees and restatements(larger registrants)
Larcker and Richardson (2004)	Earnings management( using absolute value of accruals using Jones cross sectional model)	Corporate governance and Auditor independence (FEERATIO, NONAUDFEE, TOTFEE, ABTOTFEE, and ABNONAUDFEE)	Sample consists of 5,103 US firm- years for fiscal years 2000 and 2001.	OLS Regression	Mixed evidence of associations between the provision of non-audit services and abnormal accruals. Three distinct clusters of firms found where one cluster exhibits a statistically significant positive association between non-audit fees and abnormal accruals.
Raghunandan et al. (2003)	Restatements	Non audit fees. PROPNAS (non-audit services fees as percentage of total Fees)	Sample consists of 110 US companies from 2000 to 2001	Logit regression.	No significant differences between the restatement and control samples for non-audit fees, fee ratios and total fees. No support for concerns that either non-audit fees or total fees inappropriately influence the audit and lead to restatements.
Sharma and Sidhu (2001)	Going concern opinion (audit opinion)	Non audit services fees PROPNAS (non-audit services fees as percentage of total Fees)	A sample of forty nine(49) Australian bankrupt companies between 1989 and 1996	Logit Regression	Auditors impair their independence when their audit clients generate higher proportions of non-audit services fees to total fees.
Wines (1994)	Going concern qualification (audit opinion)	Non audit service fees (non-audit fee percentages for qualified against non-audit fee percentages for unqualified companies)	Sample consists of 76 Australian companies for a period of ten years from 1980.	OLS regression	Auditors impair their independence when their audit clients generate higher proportions of NAS fees to total fees.