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Article

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Journal of Accounting and Management Information Systems (JAMIS)

Provided in Cooperation with:

The Bucharest University of Economic Studies

Suggested Citation: Tijani, Oladipupo Muhrtala; Uthman, Ahmad Bukola; Abdul-Baki, Zayyad; Oke, Lukman Adebayo (2014) : Audit Pricing, Start-Up Cost and Opinion Shopping, Journal of Accounting and Management Information Systems (JAMIS), ISSN 2559-6004, Bucharest University of Economic Studies, Bucharest, Vol. 13, Iss. 4, pp. 686-718

This Version is available at:

<https://hdl.handle.net/10419/310573>

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Audit pricing, start-up cost and opinion shopping

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Abstract: The purpose of this paper is to predict the association between the effect of start-up cost and audit opinion shopping on the pricing strategies of medium-sized audit firms. Using a sample of 753 local –office-year observations between 2006 and 2011, we find evidence of a positive association between higher audit pricing of new private client and audit opinion shopping. We also find that start-up cost is a good predictor of higher initial fees charged by auditors for private clients. While earnings risk management (ERM) and financial performance risk (FPR) are significant factors in audit pricing, litigation risk (LR) however failed to evolve as a direct significant predictor. Although this study focused on the effects of start-up costs and opinion reporting, it fails to differentiate between firm cost allocation and apportionment. The model can be used to assist audit firms not only to develop pricing strategies that fully reflect the effective cost allocation, but also to be receptive to the implications of opinion reporting on service pricing.

Keywords: Start-up cost; opinion shopping; audit pricing; medium-sized firms.

JEL codes: M41

1. Introduction

Notwithstanding the existence of well over 200 papers on audit pricing in the last three decades (Hay, 2011), there has been no research to date on the combined effect of higher start-up costs and audit opinion shopping on audit pricing. How

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auditors charge for their services remain an under-researched area (Ahmed & Goyal, 2005) even though its attention seem more extensive than most accounting and auditing areas (Hay, 2011). This study examines the impact of the twin relationship between higher start-up costs and audit opinion shopping on higher audit fees for new clients of private auditors. There is evidence that the amount of non-audit service fees (audit fees) are not (or) related to the willingness of the auditor to issue a more favorable audit report (Geiger & Rama, 2003; DeFond *et al.*, 2002) and that new clients of private auditors pay higher audit fees (Azizkhani *et al.*, 2012). To expand this line of research, the study investigates whether higher start-up cost and audit opinion shopping has a significant effect on the pricing of new private client audit. Higher costs associated with new clients (demand side) might indicate the probability that a newly engaged auditor is willing to issue a more favorable audit report (supply side) to a private client. Specifically, in this study, we observe medium-size firms and test for the association between the types of audit opinion issued and start-up costs incurred on service billings to new private clients. One advantage of exploring privately held audit clients is the higher dispersion of auditor choice (Channey *et al.*, 2002) as agency costs become heightened amongst listed firms (Fama & Jensen, 1983).

The industrial organization of public accountancy practice has been an area of considerable interest to both researchers and regulators since the 1970s (Chaney *et al.*, 2004). There has been amplified scrutiny as the claims of audit professionals are often accompanied by unanticipated corporate collapse, financial crime, fraud and the general crisis of capitalism (Bakre, 2007; Sikka, 2009; Sika *et al.*, 2009). Although the results appear mixed, auditor independence has been affected by the trend of non-audit service fees. While some studies suggest its minimal impact on the going concern reporting decision (Geiger and Rama, 2003; DeFond *et al.*, 2002) others find a significant relationship between non-audit service fees and audit opinion (Basioudis *et al.*, 2006; Craswell, 1999; Lennox, 1999; Geiger, 2003), as the final, cumulative decision is subject to a substantial amount of expert judgment and negotiation between the auditor and client management (Basioudis *et al.*, 2006). The economic transaction decision of external auditors with client companies are often products of social trust (Fukuyama, 1995; La Porta *et al.*, 1997; Zak & Knack, 2001; Alesina & La Farrara, 2000; 2002; Berglund & Kang, 2013), subsequently they are able to cement their status and privileges on the ability to mediate uncertainty and construct objective and independent views on financial statements (Otusanya & Lauwo, 2010). Though their proper interpretation remains unsettled (Doogar *et al.*, 2013) archival literature recognizes fee residuals (excess of actual audit fees over expected fees) (Simunic, 1980) as a predictor of auditor independence. Regulatory changes in recent years such as the Sarbanes-Oxley legislation (US) and the Combined Code of Corporate Governance (UK) emphasize the independence of auditors (Chanine & Filatotchev, 2011). Prior studies also identify the relationship between non audit service fees and audit opinion (Palmrose, 1986; Mutchler, 1985; Palmrose, 1986; Barkess & Simnett, 1994; Craswell, 1999; DeFond *et al.*, 2002). As such empirical work on the

possible implications of such as start-up costs and audit opinion shopping on audit fee decisions of auditors would be a specific area of interesting research. Fees earned by auditors may influence audit quality in a two ways. First, large fees paid by client-firms are motivators to increase efforts exerted. Second, it may put auditor independence at risk (Suprato & Suwardi, 2013). As private firms constitute a significant driver of the Nigerian economy and of the market for audit services they seem to be the next in line to be confronted with stringent financial reporting regulations and the obligation of external auditing of their reports. This trend sets a new stream of research in motion. Further, this force highlight the need for new evidence on the effect of start-up costs and client expectation of the auditor's willingness to issue a more favorable report, on higher audit fees associated with new private clients.

In this paper, we address two main issues. First, the study examines whether auditors opinion shopping affects service pricing. Second, we investigate whether higher audit fees is associated with higher start-up costs of private newly engaged audit clients. Even in mature and well established audit markets, there are significant disparities between public and private entities in terms of structure, culture, goals, financial concerns, stakeholders, and risk. These factors imply diversity in the way clients and auditors experience the audit process. Our study adds to extant research in the audit literature by offering two unique possibilities within a local context. First, the peculiarity of the Nigerian audit market by the Big N firms. Second, since there are apparent dissimilarities between the audit of public and private entities in terms of objective, responsibility, scope, approach, and legal inclination, we assess how auditor specialization in private entities may affect audit pricing in Nigeria.

As a proxy for higher audit fees on initial engagement, we use the proportion of audit fees from continuing clients to audit fees from new clients generated by a local office during the observation period. As part of our control variables, we develop a proxy for auditor-client misalignment using the methods in Shu (2000). We also consider the four dimensions of audit opinion: unqualified, qualified, disclaimer, and adverse opinions. We delineate from the private client portfolio, start-up costs for new private client, companies using existing ones as a baseline. We adopt measures from Verbruggen *et al.* (2011) using number of staff, proportion of junior/senior audit staff, and the average fee per hour as a proxy for components of audit costs. These measures coincide with Hay *et al.* (2006) "product-centered specification of the audit fee model". Our sample is drawn from 753 local office-year observations between 2006 and 2011. Constrained by data limitation this sample includes only four medium-sized firms with local business offices across major Nigerian cities. The increased competition in the audit market precipitated by an increase in the number of licensed audit firms, provides a novel opportunity to examine its implications on audit pricing strategies. The result of this study has cross country implications as the Nigerian audit service supply market is largely dominated by the Big-N, which by extension characterized by a

structure different from jurisdictions in which such firms are excluded by regulations (Weets & Jegers, 1997; Azizkhan *et al.*, 2012). The findings have important implications for researchers and practitioners alike. We find evidence of a positive association of higher audit pricing of new private client with audit opinion shopping. We also find that start-up costs are good predictors of higher initial fees charged by auditors for private clients. While earnings risk management (ERM) and financial performance risk (FPR) are significant factors in audit pricing, litigation risk (LR) however failed to evolve as a direct predictor.

We move from public to private client and from the Big to non-Big market. In contribution as a lead study on audit start-up costs and opinion reporting and implications for fee setting, the method in this study considers medium-sized firms as the unit of analysis. Hence, it represents a robust examination of the supply side determinants of audit pricing. Using database from the supply perspective, our study offers divergent from client-based data towards a description of measures that directly describe overall implications of audit start-up cost and opinion pricing on an auditor new-private client pricing. As a result, the study presents a new line of evidence on private audit clients in the non-Big market and evaluate the findings of studies that use public audit clients as the unit of analysis (Basioudis *et al.*, 2006; Numan & Willekens, 2009; Azizkhani *et al.*, 2012; Berglund & Kang, 2013; Doogar *et al.*, 2013).

In addition to the policy importance of auditor litigation reform, our paper contributes to accounting, auditing, finance, corporate governance, and management literature. For one, we provide Nigerian-based support for an “opinion-cost-audit fee hypothesis” as we find audit fees are increasing as a function of private-client start-up cost exposures. Our setting enables us to study audit fee under both level and changes, each of which demonstrates the importance of considering the auditor’s liability exposure. For another, we extend Sirois *et al.* (2011), a lead study, which documents that Big 4 local offices benefit from economies of scale. This translates into cost savings and ultimately impacting on their pricing strategies at the local office level where audit contracting occurs. We consider a pre-opinion setting, wherein private companies have incentives to overstate earnings, and report evidence of an inverse relation between the presence of an adverse audit opinion and signed abnormal accruals. Our main contribution is to provide formal evidence by contributing to an understanding of the Nigerian audit industry, its dynamics and drivers of the non-Big N audit competitiveness by exploring the dual role of higher start-up costs and audit opinion shopping on higher audit pricing of new private-clients. This has important implications given the recent concerns raised by regulatory agencies, business associations, private interest groups as well as academic researchers over the high level of market concentration of the Big N firms and its potential adverse impact on audit product, innovation and most importantly audit pricing. More concern, the recent regulatory trend in some jurisdictions excluding the large international accounting firms from the local audit markets.

The results also have some implications for the legal literature on “audit opinion”. Although the primary market setting in this study is private audit clients, it however, challenge the provisions of the Investment and Securities Act (ISA) of 2007 (Sections 63 and 77 (1-3), as amended regarding the role of the reporting accountant on *written consent* provided in the offer prospectus of public entities.

The remainder of this paper proceeds as follows. Section two summarizes the background literature and key concepts that are relevant to this study. In this section we also present the hypotheses. Section 3 describes the sample used in the study and illustrates the methodology used to test the hypotheses while section 4 presents the empirical results. Section 5 illustrates results, robustness checks, conclude and draw attention to the limitations of the study.

2. Review of literature and background

Prior studies and anecdotal evidence succeeding the influential work of Simunic (1980) has extended factors associated with audit pricing. Their scope ranges from audit quality (Lennox, 1999; Hribabr *et al.*, 2010), the threat of oligopolistic markets (Johnson *et al.*, 1995; Pearson & Trompeter, 1994; Sankaraguruswamy & Whisenant, 2003; Channey *et al.*, 2004; Gonthier-Besacier & Schatt, 2006; Azizkhani *et al.*, 2012) and fee premiums for the Big-N market (Palmrose, 1986; Numan & Willekens, 2009), to low-balling practices (Craswell & Francis, 1999; Simon & Francis, 1988), the prevalence of non-audit services and related auditor independence issues (Ashbaugh *et al.*, 2003; Davis *et al.*, 1993; Ezzamel *et al.*, 2002; Basioudis *et al.*, 2006; Coulton *et al.*, 2012), the industry specialization price effect (Craswell, *et al.*, 1995; Cullinan, 1998; Ferguson *et al.*, 2003; El-Gammal, 2012; Doogar *et al.*, 2013) and the role of internal audit (Felix *et al.*, 2001), social trust (Berglund & Kang, 2013), client-auditor switches (Garsombke *et al.*, 2001), governance mechanisms (O’Sullivan & Diacon, 2002; Larcker *et al.*, 2003; Chanine & Filatotchev, 2011), mergers (Meeking *et al.*, 2004), size (Hamid & Ali, 2012), social norms (Hassan & Dedoulis, 2013), and insurance hypothesis (Lam, 1998). Further, there are also being mixed evidence on higher fees charged by auditors. While some construed higher fees as bad and representation of higher level of economic bonding (Gul *et al.*, 2003; Francis & Ke, 2006; Srinidi & Gul, 2007; Hribabr *et al.*, 2010; Asthana & Boone, 2012), others perceive higher fees as a reflection of quality audit (Reynolds & Francis, 2001; Ashbaugh *et al.*, 2003; Larcker & Richardson, 2004; Kinney *et al.*, 2006; Ruddock *et al.*, 2006; Blankley *et al.*, 2012). Generally, these bodies of literature align with three main determinants of audit fee: audit client, auditor, and audit engagement characteristics. Although, our focus is in the mix of the audit client and audit engagement characteristics, for the effects of control variables we discuss literature on other explanatory variables.

2.1 Start-up costs and higher audit pricing

The absence of audited financial statements constitutes a significant challenge for start-up companies' ability to generate shareholder confidence. One of the pre-requisites for private companies seeking finance in most jurisdictions is the audit opinion. Although, the auditor effectively screens out high-risk clients, his actions are still subject of litigation risk and its attendant costs because the clients' project may fail after the auditor issues an unqualified opinion (Otusanya & Lauwo, 2010). Economic growth may be stymied (Laux & Newman, 2007) as it could hamper their access to credit and equity markets as well as inhibit job creation and the development of imaginative products and services. Each time an auditor performs his initial audit of a new client both parties often incur considerable costs, most of which are explicit (Arrunada & Paz-Ares, 1997). A number of factors may be attributable to higher audit fees in a private company context. Unlike repeated audit, new client engagement involves higher start-up costs usually in relation to familiarize with client business process, accounting procedures and initial evaluation of final accounts. The audit fee offered by the private client plays an incentive role. The higher the fee, the greater the value of becoming informed about the client's type as the auditor devotes more effort and attention to the evaluation of processes at the planning stage. Where the new client is accepted, the auditor proceeds with the planning of which he incur incremental expenses. The geographical distribution of the audit firm local business offices may also explain higher "production costs" and the attendant higher audit fees (Verbruggen *et al.*, 2007). Further, audit firm's operations are often confronted with seasonal effect variations. This *busy season* in audit engagements is related to accounting year end of client companies' coinciding with the fiscal year (Kim *et al.*, 2013). Where new client engagement occurs during such periods, the possibility of charging higher fees by the auditor exists as both human and material resources tend to be overstretched. Staffs are motivated via bonus payments plans to moderate the workload effect. Such bonus plans similarly represent additional overheads which are then passed-on to clients in the form of higher service charge. The fee offered to the auditor does not only depend on the expected litigation and audit cost, but also the private firm's investment opportunity.

The lower the expected value of the investment opportunity, the less eager is the company to induce the auditor's evaluation effort by offering higher audit fee (Laux & Newman, 2007), even though this prediction mostly relate to firms that lack pre-engagement evaluation processes by the auditor. Audit clients looking for non-audit services are significant potentials of complexity and troubled service outlets for auditors, resulting in a positive relationship between audit and non-audit fees (Basioudis *et al.*, 2005; Hay *et al.*, 2006). For most new private clients, audit engagements requiring significant client specific start-up costs, incumbent auditors possess cost advantages over potential competitors in future audits (Sankaraguruswamy & Whisenant, 2003) hence, potential competitive opportunities to take over from existing firms usually involve higher billings to such clients especially where the client switching costs are inclusive of specific

disclosure reporting requirements. Consequently, our first hypothesis regarding auditor initial engagement service pricing is non directional. We posit that higher audit pricing for new private clients is associated with higher initial start-up cost.

Initial engagement discounts (i.e. Low-balling), have the effect of raising the fees and subsequent profits of incumbent auditors (Chan, 1999). As clients have an incentive to pay positive quasi-rents to influence audit report, the economic consequence is the potential risk of losing auditor independence (Sewon & Wang, 2012). Regulations banning low-balling might be ineffective in promoting auditor independence (DeAngelo, 1981). Although auditors are more likely to take shortcuts to avoid loss-making where low-balling exist (DeAngelo, 1981), low audit effort increases the tendency of managers to manipulate earnings (Caramanis & Lennox, 2008), nevertheless it may signify the absence of unexpected accruals (Choi *et al.*, 2010) and constitute a reduced threat to auditor independence.

While much of prior work on costs and audit pricing is rather limited, the larger proportion consistently finds higher fees relating to extended audit effort and/or higher risk premium with new client engagement. The potential for future litigation portends higher control risk and auditors tend to charge higher hourly billing rate to complement their exposure (Bedard and Johnstone, 2004). Sirois *et al.* (2011) observe interactions across different client types (i.e. Small to medium sized public companies), auditor types (i.e. Big 4 and non-Big 4 auditors), and the impact of their investment in technology as a differentiation strategy on audit pricing. The methods in the study allow researchers to document evidence of the existence of economies of scale amongst the Big 4 at the local office level and its effects on audit pricing. In turn, this results in decreasing Big 4 audit fee in local market size, relative to non-Big 4 audit fee (i.e. Decreasing Big 4 premium). This exclusive insight is consistent with Big 4 audit firms engaging in greater audit technology investments to enhance efficiency, as argued by Sirois and Simunic (2010). In contrast, Choi *et al.* (2010) find that the local office audit fee is in fact increasing and this is consistent with increasing audit quality rather than the absence of economies of scale. Sirois *et al.* (2011) however, argued at a later date that the research design in Choi *et al.* (2010) might have failed to appropriately control for specific factors such as time and returns to scale differences between Big 4 and non-Big 4 firms, as a result of which could have biased the conclusions reached in the study. In the interim, there are no definitive proofs as the general consensus remains that more research is required to explore the dynamics of the audit market Sirois *et al.* (2011) as the high level of market concentration has not adversely affected audit fees (GAO (2008, p. 94). Nevertheless, high priced production input such as audit effort (e.g. Man hours) and technologies are the essentials of achieving real and/or perceived audit quality. With investment in technology, audit firms have greater opportunities to explore economies of scale in larger markets. The Big N firms, for instance, have the capability to improve their contribution margins as client-firms would be willing to receive enhanced qualitative audit in exchange for a higher service charge (Sirois and Simunic, (2010). Further, investment in endogenous competitive capabilities which are independent of output

level, such as R & D activities (product and/or service innovations), training, IT equipment, and standardized audit programs aimed at improving productivity are efforts to reduce marginal cost and achieve higher client billings.

Local partners of the Big N firms have direct responsibility for contracting with their clients. They have a duty on all audit engagements performed. This is inclusive of tasks they relay to other local offices such as client acceptance, retention, and dismissal decisions on behalf of their firm (Kim *et al.*, 2013). Zarman *et al.* (2011) examine the relationship between governance, quality and auditor remuneration. Using a new composite measure comprising audit committee independence, expertise, diligence and size, the study finds after controlling for board characteristics, that there is a significant positive relationship between audit committee effectiveness and higher audit fees for larger clients. Because effective committee monitoring results in more controlled audit, the result is wider coverage and higher audit fees. In a two-stage least squares regression approach, Ratzinger (2011) finds no association between audit and non-audit fees, suggesting that audit and non-audit fee determination do not indicate impairment of auditor independence. The study also suggests that fee-cutting on initial audit engagements is determined by client size.

2.2 Opinion shopping and higher audit pricing

The evaluation of the appropriateness and probability of success of senior management plans, action as well as the audit opinion rendered on financial statements represent the final cumulative audit decision. This decision is subject to professional judgment and negotiation between client management and the auditor (Basioudis *et al.*, 2006). The issuance of a modified audit opinion involves both explicit and implicit costs to both client and the auditor (Kida, 1980; Mutchler, 1984; Geiger *et al.*, 1998; Blay & Geiger, 2001; Weil, 2001) and clients usually are not favorably disposed by the issuance of a modified opinion (Kida, 1980; Mutchler, 1984). Within this framework, researchers provide evidence of a positive relationship between client business risk factors, audit effort and audit fees (Pratt & Stice, 1994), hence by paying higher audit fees, private firms may expect that the new auditor will be willing to issue a more favorable audit report (Azizkhani *et al.*, 2012). Auditors employ a number of risk control strategies, perform additional audit procedures and close monitoring and as such may be inclined towards charging higher fees. They assess various risks and evaluate the adequacy of their fees to cover the costs associated with the underlying risks posed by new clients (Johnstone & Bedard, 2003; Bedard & Johnstone, 2004). Subsequently, this assessment becomes a vital component of auditor-client acceptance and retention strategies (Huss *et al.*, 1993; Johnstone, 2000; Bell *et al.*, 2002).

Research investigating the relationship between opinion shopping and audit pricing does not exist in the literature. Nevertheless, there are some important studies that have vital implications. Jiang and Son (2013) analyze whether audit fees reflect a premium for controlling risk by observing all firms that filed section 404 reports between 2004 and 2009. This unique insight into the operations of control risks and

audit fee variance provide the researchers with direct evidence of the relative importance of auditor adjustment of the risk premium charged to clients for control risk assessment in addition to the scope and nature of audit work. Raghunandan and Rama (2006) find that firms receiving adverse SOX opinions paid 43% higher audit fees than firms that received clean audit reports. Using a more comprehensive sample, Hoitash *et al.* (2008) expanded on Raghunandan and Rama (2006) conclusions. Their result suggests that firms with reported internal control problems under SOX section 404 have paid substantially higher audit fees than others without deficiencies. Where clients disclose internal control deficiencies, audit firms would charge higher fees (Holgan & Wilkins, 2008). To the extent that audit effort proxy for audit fees, however the question that remained unaddressed by these authors is whether the increase in audit fees also explain client expectation of the auditor issuing a more favorable audit report. Hoag and Hollingsworth (2011) in their intertemporal analysis of audit fees and section 404 internal control opinions, find that although audit fees tend to decline for companies that remedy a material weakness, the corresponding fee reductions do not occur instantaneously. Their possible explanation for the “slow decrease” is that clients’ reports of internal weakness constitute additional business or litigation risk to auditors. Subsequently, this additional risk is considered within the client’s current and future audit pricing. Simunic (1980) assert that audit pricing is a reflection of two major elements, the level of audit effort and expected future loss component arising primarily from litigation. With the existence of control risk increasing the likelihood of litigation cannot be reduced by supplementation auditing, clients may be charged a form of insurance premium for possible losses which may result in future litigation.

Auditors are likely to respond to potential litigation risk evolving from issuing an unqualified opinion by either embedding a litigation premium into their fee or by increasing the amount of work performed (Badertscher *et al.*, 2014) consequently leading into higher fees, especially for new engagements. Accordingly, our primary prediction is that auditor’s willingness to issue a more favorable audit report will be positively associated with higher audit pricing. We test this prediction using a sample comprised of private audit client companies in a non-Big N market. By focusing only on private companies, we hold the influence of the stock price, availability constant, thus allowing independent isolation of the association between broad stakeholder reliance and audit fees, as stakeholder reliance on audited financial information is unobservable (Cassell *et al.*, 2014). To measure the level of difficulty of an audit, two proxies are often used: the existence of an important time lag between the end of the accounting period and the date on which the audit report is signed (positive relationship with audit fees is reported in a meta-analysis (Hay *et al.*, 2006), and the issuance of a qualified audit report. Such qualified opinion may pose significant threat to audit fees (Hay *et al.*, 2006). Beattie *et al.* (2001) however, did not find any statistically significant relationship between this report lags and audit fees.

Public offering settings is specialized regimes where audit fees also reflect litigation risk (Beatty 1993; Willenborg, 1999; Mayhew & Wilkins, 2003). Following Dye (1993), which demonstrates that the auditor’s wealth serves as a

bond for audit quality and that the audit fee includes the option on the auditor's wealth, it is expected that the client's desired level of audit quality would be reflected in the fee paid to the auditor. Subsequently auditors should receive higher fees and provide higher quality audit. Whether *quality* in this context coincides with private client's expectation of the auditor's favorable opinion is the subject of this study. Venkataraman *et al.* (2005) find a strong association between initial public offering (IPO) proceeds and pre-IPO audit fees. In the exploratory study which suggested that pre-IPO accruals are negative and less than post-IPO accruals, the conclusion of the authors contrast with the inferences in extant literature and provide scant support for the view that auditors acquiesce to opportunistic pre-issuance earnings management IPO issuers. Partners with large and medium-sized firms confirm that their realization rates are higher for IPO compared to annual audits. This higher hourly rate is the reflection of heightened exposure to litigation risk portended by IPO audits.

Similarly, the works of Clatworthy and Peel (2007) investigating determinants of external audit fees of quoted (Main Market, Alternative Investment and Ofex) and unquoted (public and private limited) UK companies find that quoted and unquoted public limited companies pay significantly higher audit fees than their private limited counterparts. Contrary to most prior US research, the study concluded that there are no indications that insolvent firms that failed received a higher service charge in the penultimate year to their failure.

2.3 Audit risk factors

Cassell *et al.* (2010) identify earnings manipulation risk (EMR), financial performance risk (FPR), and litigation risk (LR) as major sources of audit risk. Auditor EMR is found in his failure to detect intentional misstatements in client's financial statements. Clients with higher levels of earnings management place greater demands on audit resources (Abbott *et al.*, 2006) and auditor switching is often preceded by the reporting of income-decreasing discretionary accruals (DeFond & Subramanyam, 1998). In the documentation consistent with the conservative bias of auditors, Abbott *et al.* (2006) find that downward earnings management risk estimated by negative (i.e. Income decreasing) discretionary accrual is associated with lower audit fees. The existence of an audit expectation gap is a confirmation that third parties to assurance contracts expect auditors to curb earnings manipulation attempt of managers (Gul *et al.*, 2002; Lai, 2009) thus when auditors perceive earnings manipulating attempts by managers of new private client audits they are likely to commit more time and effort to ensure high quality audit. Therefore, we expect higher audit pricing in the course of newly engaged private clients of auditors as the level of earnings management risk of their client sets increases.

From the user's point of view, bankruptcies not preceded by going concern reports are often observed as the failure of auditing (McKeown *et al.*, 1991; Chen & Church, 1992; Geiger & Raghunandan, 2002). Client's financial performance risks are products of systematic economic condition. With major fluctuations in macro-economic variables, the risk is associated with the chances that client's economic condition may deteriorate at some point in the foreseeable future (John & Bedard, 2003; Cassell *et al.*, 2010). This is likely to influence the auditor's client acceptance and retention decisions (Choi *et al.*, 2004). While the primary objective of an audit is not bankruptcy prediction (Bruynseels *et al.*, 2007), the existence of FPR measured through various financial indicators make auditors susceptible in their reporting function and could significantly influence new client acceptance and retention strategies. Charles *et al.* (2009) investigate the association between financial reporting risk and audit fees during 2000 to 2003 paid to the Big 4, a time marked by momentous and historic events for auditors in the U.S. Consistent with the shift in the way auditor's price risk and consistent with the response to events surrounding Sarbanes-Oxley Act of 2002, the study find a positive statistically and economically significant relationship. Auditors are less likely to accept audit aggressive reporting practices, even though auditor auditee negotiation outcomes are unlikely to be subjective to audit risk evaluation (Sahnoun & Ali Zarai, 2008). Consequently, auditors should be more receptive to charging higher fees for new private clients as the level of financial performance risk in their client sets increases.

Auditor's choice of engagement holds in the decision to accept new private clients and their associated risk or to choose not to perform services for them. Audit pricing must compensate the auditor for assuming risk (Swanson, 2008). In a documentation of the economics and impact of litigation risk pricing on audits, Simunic and Stein (1996) purport that as size, complexity and risk affects audit pricing, a comparable increase in audit fees across clients would result from the increase in assurance provided by the audit. Litigation risk is peculiar to certain industries (Ashbaugh *et al.*, 2003; Raghunandan and Rama, 2007). Evidence suggests that its association with auditor resignation is positive (Krishnan, 1997). When quality audits are performed, the expectation is that the auditor's risk of being sued should reduce (Cassell *et al.* 2010). Geiger *et al.* (2006) find reporting decisions of the Big N firms as dependent on LR in their operating environment. It follows that as audit efforts increases, the expected liability, loss should decrease (Swanson, 2008). Since the expected litigation costs originate from the likelihood of accounting errors (Uysal & Gaul, 2008) higher pricing for new private clients should result from increase in litigation risk. Thus, we anticipate that auditors would charge higher fees as the level of new private client litigation risk sets increases.

3. Methodology

3.1 Regression model

We model medium-sized audit firm's decision to charge higher fees for new private clients as a function of higher start-up costs and audit opinion reporting. The dependent variable of interest, NC_HIGH_FS, equals 1 if there are higher charges to constituents of the new private clients of a local office, 0 otherwise, when compared to standard rates for existing clients over the observation period. Thus NC_HIGH_FS signals the existence of audit billings exceeding local office standard rates for existing private clients. The model is estimated using logistic regression and the observed medium-sized firms which do not charge higher audit fees for new private clients during the observation period serve as baseline condition. We define data cross-sections according to the year indicated on the auditor's sign-off date, in place of the financial statement year. This would eliminate the effects of potential timing issues associated with an auditor's initial appointment with a new private client and the formal commencement of the engagement process at the beginning of each period following the sign-off date.

The independent variable of interest, HGR_STC, refers to higher start-up costs incurred by auditors upon initial engagements with new private clients. We operationalize this variable as the ratio of aggregate audit cost allocations attributable to newly engaged private clients *versus* existing private clients with similar operational structure and sizes in the auditor's portfolio. Higher values of HGR_STC indicate higher start-up costs incurred resulting from the new engagement. We expect a positive association between this variable and the likelihood of higher audit pricing, because local offices with higher start-up costs should be more receptive to higher fees that may augment the overall higher composition of their start-up costs.

Audit opinion is an essential subject of a twin negotiation. In case of financially stressed firms, such negotiations become more sensitive. If an auditor issues a modified going-concern opinion, there are implicit cost implications for the duo (Kida, 1980; Mutchler, 1984; Geiger *et al.*, 1998; Blay & Geiger, 2001; Weil, 2001). Further, auditors are less likely to attest modified going concern opinion wherein they defer to the wishes of client management (Kida, 1980; Mutchler, 1984). To proxy for audit opinion shopping AUD_OPN_SHP, we delineate the basic classifications of audit opinion (i.e. Unqualified, qualified, disclaimer, and adverse opinion), thereafter we track the trend of the ratio of modified/unmodified audit opinion for randomly selected new private clients using existing private clients as a baseline group over the period of observation.

Following prior studies (see, DeAngelo, 1986, 1994; DeFond & Jambalvo, 1991; Yardley, Kauffman, Cairney, and Albrecht, 1992; Guenther, 1994; Subramanyam, 1997; Young, 1998; Gaver & Paterson, 2001) we adapt as proxies for earnings manipulation risk (EMR), financial performance risk (FPR), and litigation risk (LR).

We use the weighted average of absolute value of performance-adjusted discretionary *income increasing accruals* of new private clients compared to existing clients in the client portfolio of audit firm office. In calculating this weighted average, we consider audit fees. Since the manager's use of discretion represents a major determinant of discretionary accruals, higher values for EMR would relate positively to overall earnings management activity among audit client companies. Further, as all models used so far in the literature for assessing earnings management suffer from estimation bias we also focus on earnings management through unexpected or discretionary accruals. The total accruals are computed as the change in non-cash working capital, minus depreciations, write-offs and losses on asset disposals. Following DeAngelo (1986, 1994), we then calculate unexpected or discretionary accruals between the current and the previous year scaled by lagged total assets. That is,

$$DAC_{it} = TAC_{it} - TAC_{it-1}$$

where:

DAC_{it} = Discretionary accruals for firm I in year t scaled by lagged total assets

TAC_{it-1} = Total accruals for firm I in year t scaled by lagged total assets.

Subsequently, we expect a positive association between ERM associated with new private client and fees charged by a local office.

We proxy for financial performance risk (FPR) using the weighted average of the Altman Z-score of all private clients in the auditors portfolio and use the fees charged as weighted variable in calculating the average. Our motive is implicit in the population concentration specific to private companies data though these coefficients are non comparable to financial markets in NYSE nor AMEX (see, Subramanyam, 2001). Because higher values of Altman-Z score are indicative of a lower likelihood of financial risk, we multiply the Altman-Z scores by -1 prior to the FPR estimation. This would reverse the position to suggest that higher values of the scores are indicative of a higher overall level of FPR. When auditors expect higher clients FPR, they are likely to expect that management would engage in earnings management tactics. As such, auditors would commit more resources in terms of efforts and skills, subsequently, higher audit fees are expected to result. Hence, we propose a positive link between FPR and the likelihood of higher audit pricing for new private clients' audit.

Proxy for litigation risk (LR) is the ratio of audit fees charged to new private clients *versus* fees charged to existing private clients in litigation industries over the review period. Industries considered litigation given the unsystematic business risk in the Nigerian business environment include financial services, software developers, computers, and electronics similar to previous research (e.g. Ashbaugh *et al.*, 2003; Raghunandan and Rama, 2007). Higher LR values would suggest

higher overall litigation risk in the auditors client risk portfolio. However, we expect that since litigation risk differential between new and existing private clients in similar industries is unlikely, there will be no positive relationship between higher LR values and higher audit pricing of new private clients.

Prior research suggests that there is a positive association between the likelihood of a going-concern modified audit opinion, and financial distress and default on debt obligations (Mutchler 1985; Hopwood *et al.*, 1989; Chen & Church, 1992; Geiger & Rama, 2003). Hence we include financial distress (PROB), and default status (DFT) to control for internal validity threats. In addition to measures recognized, we control for average private client size, local audit office size, fixed effects of time, and audit firm affiliation. We operationalize CLT_SIZE as the mean of the logs of all new private clients of each office audit fee. For OFF_SIZE, we use the log of total audit fees from each audit firm office. FIRM_1, FIRM_2, FIRM_3, AND FIRM_4 identify the four medium-sized audit firms selected in the sample (Francis and Yu, 2009). As we select the baseline group for the estimation of the regression model, FIRM_4 in the sample. Finally, YEAR is a set of new private client engagement year indicators. This will enable control for structural shift that could influence private clients switching. The variable definitions discussed in this section are presented in Appendix.

3.2 Sample

The measures adopted for the private-client auditor portfolio were estimated using data from the four medium-sized firms with sufficient information to estimate the various components of the regression model. However, due to data limitation, we limit our sample to only four of the audit firms with local offices located in major cities in Nigeria. Audit fees, local office identification, firm affiliation, and sign-off year were obtained from management accounts of sample firms. Each regression model variable was separately operationalized to maximize the number of client-year observations in the estimation. Our initial sample datasets, as revealed in Table 1 comprise 2,704, unique local office-year observations between 2006 and 2011.

Table 1. Sample construction

	<i>Local office-year observations</i>
Total unique local office-year observations available for sign-off years 2006 through 2011	2704
Less: local offices missing/incomplete data sets	(1279)
less: local offices disaggregated/inconsistent data	(672)
Final sample	753

We eliminate 1,279 observations due to missing data and 672 others with data appearing to be disaggregated and/or inconsistent. The final sample therefore is made about 753 medium-sized firm observations, representing 89 unique offices. Of this, 41 observations come from local offices with disparate charges between existing and new private clients while 48 observations come from local offices without divergent charges between existing and new private clients for the period under study.

3.3 Data organization and control

To overcome some potential limitations of secondary dataset such as lack of familiarity, data complexity, lack of control over data quality, and the absence of key variables (Bryman & Bell, 2011, p. 320) we devoted a period of time getting familiar with the data to understand which information the different variables contained, how it was coded and scanning for potential errors in the dataset. Regarding the lack of control over data quality it should be noted that the data have been collected in research purposes not attributable to this specific area of research area. The collection process did however contain a low degree of interpretation which should limit the risk of error or diverse observations. Most variables were collected from reports obtained from the four firms, when collecting the data we gathered information regarding opening balances for the year, charged for the year, closing balance for the year, cash flow for the year, and reversals for the year. The information was gathered for earnings management risk, financial performance risk, litigation risk, client size, office size, audit opinion expressed and other variables. we used a data collection protocol to ensure the reliability of the data by limiting the risk of inter-observer inconsistencies which can be described as the heightened risk of different judgements when there is more than one observer collecting the data (Bryman & Bell, 2011). The data collection was operationalized through the use of multiple keywords, i.e. client fees, provisions, litigation, earn out, legal and reserves. If none of these keywords yielded results the balance sheet, income statement and notes was checked to find the necessary information. The sample was then transformed using winsorization, a method for modifying values and to treat the problems arising from extreme outliers. The extreme value is replaced by a cut-off value to limit data skewness (Gregoire & Schabenberger, 1999). We winsorized all the unbound variables which are endless at the 2nd and the 98th percentile thereby replacing all lower and higher values with the cut-off value.

4 Descriptive statistics and regression results

4.1 Descriptive statistics

Table 2 represents descriptive statistics on our sample of the local office observations for the years under review.

Table 2. Descriptive statistics

Variable	Local offices with graduated fees			Local offices without graduated fees				Combined		
	for new private Clients (n = 429)			for new private clients (n = 324)				Observations (n = 753)		
	Mean	Median	STD	Mean	Median	STD	t-test	Mean	Median	STD
	p-value									
HGR_STC	0.764	0.816	0.164	0.721	0.876	0.174	0.098	0.754	0.804	0.211
AUD_OPN_SHP	0.078	0.032	0.134	0.068	0.006	0.063	0.615	0.074	0.022	0.307
EMR	0.061	0.056	0.031	0.049	0.043	1.321	0.127	0.063	0.052	0.214
FPR	-1.328	-1.437	1.231	-1.788	-1.654	0.261	<0.001	-1.404	-1.486	0.386
LR	0.154	0.111	0.167	0.127	0.042	0.935	0.838	0.147	0.083	1.321
CLT_SIZE	13.784	13.945	0.675	13.796	13.842	1.117	0.186	13.674	13.751	0.435
OFF_SIZE	15.904	18.643	1.321	13.831	17.679	0.342	<0.001	18.302	18.319	0.326
FIRM_1	0.214	0.000	0.402	0.307	0.216	0.410	0.328	0.234	18.319	0.442
FIRM_2	0.312	0.000	0.452	0.214	0.214	0.342	0.006	0.243	18.319	0.434
FIRM_3	0.251	0.000	0.342	0.317	0.386	0.325	0.184	0.274	18.319	0.418
FIRM_4	0.223	0.000	0.502	0.242	0.244	0.421	0.539	0.241	18.319	0.403

Due to data availability limitation on key variable, auditor fees for 2 other firms previously intended for inclusion in the study, those firms are not included in our sample. The table presents the partial breakdown into local offices with higher (graduated) fees for new client engagement ($n = 429$) and local offices without higher (graduated) fees for new client engagement ($n = 324$) during the observation period. Hereafter, we refer to offices with higher initial engagement fees for new private clients as *offices with higher fees* and local offices without such higher charges as *offices without the high fees*. As indicated in table 2, offices with larger number of new private clients have concentrations of higher start-up cost (0.764 vs. 0.721; p -value = 0.098) and higher concentrations of financial risk in their new client portfolios (-1.328 vs. -1.788; p -value < 0.001). These offices are also larger than those without higher initial audit fees (15.904 vs. 13.861; p -value < 0.001). Further, descriptive under firm affiliation indicator variables show that FIRM_2 maintains the largest proportion of local *offices with higher fees* (FIRM_2 = 0.312), whereas FIRM_3 contain the largest proportion of local *offices without higher fees* (FIRM_3 = 0.317).

4.2 Correlations

Table 3 presents the Pearson correlation coefficients among the firm affiliation indicators (FIRM_1, FIRM_2, FIRM_3, and FIRM_4) are highly and statistically significant.

This is an indication of artifact of all observations distributed among all firms depicted. Correlations between AUD_OPN_SHP and all auditor risk proxies are positive and significant 20.7 to 27.6 percent. This high and statistical significance suggests that high risk private clients are potential audit opinion shopping. As such, auditors opinion reporting reflects the existence of unsystematic business risk factors.

Table 3. Correlations

	HGR_STC	AUD_OPN_SHP	EMR	FPR	LR	CLT_SIZE	OFF_SIZE	FIRM_1	FIRM_2	FIRM_3	FIRM_4
HGR_STC	1.000	-0.026	-0.048	0.064	-0.023	0.167	0.027	-0.021	-0.130	0.076	0.063
AUD_OPN_SHP		1.000	0.212	0.046	0.034	<.0001	0.267	0.432	<.0001	0.006	0.031
	-0.034		0.224	0.223	0.352	-0.167	-0.104	-0.047	0.028	0.095	-0.086
EMR			1.000	<.0001	<.0001	<.0001	0.001	0.129	0.112	0.006	0.001
	0.220	<.0001		<.0001	<.0001	<.0001	0.001	0.129	0.112	0.006	0.001
FPR	-0.048	0.221		0.124	0.201	-0.057	0.002	-0.067	0.043	-0.006	0.032
	0.046	<.0001	<.0001		<.0001	0.029	0.812	0.014	0.150	0.794	0.219
LR	0.067	0.207	0.172	1.000	0.084	-0.064	0.032	0.011	-.001	0.062	-0.047
	0.016	<.0001	<.0001		0.018	0.092	0.438	0.865	0.860	0.185	0.083
CLT_SIZE	-0.023	0.276	0.307	0.804	1.000	-0.067	-0.021	-0.013	-0.006	0.112	0.021
	<.0001	<.0001	<.0001	0.011		0.016	0.423	<.0001	0.765	0.000	0.584
OFF_SIZE	0.179	-0.216	-0.026	-0.045	-0.086	1.000	0.202	-0.021	-0.074	-0.109	0.211
	<.0001	<.001	0.036	0.093	0.016		<.0001	0.674	0.003	0.000	<.0001
FIRM_1	0.042	-0.121	0.003	0.031	-0.032	0.302	1.000	-0.001	-0.012	-0.087	0.185
	0.241	0.001	0.816	0.432	0.483	<.0001		0.802	0.629	0.001	-.0001
FIRM_2	-0.031	-0.043	-0.084	0.031	-0.142	-0.024	-0.004	1.000	-0.284	-0.421	-0.427
	0.451	0.126	0.014	0.731	<.0001	0.742	0.842		<.0001	<.0001	<.0001
FIRM_3	-0.147	0.045	0.033	-0.001	-0.006	-0.076	-0.021	-0.361	1.000	-0.374	-0.318
	<.0001	0.121	0.146	0.845	0.890	0.004	0.629	<.0001		<.0001	<.0001
FIRM_4	0.078	0.068	-0.004	0.034	0.112	-0.208	-0.087	-0.341	-0.276	1.000	-0.348
	0.006	0.003	0.875	0.156	0.000	0.000	0.001	<.0001	<.0001		<.0001
	0.047	-0.079	0.023	-0.049	0.021	0.318	0.128	-0.304	-0.384	-0.432	1.000
	0.026	0.001	0.231	0.075	0.754	<.0001	<.0001	<.0001	<.0001	<.0001	

4.3 Regression results

Table 4 represents regression results of the probability of *higher initial fees* charged by local offices of medium-sized firms.

Table 4. Logistic regression of the probability of changes in fees charged by local offices of medium-sized firms

<i>Variable</i>	<i>Predicted Sign</i>	<i>Coefficient Estimate</i>	<i>P-value</i>
Intercept	+	-4.167	<.0001
HGR_STC	+	0.894	0.004
AUD_OPN_SHP	+	0.682	0.079
EMR	+	2.304	0.089
FPR	+	0.168	0.007
LR	+	-0.021	0.896
CLT_SIZE	+	-1.212	<.0001
OFF_SIZE	+	1.324	<.0001
PROB	-	-42.457	0.29
DFT	+	32.295	.392
FIRM_1	+	0.132	0.218
FIRM_2	+	0.208	0.173
FIRM_3	+	0.244	0.132
FIRM_4	+		0.103
YEAR	+	<i>(included)</i>	

n = 237

Pseudo r² = 43.67%

Chi² = 231.74 (<.001)

P-values are based on robust standard errors obtained from the asymptotic covariance matrix.

One-tailed p-values when signs are reported.

We estimate the model using logistic regression and all office-year observations in the sample (n = 753) are included in the final estimation. The estimated regression coefficient result for the number of new private clients is positive and significant; an evidence of the likelihood of higher fees per private audit client rising with the increase in the number of new private clients. We posit that this association is an

indication of preliminary audit expenses resulting from extensive marketing efforts and other activities aimed at acquiring new private clients. Factors peculiar to local audit market forces could provide further clarifications for this funding. For instance, an audit firm may expend significant overheads with the intention of acquiring a number of new clients sets, such costs are passed on to the new clients in the form of higher fees when successfully achieved. Client board decisions as regards the selection of independence auditors may also hold the ace in this regard, particularly amongst board members connected by social ties. More times, the firm of engagement partners that have social ties with board members may command fee premium. We explore other alternative explanations to this outcome in the supplementary test section.

While LR is not significant, results of estimated coefficients for EMR and FPR are positive and significant. For EMR and FPR the result is an indication that the existence of earnings management risk and financial risk increase the likelihood of auditors charging higher initial fees for new private clients. The result of AUD_OPN_SHP, reveal evidence of a positive association with higher audit pricing. The reason for this outcome may not be far from the probability of positive reports envisaged by new clients from auditors inferred from their new engagement. Although, auditor independence in conduct and appearance should limit the influence of service pricing on opinion reporting, the same is not validated in our regression coefficient. Further, the existence of financially stressed firms in an auditor new client portfolio is not an indication of the existence of client influence of the audit opinion. For HGR_STC, a positive association with higher audit pricing is the result of the estimated coefficients. Thus, our proposition is supported. We posit that the failure of LR in this model may not be unconnected with the existence of a sectorial distribution of litigation risk, as auditors may not consider LR in the industry an overriding factor when assessing its pricing strategy. When LR cut across all companies in a particular industry, auditors are likely to establish standardized fees that would capture the effects of the unsystematic risk. Hence, they are less likely to place a premium on the fees chargeable to private clients newly absorbed into their portfolio.

For the control variables, regression results for CLT_SIZE indicate that the likelihood of higher pricing amongst medium-sized firms with larger private clients is significantly lower. As such, the existence of large private firms in auditor portfolio does not necessitate the charging of higher initial audit fees. However, results for OFF_SIZE are significantly greater among the local offices, evidence that the size of local office has positive association with new private client billings. None of the four firms' affiliation indicators are statistically significant.

In the final sample, there are 429 *offices with higher fees* for new private clients, representing 56.97 percent of all observation. We conjecture that this relatively large number of observations with a net increase in their fees for new private

clients is reflections of auditors' reaction to significant changes in cost structure when new clients are engaged. To better understand the role of higher start-up costs on the pricing decisions of auditors beyond this unique event in the Nigerian auditing environment, we eliminate local audit offices *without higher fees* from the sample, 324 representing 43.03 percent. This procedure reduces the sample to 207 office-year observations. The independent variable in this reduced sample regression, NC_HIGH_FS_REDC serve as an indicator and takes a value of 1 if the difference between audit fees from new private clients and existing private clients is negative, 0 otherwise. Offices *without the high fees* serve as a baseline. The outcome is presented in Table 5.

Table 5. Logistic regression of the probability of a net decrease in the size of office-year observations – Reduced sample

<i>Variable</i>	<i>Predicted Sign</i>	<i>Coefficient Estimate</i>	<i>P-value</i>
Intercept	+	-5.121	<.0001
HGR_STC	+	0.983	0.004
AUD_OPN_SHP	+	0.783	0.004
EMR	+	2.204	0.438
FPR	+	0.142	0.017
LR	+	-1.243	0.241
CLT_SIZE	+	-1.218	<.0001
OFF_SIZE	+	1.324	<.0001
FIRM_1	+	0.138	0.398
FIRM_2	+	0.241	0.217
FIRM_3	+	0.238	0.148
FIRM_4	+		0.145
YEAR	+		(included)

n = 176

Pseudo r² = 46.37%

Chi2 = 197.31 (<.001)

P-values are based on robust standard errors obtained from the asymptotic covariance matrix.

One-tailed p-values when signs are reported.

For this reduced sample regression, the estimated coefficient of EMR is no longer significant. We interpret this occurrence as a predictor of differing risk priorities among local offices *without the high fees*.

4.4 Robustness tests

To examine the robustness of the assessment, we perform several other tests. The primary variable of interest NC_HIGH_FS, conditions on whether there are higher fees charged to new private client constituents of medium-sized audit firms. There are however certain conditions wherein this variable may fail to capture the true extent or direction of the audit fee policies and strategies of local audit office. For example, the pricing strategy of an office could be associated with *low-balling* of new clients. Auditor's independence is impaired when audit fees are set below total current costs on initial audit engagements. To address this and similar issues, we develop two alternative versions of the NC_HIGH_FS variable. The first variation is the log of the net changes in audit fees from incoming and outgoing private clients. The second is the log of net changes in the number of incoming and outgoing private clients during the period under study. Given that the changes in fees realizable from new private clients could be relatively small following a new private client engagement and/or replacement strategy, we also eliminate local offices with new private client engagement with less than 5 percent in the audit firm's portfolio. Our baseline of 5 percent is informed in contemporary portfolio management strategies in the local audit market. Afterwards the revised regression results remain qualitatively unchanged after these alternative definitions of NC_HIGH_FS.

In our discussion of Table 5, we posit that the positive association between a client, auditor switching and *higher audit fees* is an indication of auditor-client mismatch. This mismatch could be the result of auditor-related factors such as client dissatisfaction owing from customer service deficiencies or insufficient marketing efforts by audit firm due to strategies aimed at achieving for new client sites. Other causes of mismatch from the demand side include client merger or acquisition transactions. To account for the potential influence of such demand-driven causes, we estimate the regression model using an alternative version of NC_HIGH_FS that equals 1 if there are higher fees to the constituents of new private clients of a local office originating from demand-based factors, 0 otherwise. The final regression results remain significant and in the predictable direction.

We also consider the possibility of significant changes in the new private client operations, which could affect the level of audit work required. Such instances is the case of mergers and acquisition transactions. This concern is addressed by evaluating and estimating an OLS version of the regression model with the percentage of change in new audit fees as the dependent variable of interest. The estimated regression coefficients for most of the auditor risk factors, and AUD_OPN_SHP remain positive and significant.

5. Conclusions

External auditors are thought to provide value by adding reliability and credibility to financial reports. Their attest function arises from the assurance over controls they are required to offer. Although the appointment, retention and fees are subjects of client control, the auditor must however remain independent of the client. This study began with questions about start-up costs and audit opinion shopping that would influence auditor's pricing for new private audit clients. Through the analysis of variables, we find a positive relationship between higher start-up costs and higher audit pricing by external auditors on new private engagements. As start-up costs for new client increases, higher fees result due to incremental expenses, geographical distribution of the audit firm local business offices, higher production costs, and other associated overhead expenses incurred by the auditor. Start-up cost has a large impact on initial audit pricing in the external audit profession as influencing human and material commitment to qualitative assurance function. As such, we expect that when auditors incur higher expenses on the initial audit in the absence of their low-balling, they are motivated to pass on the costs in the form of higher fees charged to audit client.

The objective of our study is to broaden understanding of the audit fee model. Using a sample of 753 local office-year observations between 2006 and 2011, we found that the relationship of audit pricing is changed by the auditor opinion shopping as the issuance of modified audit opinion involves costs to both client and the auditor and clients usually are not favorably disposed to the issuance of a modified opinion. This analysis provides useful insight into initial audit engagement pricing. When adopting audit pricing strategies, the client's financial performance and earnings management risks are important considerations for external auditors as often, financially stressed companies are a potential compromise of the auditor independence. If clients are not comfortable with a particular auditor's reporting practices, they are much less likely to engage the service. Accordingly, auditors should focus on alleviating clients concerns about audit opinion in addition to retaining their independence. The results is consistent with the knowledge of previous research (see, for example, Gupta, Krishnan, and Yu, 2009) and lend support to our expectation that the likelihood of a client not engaging an auditor increases with the expectation of an unfavorable audit opinion. The results for the auditor risk proxies are generally consistent with prior studies, in support of the notion that auditors with greater levels of risk in their clients' portfolios are more likely to charge higher fees to augment their litigation risks that might ultimately result.

In order to understand new private client acceptance and pricing strategies of auditors, we develop a model with external variables. The relationships among the primary constructs were significant and consistent with findings for general users.

Earnings management risk and financial performance risk also affect the pricing decision of auditors through increased use of human and material resources to ensure quality audit. However, litigation risk failed to influence the initial pricing of new private clients. We assumed that our quantitative data input decrease the effect of social factors because social factors influence the premium paid to auditors by client companies. Understanding the relationship between these variables is essential to further audit pricing policies and strategies of auditors and fosters a progressive atmosphere in the external audit bidding process.

The findings of this study reveal that the model is appropriate to investigate the audit pricing concept. Even though the results can be considered to be statistically significant in most parts, there are some limitations that have to be mentioned. First of all, the sample size is relatively low, although the magnitude of observation appears quite large. On this basis, it might be reasonable to generalize the results with caution. Second, we note that this paper examines only the direct costs associated with private clients' selection. Since we are unable to measure the indirect effects of auditor choices such as cost of capital, cost of litigation, etc. From the demand perspective, we cannot conclude that private clients benefit from influencing auditor's opinion in terms of total costs, but only in terms of indirect switching benefits. We, however, encourage additional research in this area. Finally, regardless of these limitations this research offers considerable amount of knowledge and contribution to the auditing profession.

References

- Abbott, L. J., Parker, S., & Peters, G. F. (2006) "Earnings management, litigation risk, and asymmetric audit fee responses", *Auditing: A Journal of Practice and Theory*, vol. 25: 85-98
- Ahmad, A. C., Shafie, R., & Yusof, N. Z. (2006) "The Provision of Non-Audit Services, Audit Fees and Auditor Independence", *Asian Journal of Management Journal of Accountancy and Finance*, vol. 7: 18-26
- Ahmed, K., & Goyal, M. (2005) "A Comparative Study of Pricing of Audit Services in Emerging Economies", *International Journal of Auditing*, Vol. 9:103-116
- Alesina, A., & La Ferrara, E. (2000) "Participation in Heterogenous Communities", *The Quarterly Journal of Economics*, vol. 115 (3): 847-904
- Alesina, A., & La Ferrara, E. (2002) "Who Trusts Others?", *Journal of Public Economics*, vol. 85 (2): 207-234
- Arrunada, B., & Paz-Ares, C. (1997) "Mandatory Rotation of Company Auditors: A Critical Examination", *International Review of Law and Economics*, vol. 17: 31-61

- Asare, S. K., & Knechel, W. (1995) "Termination of information evaluation in auditing", *Journal of Behavioral Decision Making*, vol. 8: 21-31
- Asare, S., Cohen, K., & Trompeter, G. (2001) "The effect of management integrity and non-audit services on client acceptance and staffing decisions", *Working Paper, University of Florida*
- Asare, S., Hackenbrach, K., & Knechel, R. W. (1994) "Client acceptance and continuation decisions", *Proceedings of the 1994 Deloitte & Touche/University of Kansas symposium on auditing problems*, vol. 10: 163-178
- Ashbaugh, H. R., LaFond, R., & Mayhew, B. W. (2003) "Do non-audit services compromise auditor independence? Further Evidence", *The Accounting Review*, vol. 78 (3): 611-693
- Asthana, J., & Boone, S. (2012) "Abnormal audit fee and audit quality", University of Texas, San Antonio
- Azizkhani, M., Shailer, G., & Monroe, G. (2012) "The competitive pricing of audit services in a non-Big 4 market", *Accounting Research Journal*, vol. 8 (2): 34-52
- Badertscher, B., Jorgensen, N., Katz, S., & Kinney, W. (2014) "Public equity and audit pricing in the US", *Journal of Accounting and Research, forthcoming*.
- Bakre, O. M. (2007) "The Unethical Practices of Accountants and Auditors and the Compromising Stance of Professional Bodies in the Corporate World: Evidence from Corporate Nigeria", *Accounting Forum*, vol.7 (3): 102-114
- Barkess, L., & Simnet, R. (1994) "The provision of other services by auditors: Independence and pricing issues", *Accounting and Business Research, Spring*, vol. 2: 99-108
- Basioudis, I. G., Geiger, M. A., & Papanastasiou, V. (2006, January 27) "Audit Fees, Non-Audit Fees, and Auditor Reporting on UK Stressed Companies", *National Auditing Conference* (pp. 1-24). Manchester: University of Manchester
- Beattie, V., Goodacre, A., Pratt, K., & Stevenson, J. (2001) "The Determinants of Audit Fees - evidence from the voluntary sector", *Accounting and Business Research*, vol. 2 (31): 243-274
- Beatty, R. (1989) "Auditor reputation and the pricing of initial public offerings", *The Accounting Review*, vol. 7: 693-709
- Beatty, R. (1993) "The economic determinants of auditor's compensation in the initial public offerings market", *Journal of Accounting Research*, vol. 31(Autumn): 294-302
- Bedard, J. C., & Johnstone, K. (2004) "Earnings manipulation risk, corporate governance, risk, and auditors' planning and pricing decisions", *The Accounting Review*, vol. 79 (2): 277-304
- Bell, T. B., Bedard, J. C., Johnstone, K. M., & Smith, E. F. (2002) "Risk: A computerized decision aid for client acceptance and continuance risk assessments", *Auditing: A Journal of Practice and Theory*, vol. 21(2): 97-113

- Berglund, N., & Kang, T. (2013) "Does Social Trust Matter in Financial Reporting? Evidence from Audit Pricing", *Journal of Accounting Research*, Vol. 12: 119-121
- Bills, J. L., & Jensen, L. (2010) "Auditor-Client Pairing: A Positive Assortative Matching Market", *Journal of Accounting Research*, vol. 13 (1): 1-38
- Blankley, A. D., Hurtt, D., & McGregor, J. (2012) "Abnormal audit fees and restatements", *Auditing: A Journal of Practice and Theory*, vol. 31 (1): 79-96
- Blay, F., & Geiger, M. (2001) "Bankruptcies, Audit Reports, and the Reform Act", *Auditing: A Journal of Practice and Theory*, (March), vol. 4: 187-195
- Bruynseels, L., Knechel, W. R., & Willekens, M. (2007) "Do industry specialists and business risk auditors enhance audit reporting accuracy", *Journal of Accounting, Auditing and Practice*, vol. 2: 54-68
- Bryman, H., and Bell, K. (2011) "Corporate reputation and social performance: The importance of fit", *Journal of Management Studies*, Vol. 25 (2): 122-139
- Cassell, C. A., Giroux, G., Myers, L. A., & Omer, T. C. (2010, May) "The relation between the strength of corporate governance and auditor-client realignments", *Working Paper*
- Chahine, S., & Filatotchev, I. (2011, April 8) "The effects of corporate governance, audit and non-audit fees on IPO value", *The British Accounting Review*, vol. 43: 155-172 doi:10.1016/j.bar.2011.06.008
- Chan, D. K. (1999) "Low-balling and efficiency in a two-period specialization model of auditing competition", *Contemporary Accounting Research*, vol. 16(4): 542-609
- Chaney, P. K., Jeter, D. C., & Shivakumar, L. (2004) "Self-Selection of Auditors and Audit Pricing in Private Firms", *The Accounting Review*, vol. 79 (1): 51-72
- Charles, S. L., Glover, S. M., & Sharp, N. Y. (2009, October) "The Association between Financial Reporting, Risk and Audit Fees Before and After the Historic Events Surrounding SOX
- Chen, K. C., & Church, B. K. (1992) "Default on debt obligations and the issuance of going-concern opinions", *Auditing: A Journal of Practice and Theory*, vol. 11 (2): 30-50
- Choi, J. H., Doogar, R. K., & Ganguly, A. R. (2004) "The riskiness of large audit firm portfolios and changes in audit liability regimes: Evidence from the U.S. audit market", *Contemporary Accounting Research*, vol. 21 (4): 747-785
- Choi, J. J., Kim, J., & Zang, Y. (2010) "Do abnormally high audit fees impair audit quality?", *Auditing: A Journal of Practice and Theory*, vol. 29 (2): 115-140
- Clathworthy, M., & Peel, M. J. (2007, January/March) "The Effect of Corporate Status on External Audit Fees: Evidence from the UK", *Journal of Business Finance and Accounting*, vol. 34 (1): 169-201 Retrieved from 10.1111/j.1468-5957.200500658.x
- Coulton, J., Livne, G., Pettinicchio, A., & Taylor, S. (2012) "Audit fee and accounting quality: Inferences from single-period versus multi-period perspectives. UTS Business School

- Craswell, A. T. (1999) "Does the Provision of non-audit services impair auditor independence ?", *International Journal of Auditing*, vol. 12: 18-34
- Craswell, A. T., & Francis, J. R. (1999) "Pricing initial audit engagements: a test of competing theories", *The Accounting Review*, vol. 74 (2): 201-216
- Crawford, V. P., & Knoer, E. M. (1981) "Job matching with heterogenous firms and workers. *Econometrica*, vol. 49: 437-450
- Cullinan, C. (1998) "Evidence of non-Big 6 market specialization and pricing power in a niche assurance service market. *A Journal of Practice and Theory*, vol. 17 (supp): 47-57
- Davis, L. R., Ricchiute, D. N., & Trompeter, G. (1993) "Audit effort, audit fees, and the provision of non-audit services to audit clients", *The Accounting Review*, vol. 68 (1): 135-150
- DeAngelo, L. (1981) "Audit size and auditor quality", *Journal of Accounting and Economics*, vol. 3 (2): 183-199
- DeAngelo, L. E. (1986) "Auditor Independence, low-balling, and disclosure regulation", *Journal of Accounting and Economics*, vol. 3 (2): 113-127
- DeAngelo, L. E. (1994) "Managerial competition, information costs and corporate governance: The use of accounting performance measures in proxy contests. *Journal of Accounting and Economics* (January): 3-36
- DeFond, M. L., and J. Jiambalvo. (1991) "Incidence and circumstance of accounting errors", *The Accounting Review* (July), vol. 2: 643-655
- DeFond, M. L., & Subramanyam, K. R. (1998) "Auditor changes and discretionary accruals", *Journal of Accounting and Economics*, vol. 25 (1): 35-67
- DeFond, M. L., Raghunandan, K., & Subramanyam, K. R. (2002, September) "Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions", *Journal of Accounting Research*, vol. 40 (4)
- Doogar, R., Sivadasan, P., & Solomon, I. (2013) "Audit fee residuals: costs or rents?", *Journal of Accounting Research*, vol. 17 (2): 1-44
- Dunn, K., & Mayhew, B. (2004) "Audit firm industry specialization and client disclosure quality", *Review of Accounting Studies*, vol. 9: 35-58
- Ezzamel, M., Gwilliam, G. R., & Holland, K. C. (2002) "The relationship between categories of non-audit services and audit fees: evidence from UK companies", *International Journal of Auditing*, vol. 6 (1): 13-35
- Fama, E., & Jensen, M. (1983, June) "Separation of Ownership and Control", *Journal of Law and Economics*, vol. 26: 301-326
- Felix, W. L., Gramling, A. A., & Maletta, M. J. (2001) "The contribution of internal audit as a determinant of external audit fees and factors influencing this contribution", *Journal of Accounting Research*, vol. 39 (3): 513-534
- Ferguson, A., Francis, J. R., & Stokes, C. J. (2003) "The effects of firm-wide and office level industry expertise on audit pricing", *The Accounting Review*, vol. 78 (2): 429-448
- Fernando, C., Gatchev, V., & Spindt, P. (2005) "Wanna Dance? How firms and underwriters choose each other", *The Journal of Finance*, vol. 2: 2437-2469

- Francis, J., & Ke, B. (2006) "Disclosure of fees paid to auditors and the market valuation of earnings surprises", *Review of Accounting Studies*, vol. 11 (4): 495-523
- Fukuyama, F. (1995) "Trust", New-York: Free Press
- Gaver, J. J. & J. S. Paterson. (2001) "The association between external monitoring and earnings management in the property-casualty insurance industry", *Journal of Accounting Research* (September), vol. 2: 269-282
- Geiger, A., Raghunandan, K., & Rama, D. V. (2006) "Auditor decision-making in different litigation environments: The Private Securities Litigation Reform Act, audit reports and audit size", *Journal of Accounting and Public Policy*, vol. 25 (3): 332-353
- Geiger, M. A., & Raghunandan, K. (2001) "Bankruptcies, Audit Reports, and the Reform Act", *Auditing: A Journal of Practice and Theory*, vol. 20 (1): 187-197
- Geiger, M., & Rama, D. V. (2003) "Audit Fees, Non-Audit Fees, and Auditor Reporting on Stressed Companies", *A Journal of Practice and Accounting*, vol. 22 (2): 53-69
- Gregoire, J., and Schabenberger, T. (1999) "Sampling-Skewed Biological Populations: Behaviour of Confidence Confidence Intervals for the Population Total", *Ecology*, vol. 80 (3): 1056-1065
- Guenther, D. A. (1994) "Earnings management in response to corporate tax rate changes: Evidence from the 1986 Tax Reforms Act", *The Accounting Review* (January) vol. 2: 230-243
- Gul, F. A., Lynn, S. G., & Tsui, J. S. (2002) "Audit quality, management, ownership, and the informativeness of accounting earnings", *Journal of Accounting, Auditing and Finance*, vol. 26 (2): 25-49
- Hay, D. (2011) "The accumulated weight of evidence in audit fee research", *Journal of Auditing and Accountability*, vol. 2: 1-39
- Hay, D. C., Knechel, R. W., & Wong, N. (2006) "Audit fees: A Meta-analysis of the Effect of Supply and Demand Attributes", *Contemporary Accounting Research*, vol. 23 (1): 141-191
- Hoag, M. L., & Hollingsworth, C. W. (2011) "An intertemporal analysis of audit fees and section 404 material weaknesses", *Auditing: A Journal of Practice and Theory*, vol. 30 (2): 173-200
- Hogan, C. E., & Wikins, M. S. (2008) "Evidence for their Audit, Risk Model: Do Auditors Increase Audit Fees in the Presence of Internal Control Deficiencies?", *Contemporary Accounting Research*, vol. 25 (1): 219-242
- Hoitash, R., Hoitash, U., & Bedard, J. C. (2008) "Internal control quality and audit pricing under the Sarbanes-Oxley Act", *Auditing: A Journal of Practice and Theory*, 27(1), 105-126.
- Hopwood, W., J., McKeown, and Mutchler, J. (1989). A reexamination of auditor versus model accuracy within the going concern of the going concern opinion decision. *Contemporary Accounting Research* (Spring): 409-431

- Hribar, P. T., Kravet, T., & Wilson, R. (2010). "A new measure of accounting quality", University of Texas, The University of Iowa, Dallas
- Huang, H., Raghunandan, K., & Rama, D. (2009, May). "Audit Fees for Initial Audit Engagements Before and After SOX", *Auditing: A Journal of Practice and Theory*, vol. 28 (1): 171-190
- Huss, H. F., & Jacos, F. A. (1991) "Risk Containment: Exploring auditor decisions in the engagement process, *Auditing: A Journal of Practice and Theory*, vol. 10 (Fall): 16-32
- Huss, H. F., & Patterson, D. M. (1993) "Managing risk in public accounting firms. *Risk Management*, vol. 40 (9): 51-60
- Jiang, W., & Son, M. (2013, July). "Do Audit Fees Reflect Risk Premiums for Control Risk? (C. f. Governance, Ed.)", *CCRG Working Paper Series*. Retrieved from <http://business.fullerton.edu/centers/ccrg/research/papers>
- Johnson, E. N., Walker, K. B., & Westergaard, E. (1995) "Supplier concentration and pricing of audit services in New Zealand", *A Journal of Practice and Theory*, vol. 14 (2): 74-89
- Johnstone, K. M. (2000) "Client-acceptance decisions: Simultaneous effects of client business risk, audit, auditor business risk, and risk adaptation", *A Journal of Practice and Theory*, vol. 19 (1): 1-27
- Johnstone, K. M., & Bedard, J. C. (2001) "Engagement planning, bid pricing, and client response in the market for initial attest engagements", *The Accounting Review*, vol. 76 (April): 199-220
- Johnstone, K. M., & Bedard, J. C. (2003) "Risk Management in client acceptance decisions", *The Accounting Review*, vol. 78 (4): 1003-1025
- Johnstone, K. M., & Bedard, J. C. (2004) "Audit firm portfolio management portfolio management decisions", *Journal of Accounting Research*, vol. 42 (September): 659-691
- Johnstone, M. (2000) "Client Acceptance Decision: Simultaneous effects of client business risk, audit risk, auditor business risk, and risk adaptation", *Auditing: A Journal of Practice and Theory*, vol. 19 (Spring): 1-27
- Kasai, N., & Takada, T. (2012) "How do regulation and deregulation of audit fees influence audit quality? Empirical evidence from Japan", *Journal of Accounting and Finance*, vol. 16 (2): 1-41
- Kida, T. (1980) "An investigation into auditors' continuity and related qualifications judgements", *Journal of Accounting Research*, (Autumn), 506-523
- La Porta, R., De Silanes, L., Shleifer, A., & Vishny, R. (1997) "Trust in Large Organizations", vol. 2 (3): 333-338
- Lai, K. W. (2009) "Does quality matter more for firms with high investment opportunities?", *Journal of Accounting and Public Policy*, vol. 28 (1): 33-50
- Landsman, W. R., Rountree, B. R., & Nelson, R. (2009) "Auditor switches in the pre and post Enron eras: Risk or realignment? *The Accounting Review*, vol. 84 (2): 531-558

- Larcker, D. F., & Richardson, S. A. (2004) "Fees paid to audit fees, accrual choices and corporate governance", *Journal of Accounting Research*, vol. 8 (42): 625-658
- Lennox, C. (1999) "Non-Audit Fees, disclosure and audit quality", *The European Accounting Review*, vol. 8 (2): 239-252
- Leventis, S., Hasan, I., & Dedoulis, E. (2013) "*The cost of sin: The effect of social norms on audit pricing*", England: Bank of England
- Mayhew, B., & Wilkins, M. (2003) "Audit firm industry specialization as a differentiation strategy: evidence from fees charged to firms going public", *Auditing: A Journal of Practice and Theory*, vol. 22 (September): 33-52
- McKeown, J. C., Mutchler, J. F., & Hopwood, W. (1991) "Towards an explanation of auditor failure to modify the audit opinion of bankrupt companies", *Auditing: A Journal of Practice and Theory*, vol. 7: 1-13
- Mutchler, J. F. (1985) "A Multivariate Analysis of the auditors' going concern opinion decision", *Journal of Accounting Research*, (Autumn), vol. 8: 668-682
- Niven, D. (2010, August) "Audit fees and maintaining audit quality: reduces audit fees can present problems in terms of quality", *Technical Focus*, p. 67
- Numan, W., & Willekens, M. (2009) "*Industry Specialization as a means to soften price competition in the audit market*", Katholieke Universiteit Leuven, Department of Accounting, Finance and Insurance. Faculty of Business and Economics
- O'Sullivan, N., & Diacon, S. R. (2002) "The impact of ownership, governance and non-audit services on audit fees: evidence from the insurance industry", *International Journal of Auditing*, vol. 6 (1): 93-107
- Palmrose, Z. (1986) "The effect of non-audit services on the pricing of audit services: further evidence", *Journal of Accounting Research*, Autumn, vol. 19: 405-411
- Palmrose, Z. V. (1986) "Audit fees and auditor size: further evidence", *Journal of Accounting Research*, vol. 24 (4): 97-110
- Pearson, T., & Trompeter, G. (1994) "Competition in the market for audit services: The effect of supplier concentration on audit fees", *Contemporary Accounting Research*, vol. 11(1): 91-114
- Pratt, J., & Stice, J. D. (1994, October) "The effects of clients' characteristics on auditor litigation risk judgements, required audit evidence, and recommended audit fees", *The Accounting Review*, vol. 69: 639-656
- Raghunandan, K., & Rama, D. V. (2006) "SOX Section 404 material weakness disclosures and audit fees", *Auditing: A Journal of Practice and Theory*, vol. 25 (1): 99-114
- Raghunandan, K., & Rama, D. V. (2007) "Determinants of audit committee diligence", *Accounting Horizons*, vol. 21 (3): 265-279
- Ratzinger, N. (2011) "*Audit and Non-Audit Fees in Germany - Impact of Audit Market Characteristics*", HEC Paris, Accounting and Management Control Department. Paris: Cedric LESAGE

- Raynolds, J. K., & Francis, J. (2001) "Does Size Matter? The influence of large clients on office level auditor reporting decisions", *Journal of Accounting and Economics*, vol. 30 (3): 375-400
- Roth, A. E. (1984) "The evolution of the labor market for medical interns and residents: a case study in game theory", *Journal of political economy*, vol. 92: 991-1016
- Ruddock, C. S., Taylor, J., & Taylor, L. (2006) "Non-audit services and earnings conservatism: is auditor independence impaired?", *Contemporary Accounting Research*, vol.23: 701-746
- Sankaraguruswamy, S., & Whisenant, S. (2003, September). "Pricing Initial Audit Engagements in the U. S. Market: A Test of Competing Theories". Texas, U.S.
- Sewon, O., & Wang, K. (2012) "Competition and low-balling: evidence from Texam Municipalities", 1-10
- Shu, S. Z. (2000) "Auditor resignations: Clientele effects and legal liability", *Journal of Accounting and Economics*, vol. 29 (2): 173-205
- Sikka, P. (2009) "Financial Crisis and the Silence of the Auditors", *Accounting, Organizations and Society*. vol. 3: 12-76
- Sikka, P. (2009) "The Audit Crunch: Reforming Auditing", *Managerial Auditing Journal*. Vol. 2: 10-42
- Simon, D. T., & Francis, J. R. (1988) "The effect of auditor change in audit fees: tests of price cutting and price recovery", *The Accounting Review*, vol. 63 (2): 255-269
- Simunic, D. A. (1980) "The pricing of audit services: Theory and evidence", *Journal of Accounting Research*, vol. 18 (1): 161-190
- Sirois, L. P., & Simunic, D. A. (2010) "Auditor Size and Audit Quality Revisited: The Importance of Audit Technology. Retrieved from http://papers.ssrn.com/so13/papers.cfm?abstract_id=1694613
- Sirois, L. P., Marmousez, S., & Simunic, D. A. (2011) "Big 4 non-Big 4 Audit Production Costs: Office Level Audit Technology and the Impact of Audit Fees", *Journal of Accounting Research*, vol. 32 (2): 2-38
- Srinidi, B., & Gul, F. A. (2007) "The differential effects of auditors' non-audit and audit fees on accrual quality", *Contemporary Accounting Research*, vol. 24: 595-629
- Subramanyam, K. R. (1996) "The pricing of discretionary accruals", *Journal of Accounting and Economics*, vol. 4 (August-December): 249-281
- Suprpto, E., & Suwardi, E. (2013) "The Effect of Audit Partner Rotation and Audit Firm's Fee on Audit Quality", *8th Annual London Business Research* (pp. 1-12). London: Imperial College London
- Titman, S., & Trueman, B. (1986) "Information quality and the valuation of new issues", *Journal of Accounting and Economics*, vol. 8: 159-172
- Venkataraman, R., Weber, J., & Willenborg, M. (2005) "Litigation Risk, Audit Fees and Audit Quality: Initial Public Offerings as a Natural Experiment", *Journal of Accounting Research*, vol. 43 (1): 1-42

- Verbruggen, S., Christiaens, J., Reheul, A., & Caneghem, T. (2011) "Audit pricing in a reformed nonprofit market", *HUB Research Papers*, vol. 8: 1-40
- Weets, V., & Jegers, M. (1997) "Are the "Big Six" "big" in Belgium?", *The European Accounting Review*, vol. 6 (4): 773-789
- Willenborg, M. (1999) "Empirical analysis of the economic demand for auditing in the initial public offerings market", *Journal of Accounting Research*, vol. 37 (Spring): 225-238
- Yardley, J. A., Kauffman, N. L., Cairney, T. D., and W. D. Albrecht. (1992) "Supplier behavior in the U.S. audit market", *Journal of Accounting Literature*, vol. 11: 151-184
- Zak, P. J., & Knack, S. (2001) "Trust and Growth", *The Economic Journal*, vol. 111: 295-321
- Zaman, M., HUdaib, M., & Haniffa, R. (2011, March) "Corporate Governance Quality, Audit Fees and Non-Audit Services Fees. *Journal of Business Finance and Accounting*, vol. 38 (1): 165-197, Retrieved from 10.1111/j.1468-5957.2010.02224.x

Appendix

Variable definitions

NC_HIGH_FS = 1 if there are graduated fees for new clients of a local office, 0 otherwise. This variable signals the existence of fee differentials between new and existing clients for study firms

HGR_STC = 1 if the difference between fees for existing private clients and new clients is negative, 0 otherwise

AUD_OPN_SHP = ratio of aggregate modified vs. unmodified opinion for new private clients to existing private clients over the study period

EMR = weighted average of the absolute value of performance adjusted discretionary accruals of all private client companies in the client portfolio of a local office (weighted by audit fees). Performance adjusted discretionary accruals are estimated as follows:

$$TA_t/ASSETS_{t-1} = \alpha + \beta_1 1/ASSETS_{t-1} + \beta_2 (\Delta SALES_t - \Delta AR_t) / ASSETS_{t-1} + \beta_3 PPE_t / ASSETS_{t-1} + \beta_4 ROA + \varepsilon_t$$

FPR = weighted average of the Altman Z-score of all private companies in the client portfolio of a local office (weighted by audit fees). The Altman Z-score, with Shumway's (2001) coefficients, is estimated as follows:

$$Z\text{-SCORE} = [1.2(CA-CL)/TA + 0.6(RE/TA) + 10.0(EBITA) + 0.05(MVEQ/TL) + 0.47(SALES/TA)] (-1)$$

LR = ratio of audit fees from private clients in litigious industries to total audit fees generated by a local office during a year

CLT_SIZE = mean of logs of audit fees from all clients of each local office

OFF_SIZE = log of total audit fees from all clients of each local office

FIRM_1 = 1 if local office-year observation relates to a local office of FIRM 1, 0 otherwise

FIRM_2 = 1 if local office-year observation relates to a local office of FIRM 2, 0 otherwise

FIRM_3 = 1 if local office-year observation relates to a local office of FIRM 3, 0 otherwise

FIRM_4 = 1 if local office-year observation relates to a local office of FIRM 4, 0 otherwise

YEAR = set of year dummies, by sign-off year