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Audits of private firms

by

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Abstract: Private and public firms differ across a number of important dimensions. Public firms are under scrutiny by stock exchanges, regulators, and market participants and they share the feature of separation of ownership and control. Private firms, in contrast, are much less regulated, the nature of their agency problems is different, they are less exposed to market forces, litigation and publicity, and they operate in a much more opaque information environment. The greater heterogeneity among private firms makes the role of auditing less obvious, which is reflected by auditing being made statutory in some countries while being voluntary in others. In this paper we highlight the differences between audits of private and public firms and review and synthesize the empirical evidence, which is sparse in comparison to what is available for public firms.

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INTRODUCTION

Regulators around the world have agreed that public firms must disclose audited financial statements.¹ One reason is the positive welfare effect of reliable information of high quality. Audited financial statements are intended to lubricate capital markets by providing relevant and reliable firm-specific information that enables more precise forecasts of future cash flows and reduced uncertainty, which ease access to finance and foster investment and growth. The improvement in the allocation of capital that is presumed to result from the proliferation of high quality financial information has led regulators to conclude that the benefits of statutory audits outweigh the cost for public firms.

There is no consensus among regulators regarding the need for statutory audits of private firms. Part of the explanation is different stances on the role played by financial statements. In some countries, such as the US and Japan, private firms operate without any requirements by law to disclose financial statements (Arrunada 2011). In other countries, among those all countries in the European Union (EU), private firms must prepare financial statements and make them publically available.² As financial statements are a prerequisite for statutory audits, differences in accounting regulation are important for understanding differences in the auditing regulation.

Even if regulators agree that financial statements are important and thus mandatory for private firms, they may disagree about statutory audits. In the EU, Article 51(1) in the fourth directive requires mandatory auditing for all firms (European Commission 1978). However, member states may exempt the smallest firms from this audit obligation (Article 51(2)). Figure 1³, adapted from Collis (2010), clearly illustrates that regulators disagree about the need for statutory audits for the smallest firms. In 2005, *all* firms in Denmark, Sweden and Malta, even those with no sales, were required to prepare audited financial statements. At the same time, four countries (Cyprus, the Netherlands, Germany and the UK) mandated auditing only for firms with sales exceeding 7 million euro.

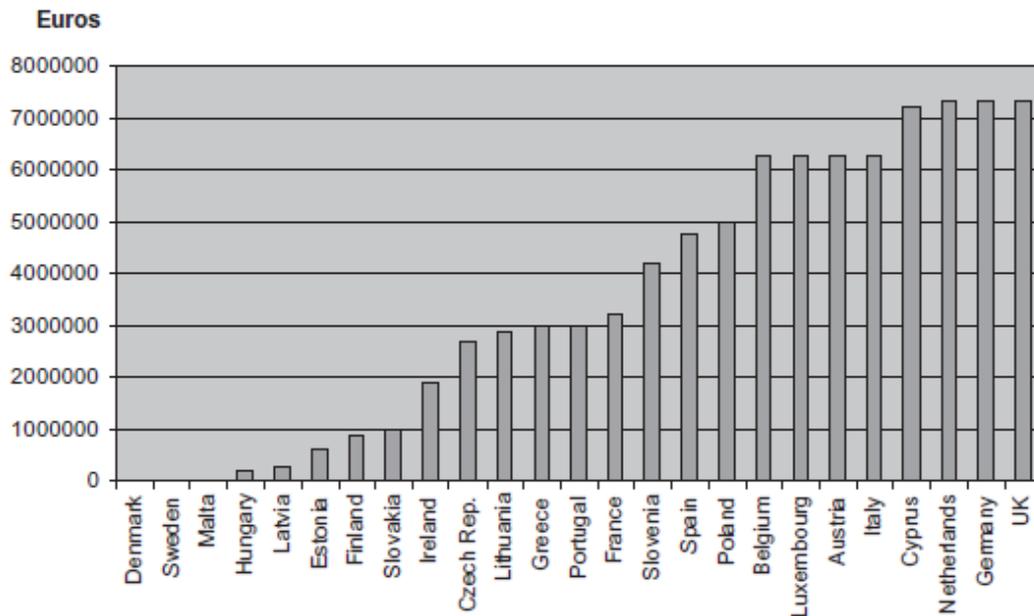


Figure 1: Turnover thresholds for audit exemption for EU-25 in 2005
Adapted from EC, 2006, p. 7 and EC, 2005

Auditing in private firms is an important topic. One reason is that research focusing on public firms may not be generalizable to private firms since they differ from public firms along a number of important dimensions. In addition the suppliers of audit services have different incentives and competences (we elaborate these below). Thus, it is not clear to what extent theory and empirical findings based on public firms can provide insight and guidance to regulators, standard setters, researchers and users of (audited) financial statements when it comes to auditing in the private firm segment of the economy.

A second reason for focusing on private firms is their economic importance. Some examples: Private firms represent more than 99 per cent of all firms in the US and these firms account for more than 50 per cent of the private sector GDP (Minnis 2011). Belgium has more than 250 000 firms and only 150 are listed (Bauwede and Willekens 2004). More than 90 per cent of all registered companies in UK are private (Chaney, Jeter and Shivakumar 2004), and private firms account for 99.6 per cent of all businesses in Australia (Australia Bureau of Statistics 2001). One type of private firm (SMEs) accounted for 67 per cent of total employment and 58 per cent of gross value added in the EU in 2012 (Wymenga, Spanikova, Barker, Konings, and Canton 2012). Thus, it is apparent that understanding governance, growth and performance of the private firm is important for economic growth and prosperity for society at large; and auditors may play a key role as a provider or verifier of financial information and as an advisor to decision makers.

A third reason to focus on private firms is that they give new opportunities for the development and testing of theories and also for conducting more robust tests of existing theories. Our review shows that researchers into private firms typically have chosen topics and questions that previously have been analyzed for public companies. However, it is possible to ask questions that are directly relevant for private firms and also to conduct tests that are not feasible in a public firm setting. These opportunities occur because of the differences between public and private firms. Besides, the variation in tests and control variables is generally larger in the private firm segment, which enables more robust tests than is possible by focusing on public firms only. Also, a lower level of concentration of the big audit firms and lower litigation risks provide other incentives for auditors; and different market conditions and risk exposure are important in order to understand auditor behavior. Thus, the private firm segment is an arena for advancing theories and tests that should be utilized to a much greater extent than currently seen. One major challenge when studying private firms is of course the difficulties with access to data, but some data are available that have yet to be utilized.⁴ In addition the possibility of conducting field research in cooperation with audit firms may be better in the private firm segment, as the possibility of maintaining anonymity for both clients and audit firms is much greater due to the sheer number of clients and audit firms.

In this paper we review the literature on audits of private firms, which is sparse compared to public firms. Francis, Khurana, Martin, and Pereira (2011: 489) describe the state of affairs quite accurately: “Despite the importance of smaller entities to the economy and capital markets, surprisingly little is known about these firms with respect to their accounting and auditing choices or the economic consequence of these choices.”

The structure of the paper is as follows. We start by highlighting the differences between private and public firms and proceed by providing an overview of existing research. We divide the overview into four broad categories; i) ability to detect misstatements, ii) ability to report on misstatements, iii) audit quality differences between audit firms, and iv) auditor choice and client firm characteristics. Then we discuss directions for future research before a short summary concludes the paper.

WHAT IS SPECIAL ABOUT PRIVATE FIRMS AND THEIR AUDIT?

Private firms are different from public firms. Whether these differences increase or decrease the demand for auditing or make audits more or less important, is not clear a priori. Nor is it apparent without testing that results for public firms can be generalized to private firms (Hope, Thomas and Langli 2012). We highlight the major differences between private and public firm in this section.

One important difference between public and private firms is that the nature of the agency conflicts is different. Compared to public firms, private firms have much more concentrated ownership, especially greater ownership by managers, “major capital providers often have insider access to corporate information and capital providers may take a more active role in management (van Tendeloo and Vanstraelen 2008: 449). Besides, family ties between CEOs and shareholders and between CEOs and board members are much more common (Hope et al. 2012). Furthermore, private firms operate in a substantially poorer information environment, disclose less non-financial information, their financial statements are less scrutinized by market participants, they have little capital-market pressure to hire high-quality auditors, and their financial statements may be more influenced by taxation, dividend and other political issues such as the intention to transfer the firm to the next generation (Chaney et al. 2004; De Franco, Gavigo, Jin and Richardson 2011; Ball and Shivakumar 2005; Hope et al. 2012; Sharma and Carney 2012). Thus there are weaker incentives for private firms to produce high quality financial statements and there is less agency conflict between shareholders and managers, but potentially more agency conflict between majority owners and minority owners (whether being members of the same family or not) and/or between owners and creditors and tax authorities. Thus the monitoring role of auditing may be more important in private firms (Lennox, 2005), but there are also arguments related to how private firms may solve moral hazard and asymmetric information problems that may make auditing less valuable in private firms (Cano Rodriguez and Alegria 2012).

A second reason for focusing on private firms is that they may demand auditing for reasons not related to agency costs. We know that signaling that financial statements are free from material errors and that managers refrain from extraction of benefits on behalf of other stakeholders are important reasons why firms voluntarily hire an auditor when audit is not statutory, or voluntarily hire a *high* quality auditor when audit is statutory. In the private firm segment the demand for auditing may also reflect other reasons. For instance may a firm demand an external auditor to compensate for the loss of control that is inherent in hierarchical organizations as a longer chain of command reduces the top manager’s ability to observe subordinates’ actions (Abdel-Khalik 1993), to improve “operational efficiency and effectiveness due to auditor evaluation of internal processes, deterrence of management malfeasance, increased compliance with legal and regulatory constraints, and market permission to undertake certain activities (e.g., participate in public capital markets)” (Knechel, Niemi, and Sundgren 2008: 66), and to get access to competences not available in-house as private firms may not be able to afford employees with expertise in accounting, taxation and other business issues (Svanström and Sundgren 2012). “Consequently, the choice of auditor in any given

setting may be due to more complex factors than simply the reduction of external agency costs, especially for firms that are small or not publicly traded” (Knechel et al. 2008: 69). Thus there is much greater heterogeneity in the reasons why private firms hire auditors than for public firms.

Not only are there important differences on the demand side of the audit market, substantial differences also exist on the supply side. Among listed firms, the market may be characterized as an oligopoly as the large international audit firms, currently Ernst & Young, KPMG, Deloitte and PwC (henceforth Big N) dominate.⁵ Their market share is over 90 per cent of public firms in most EU member states (ESCP Europe 2011), 72 per cent in Spain (Cano Rodriguez and Alegria 2012), 97.4 per cent among FTSE 350 firms in 2005 (Oxera 2006) and 52.3 [80] per cent in the Australian sample used in Goodwin (2011) [Salman and Carson 2009]. The United States Government Accountability Office (GAO 2008) reports that the four largest accounting firms audit 98 per cent of the more than 1,500 largest public US companies whereas mid-size and smaller audit firms audited almost 80 per cent of the more than 3,600 smallest companies.

The Big N market share among private firm is more difficult to estimate as the data covering all private firms within a country is not easily accessible. However, there is no doubt that the Big N market share among private firm is substantially lower than for public firms, with large variations across countries: 28 per cent in Spain (Cano Rodriguez and Alegria 2012), 18.1 per cent in Norway (Hope et al. 2012), 34 per cent in Korea (Kim, Simunic, Stein and Yi 2011), 8.3 [6] {50} per cent in the UK samples used by Clatworthy, Makepeace, and Peel (2009) [Pittman and Lennox 2011] {Chaney et al. 2004}, while Van Tendeloo and Vanstaelen (2008) reports Big N market shares of 37.6 in Belgium, 90.2 per cent in Finland, 14.4 per cent in France, 84.9 per cent in the Netherlands, 27.7 per cent in Spain and 45.6 per cent in the UK. When public and private firms are viewed as a whole, the market share of Big N firms is less than 26 per cent in 19 EU member states and between 35 and 44 per cent in Denmark, Luxembourg, Sweden and the UK (ESCP Europe 2011). Taken together, the figures indicate that the audit market both among private and public firms is segmented with a large Big N dominance among the largest firms.

The dominance of Big N, particularly among listed firms, has led regulators to worry about market concentration and how this may affect audit quality. Among EU regulators the concern is that the concentration gives large firms too few suppliers to choose from and that “concentration might entail an accumulation of systemic risk ..” that could, if one of the Big N firm collapses, “disrupt the whole market” (European Commission 2011). In the private firm segment the audit firms are mostly

small with a local anchor, and the market concentration is of less concern. However, a large number of suppliers of auditing services of which most are small create other threats to audit quality.

In audits of SMEs, the audit team normally consists of very few persons and their audit firm and audit office are typically much smaller than those that audit large private firms and public firms. This influences auditor behavior in different ways and impacts audit quality. The incentive to provide audits of sufficiently high quality decreases for SMEs because the reputational capital at risk and the risk of litigation is reduced when auditing small clients with low publicity. Additionally, in small audit firms, the pool of colleagues to consult is smaller, the internal controls are less thorough and the internal monitoring mechanisms are weaker. The risk of social bonding between auditor and client due to long-term relationships, local anchoring and familiarity is higher compared to public firms, which is a potential threat to independence. As an auditor's reputation risk falls, when going from public to private firms, impaired independence due to economic bonding may also increase. On the other hand, the small size of the audit team makes potential synergies and spillovers gained from providing non-audit services (NAS) more easily transferable to the audit and thereby may increase audit quality. In sum, audit quality may be much more dependent on the experience, competence, judgment and integrity of the individual auditor in charge in smaller audit firms compared to large audit firms, and in particular compared to those that have been subject to extensive research: the auditors of public companies.

The differences that exist between private and public firms are so large that we cannot rely on findings for public firms without careful consideration when we want to understand auditing in private firms, whether auditing is statutory or not.

REVIEW OF THE LITERATURE

In order to increase the reliability of financial statements and reduce agency costs, the audit has to be performed with high quality. Audit quality is much debated but, despite two decades of research, there is little consensus about how to define and measure audit quality (Knechel, Krishnan, Pevzner, Shefchik, and Velury 2012).

DeAngelo (1981) defines audit quality in terms of the likelihood that the auditor discovers material misstatements in a firm's reporting system and the likelihood that misstatements are reported. Even though audit quality is more multi-faceted than DeAngelo's two-dimensional model suggests

(Knechel et al. 2012), the model is useful because much research into auditing in private firms fits how DeAngelo modeled audit quality. We therefore use that model as a point of departure.

Ability to detect misstatements

The first dimension in the audit quality definition is the likelihood of discovering misstatements, which depends on the auditor's competence and level of effort. Few studies have analyzed how observable variables relate to competence and level of effort, and most of the research has been conducted at the audit firm level, using data from listed companies. However, during the last few years researchers have started to investigate how audit quality relates not only to audit firm factors, but also to audit offices, audit teams and the individual partner (see Francis 2011; Knechel et al. 2012; Sundgren and Svanström 2012b). These new approaches are relevant and necessary since complex auditing decisions are ultimately judgmental and taken by individuals or groups of individuals, and the evidence suggests that audit quality varies within and across each level of analysis whether being firm, office, team or partner.

Competence/expertise

The resources needed to obtain reasonable assurance that the financial statements are free from material misstatements vary across engagements, and depend on the personnel, the abilities and expertise of the audit team, the audit technology and the audit methodology being used (De Angelo 1981; Knechel et al. 2012). To put it simply, "audits are of higher quality when undertaken by competent people" (Francis 2011: 134). To some extent we might assume that auditors are competent based on general education requirements and CPA licensing, but individual auditor performance varies due to demographic, physiological and cognitive characteristics (Francis 2011).

The expertise needed to detect material misstatements can be divided into i) general knowledge, ii) domain-specific knowledge and iii) client-specific knowledge. Work experience, participation in courses, seminars and other training activities are positively associated with an auditor's ability to detect misstatements in general. Daily exposure to input from colleagues and to external expertise via internal reviews of on-going and completed audit work, and attendance at seminars with experts who present new or updated standards, laws, techniques and programs on a regular basis are also activities that aim at improving the general competence level. There are significant differences between large and small audit firms with regard to participating in such activities which we discuss in greater detail below.

Prior experience of auditing companies in the same industry generates domain-specific knowledge that improves auditor judgment. Evidence from public firms supports that industry experts outperform non-specialists in error-detection, in performing analytical procedures, in assessing components of audit risk and disclosing internal control deficiencies (Knechel et al. 2012). The potential relationship between industry expertise and audit quality has not gained much attention in private company research. Hope and Langli (2010) used industry expertise as a control variable in their audit fee regressions. They found a positive association between industry expertise and fees from provision of non-audit services (which may indicate that industry experts sell more non-audit services and/or charge higher fees for non-audit services), but no relationship between fees from auditing and industry expertise (if industry experts deliver audits of higher quality one might have expected them to earn higher fees).⁶

Client-specific knowledge is of vital importance when conducting private firm audits, given the strict time budget for these assignments. Client-specific knowledge, such as knowledge of the client's accounting system and internal control structure, gives auditors comparative advantages in detecting errors, creates a significant learning curve for new auditors and significantly reduces start-up costs (DeAngelo 1981; Johnson, Khurana, and Reynolds 2002). The literature that studies the relationships between audit quality, non-audit services (NAS) and auditor tenure acknowledges the importance of client-specific knowledge. Auditors gain knowledge from providing both auditing and NAS and they are able to utilize the same client-specific information for both services (Arruñada 1999). An auditor who consults on improvements to the client's internal controls learns how the business operates and can draw upon that knowledge when conducting appropriate tests of internal controls during the audit process. Beck and Wu (2006) argue that auditors enrich their knowledge accumulation by performing NAS, which allows the auditor to anticipate and learn about changes in the client's earnings dynamics. During long auditor-client relationships, the auditor learns about the client's operations and systems which allows him or her to more easily identify areas with increased risk of material misstatements.

Svanström (2012) studied private companies in Sweden and found positive associations between provision of NAS and measures of audit quality, thus suggesting that knowledge about the client is crucial in detecting and correcting material misstatements in financial statements of private companies. The importance of client specific knowledge in driving demand for services is documented by Svanström and Sundgren (2012), who found that the purchase of NAS from the incumbent auditor was positively associated with the length of the auditor-client relationship and the

perceived quality of the audit services. However, there were negative associations between both audit firm tenure and perceived audit quality and the purchase of NAS from an audit firm other than the incumbent one. These findings suggest that, in private companies' audits, client-specific knowledge is strongly related to the demand and quality of auditing and non-auditing services.

Level of effort

Competence must be accompanied by effort for the audit program to be properly planned and executed. Several factors influence how thoroughly the audit program is planned and executed, among them the auditor's judgments about how agency conflicts influence the risk of material misstatements in financial statements, the size of the auditor's portfolio, the incentives facing the auditor and the auditor's working environment.

The International Standards on Auditing (ISA) require auditors to assess several agency conflicts when assessing risk of material misstatements, for instance agency conflicts related to the firm's ownership and governance structures (e.g. ISA 315 paragraph 11, 14, A17, A30). For instance does the presence of large shareholdings reduce the need for an external auditor to monitor the CEO since such shareholders have incentives and ability to monitor management on their own? In firms with dispersed ownership, however, the need for external auditing is likely to be higher since an individual shareholder lacks the incentives to carry the monitoring costs because he receives only his fraction of the benefits of increased monitoring. As another example: the board becomes less independent if the CEO has family members on the board. Reduced independence means weaker board monitoring and, to compensate for a less independent board, the auditor should increase effort in order to "obtain reasonable assurance about whether the financial statements as a whole are free for material misstatements, whether due to fraud or error" (ISA 240, paragraph 5).

Hope et al. (2012) develop and test six hypotheses about how auditors should respond in the presence of agency conflicts. The results document that auditors adjust their level of effort as predicted by agency theory and the ISAs. Audit effort is negatively related to concentrated ownership and the presence of a second large shareholder, consistent with these shareholders' incentives and ability to monitor management. Auditor effort relates negatively to CEO ownership, consistent with CEO-ownership aligning conflicts of interest between the CEO and owners. Family relationships between major shareholders and the CEO, and between the CEO and board members, are positively associated with effort, consistent with kinship and marriage resulting in reduced monitoring by owners and board members who belong to the same family as the CEO. Finally, they find that audit

effort is negatively associated with the proportion of board members from the largest family, consistent with there being fewer agency conflicts between owners and the board, and positively related to family relationships between board members and the CEO (suggesting a less independent board, as explained above). Two additional findings are worth noting since we return to related topics below. The first is that audit fees increase with leverage, consistent with auditors increasing effort in order to ensure the interest of debt holders. The second is that there is a Big N premium, consistent with Big N auditors being more sophisticated since they respond more strongly to agency conflicts.⁷ Overall the results show that auditors pay due attention to potential agency conflicts in firms' ownership and governance structures and adjust their audit effort correspondingly.

Portfolio size and career stage

The size of an engagement partner's portfolio is related to effort since one engagement partner has a fixed number of hours available per period. Therefore, having too many clients may force the engagement partner or members of the audit team to cut corners and simplify test procedures in order to meet time and budget constraints. Thus, being busy may increase the risk of material misstatements and/or erroneous audit reports. From other fields than studies of board effectiveness (i.e. nursing, supermarket cashiers and bank employees), research has shown that being more busy influences work performance negatively. Evidence from the auditing field, though not private company specific, shows that tight reporting deadlines following from time and budget pressure have the potential to compromise the auditor skepticism and professional judgment which are critical to audit quality (Coram, Ng, and Woodliff 2004). López and Peters (2012: 140) document that "compressed workloads impair audit quality and increase management's ability to manipulate reported earnings" for US public firms. The documented behavioral outcomes from complying with time budgets are: i) premature signing off on an audit program step (one or more of required audit procedures are not completed), ii) reducing the amount of work performed on an audit step below what the auditor would normally consider reasonable, iii) failing to research an accounting principle, iv) making superficial reviews of client documents, and v) accepting weak client explanations (Kelley and Margheim 1990). We expect being busy to have at least similar consequences in private firm audits as the auditors are less exposed to risks of litigation and loss of reputation.

The level of effort may also depend on where the engagement partner is in his or her career (Sundgren and Svanström 2012b). Young persons may be more willing to put in effort in order to achieve promotions and wage increases, while persons approaching retirement may lack the incentives and the desires that are necessary to deliver the same effort and performance as in

previous years. For instance, an auditor close to retirement has much less to lose economically if involved in an audit failure, since the negative consequences in terms of promotions and wage increases may be negligible compared to an auditor who recently entered the job market. The incentives to learn and implement improved audit test methodology may also be lower for auditors approaching retirement since the costs, which are born when learning new methods, may outweigh the expected benefit due to the period for collecting future audit fees being too short. Thus, career stage may impact audit quality.

It is demanding to disentangle the effect of career considerations from experience. In early years of their career auditors gain experience by auditing companies in industries of different sizes and circumstances. Audit experience is often a precondition for promotion. When approaching retirement, auditors may be too familiar with the client due to a long-standing relationship, which has the potential to make the auditor indulge the client's wishes and therefore reduce audit quality. Thus, the effect of experience and career concern may go in parallel and make it difficult to assess their individual impacts.

Sundgren and Svanström (2012b) test if audit quality, measured by the propensity to issue a going concern modification, decreases with the engagement partner's work load and closeness to retirement age, using a sample of 1,156 bankrupt Swedish companies. Consistent with concerns raised by regulators and oversight bodies, they find that audit quality relates negatively to the number of assignments and to closeness to retirement age. Goodwin (2011) studies public companies in Australia and finds negative associations between the number of assignments held by the audit partner and both earnings quality and audit fees. Gaeremynck, Van Der Meulen, and Willikens (2008) measure an audit firm's portfolio size with a composite index based on the number of assignments and the size of the auditees, using factor analysis. They find no relationships between the size of the audit firm's client portfolio and measures of audit quality, using Belgian data. Even if it is too early to conclude, these results may indicate that individual auditor characteristics are systematically related to audit quality but that differences in audit quality at the partner-level is uncorrelated with audit firm.

Ability to report on discovered misstatements

The second component of audit quality is the likelihood that an auditor will comment on any discovered misstatements and weaknesses in the audit report. This likelihood depends on professional skepticism, objectivity and independence.

Auditor independence is the cornerstone of the audit profession since independence is necessary for users of financial statements to trust the audit report. There are numerous factors and circumstances that may cause threats to auditor independence (see IFAC Code of Ethics). Perhaps the most debated and controversial issue among regulators, researchers and users of financial statements is the potential threat to independence caused by economic bonding between the client and the audit firm, particularly due to fees from the provision of non-audit services (NAS). Proponents of prohibiting auditors from providing consulting services argue that the auditor has economic incentives to acquiesce to client pressure in order to please the client and thereby increase the likelihood of obtaining future fees from auditing and NAS. While there are numerous studies on NAS and auditor independence in public companies, only a few researchers focus on private companies (Svanström 2012; Hope and Langli 2010).

There is a valid concern that provision of NAS to private companies negatively affects auditor independence and audit quality, but the threats to independence are somewhat different compared to those related to public firms. In general, auditors of private companies audit a large number of predominantly small companies, and fees from auditing and NAS from a single client are unlikely to significantly impact an auditor's total compensation. At the same time, the risks of litigation and loss of reputation that act as guards of independence for public firms are substantially lower in private firms. As expected costs caused by loss of reputation and litigation fall, lower future fees are necessary in order for the auditor to be willing to compromise integrity. And since the fees from auditing may be limited due to the size of the client, future fees from providing NAS may become more important. Social bonding due to long-standing relationships between the auditor and client may reinforce the risk of impaired independence, particularly if the auditor provides NAS and assumes a more managerial role. However, whether impaired independence due to economic and social bonding results in reduced audit quality is uncertain since better knowledge of the client may increase the auditors' ability to deliver audits of high quality.

Hope and Langli (2010) examined a large sample of private Norwegian firms and argued that studying private companies in a low litigation risk setting provided the best chances of finding evidence of impaired independence since the expected costs of delivering low quality audits is low. However, they found no association between auditors' fees and the propensity to issue a going concern opinion. They state that "Although it is difficult to ascribe the results to a single factor, our findings are certainly consistent with auditors behaving with ethics and integrity in mind" (Hope and Langli 2010: 598). Using a sample of Swedish firm, Svanström (2012) documents a positive association

between provision of NAS and audit quality measured by discretionary accruals and management's. In sum, the two studies that have analyzed auditor independence in the private firm segment document no evidence that fees from auditing or NAS negatively affect auditor independence.

Audit quality differences between audit firms

Companies differ in their needs of and willingness to pay for auditing services, and because of these differences the suppliers of audit services have incentives to deliver services of different quality. Evidence of differences in the needs for auditing is most evident in countries where auditing is voluntarily and companies may choose between auditors of different quality. In such markets, some firms remain unaudited while others choose one or perhaps two auditors from local, national or international audit firms. When auditing is statutory, firms have fewer choices, but these firms may also choose auditors of different quality, i.e. choose a high quality auditor instead of a low quality auditor or engage two auditors if they wish to increase the credibility of their financial statements.

Even though it is a strong simplification to categorize auditors into those of high and low quality (as quality varies on a continuum *between* high and low), it is useful because it allows us to pose the question: What distinguishes auditors of high quality from those with low quality? Referring to the definitions of audit quality given by DeAngelo (1981), quality must relate to characteristics of the auditor (which we have discussed above). Secondly, there must be variation in the effects of the audit, i.e. that high quality auditors are associated with more favorable outcomes than low quality auditors. For public firms, it is well documented that there are quality differences between audit firms, and that large audit firms, typically operationalized as the Big N audit firms, provide audits of higher quality than other auditors (Knechel et al. 2012). The evidence in the private company setting is sparse in comparison.

We start by reviewing studies that analyze outcomes of the audit process. The outcomes are uncertain and impossible to observe and therefore researchers use indirect measures that may proxy for the outcome. Favorable outcomes or the absence of negative outcomes have been used as indicators of high audit quality. Knechel et al. (2012) group the outcomes into adverse outcomes (restatements, litigation), financial reporting quality (accruals, the association between earnings and stock prices, and conservatism), the accuracy of audit reports, and regulatory reviews of audit firms (peer reviews, inspections by oversight boards).⁸ The empirical evidence from private companies focuses primarily on audit quality differentiation between Big N audit firms and others with respect to earnings management, the accuracy of the going concern report, disciplinary sanctions against

auditors, and fees. Next we review studies that have analyzed whether engaging an auditor or not when auditing is voluntary, or engaging a high quality auditor or not in a statutory auditing regime, gives easier access to finance, lowers cost of debt capital and leads to higher prices when firms are sold. Finally we review studies that have analyzed internal benefits, i.e. benefits that are gathered within the firm, such as more efficient production, shipping and handling.

Financial reporting quality

High quality auditors should promote high financial reporting quality, for instance by prevent earnings management. Using a sample of Belgium private companies, Van der Bauwhede and Willekens (2004) found no evidence that clients of Big N auditors engaged less in earnings management than clients of other auditors. Van Tendeloo and Vanstraelen (2008) documented lower levels of earnings management among clients of Big N auditors compared to clients of other auditors in high book-tax alignment countries (Belgium, France, Finland, Spain), but no such evidence was found in low book-tax alignment countries (UK and Netherlands). Van Tendeloo and Vanstraelen suggest that Big N auditors constrain earnings management in high-tax alignment countries because financial statements are more closely scrutinized by tax authorities in these countries. As such, the likelihood of detecting audit failures is higher in high-tax alignment countries, which gives Big N audit firms stronger incentives to restrain firms from aggressive earnings management in order to protect their own reputation.

The argument that auditors pay greater attention to their exposure to reputation and litigation risk when auditing private firms is supported by Cano-Rodríguez (2010), who analyze two types of conservatism using a sample of private Spanish firms: Conditional and unconditional conservatism.⁹ Cano-Rodríguez (2010) documents that Big N auditors are associated with higher conditional conservatism for firms of all sizes, indicating higher audit quality. However, unconditional conservatism is only observed for larger, high-leverage and low-growth firms, i.e. “firms with higher level of litigation and reputation risk for auditors” (Cano-Rodríguez 2010 p 132). The negative relationship between unconditional conservatism and the extent to which the client exposes the auditor to reputational or litigation risk, indicates that Big N auditors protect themselves by encouraging lower quality earnings for their most risky clients. These results are consistent with the findings of Ajona, Dallo and Alegría (2008), also using Spanish firms, who show that Big N auditors are associated with significantly lower discretionary accruals in the years prior to an auditee’s entering into bankruptcy, i.e. when a client’s financial condition exposes the auditor to increased risk.

Gaeremynck et al. (2008) move beyond the high/low dichotomy of auditors and analyze how measures of audit quality based on an auditor's client portfolio relate to financial reporting quality (both disclosure quality and earnings management). They find that the size of the auditor's portfolio is irrelevant, that having high visibility clients in the portfolio is associated with less earnings management (but no relationship with disclosure quality), and that less earnings management and better disclosure quality is associated with portfolios of clients with weaker financial health. The results in Gaeremynck et al. (2008) support the hypothesis that audit quality increases when the auditees increase the auditor's exposure to risk of loss of reputation or to litigation.

The accuracy of the audit report

Upon completion of an audit, the auditor issues an audit report. The content of the report depends on what the auditor has discovered and what he prefers to report. Researchers have been particularly interested in the accuracy of audit reports with respect to going concern qualifications. Here, the auditors may make two types of error: Issue an incorrect going concern report (type I error) or issue an incorrect clean opinion (type II error). Type I errors are more serious than type II errors for the auditees, while type II errors are more serious for capital providers. This is because creditors, customers and investors may refrain from doing business with firms receiving going concern reports due to expected financial difficulties. Thus a going concern report may encourage an auditee's stakeholders to take actions that reinforce the financial problems of the auditee. For the auditor, type II errors bring exposure to risks of litigation and loss of reputation, while type I errors may lead to the loss of future fees because the auditee may switch auditor.

Ajona et al. (2010), analyzing bankrupt Spanish firms, find that Big N auditors more often issue going concern reports, consistent with protecting themselves from the risk described above. Gaeremynck and Willekens (2003) analyze 114 firms that filed for bankruptcy or voluntarily liquidation in 1995 or 1996, matching them with 114 firms based on size, industry and year. They find no difference between Big N and non-Big N auditors with respect to whether auditees go bankrupt in the subsequent year. However, they show that Big N auditors more often issue going concern reports for firms that liquidate voluntarily, which suggests that Big N auditors are more sophisticated in detecting firms with financial problems and/or that they more likely report what they have detected.

The results in Gaeremynck and Willekens (2003) are from a period when the going concern standard was principle-based, allowing auditors considerable discretion. The standard was replaced by a rule-based standard in 2000. Carello, Vanstraelen, and Willenborg (2009) analyze 132 firms filing for

bankruptcy during 1995-1996 and 89 firms filing for bankruptcy during 2001-2002, and match these firms with an equal number of financial stressed non-bankrupt firms using year, industry and probability of bankruptcy. Carello et al. (2009) find that non-Big N auditors committed more type II errors than Big N auditors when the standard was principle-based, but not after introduction of the rule-based standard. Furthermore, after introduction of the rule-based standard, they document an increase in type I errors, a decrease in type II errors and that there is no longer a negative relationship between going concern reports and an auditee's size (which is found in almost all previous studies). In conclusion, they state that "the Belgian standard tends to favor creditors and disfavor auditors, and perhaps also companies and employees. Evaluation of the net of these effects depends on the priorities one assigns to the parties, an evaluation that we respectfully leave to Belgian standard-setters and regulators." (p. 1425).

Regulatory reviews of auditors

The positive association between audit quality and the size of the audit firm/office/team that have been documented for public firms (Francis and Yu 2009; Choi et al. 2010) might be even more apparent in audits of private companies since the audit is conducted, at one extreme, by auditors employed by Big N firms and, at the other extreme, by sole practitioners working alone. In these very different work environments, the levels of internal quality control systems, external input from colleagues and the auditors' incentives vary significantly. Sundgren and Svanström (2012a) is the only study we are aware of that analyzes regulatory reviews of auditors in private companies. The researchers find that auditors working at offices with three or more CPAs were significantly less likely to be subject to disciplinary sanctions compared with auditors at offices with only one or two CPAs. The significant positive association between audit office size and audit quality was found for non-Top 6 audit firms only (top 6 = Big 4 + BDO + Grant Thornton), suggesting that audit quality is more heterogeneous among small audit firms than among large audit firms and that small offices more often fail to meet the quality requirements.

The Big N fee premium

There is ample evidence using public firm data that large auditors charge significantly higher fees than smaller auditors. The fee premium that large audit firm earn can be caused by several (non-independent) reasons, such as lack of competition among auditors, which is a primary concern among regulatory bodies; reputation and brand name effects; higher quality audits; higher production cost, better trained staff and more advanced technology; and higher potential losses in the event of litigation (large audit firms have "deep pocket") (Chaney et al. 2004, Clatworthy et al. 2009).

The existence of a fee premium has also been studied using samples of private firms, which has the advantage of reducing the effects that “deep pockets”, litigation risk, loss of reputation, and market concentration may have on fees. Thus, if the fee premium exists, the likely causes are not related to these effects.

Chaney et al. (2004) use a large sample of UK private firms and find a fee premium for Big N firms using standard OLS-regressions, but no fee premium when they control for potential self-selection using the Heckman approach:

“[The] results are consistent with the notion that auditees, when not compelled by market pressures to choose a Big 5 auditor, choose the lowest-cost auditor available; further, our results suggest that clients in our setting, on average, do not view Big 5 auditors as superior in terms of the perceived quality of services provided to a degree sufficient to justify a fee premium.” (p 70).

Lennox, Francis and Wang (2012) raise doubt about the results in Chaney et al. (2004) due to how the Heckman test is implemented. Clatworthy et al. (2009), also using a large UK private firm sample but controlling for self selection bias using different methods, find results that directly contradict the findings in Chaney et al. (2004). They document a fee premium for Big 4 firms and find no evidence supporting the view that Big 4 clients choose the lowest cost auditor. Price premia for Big N auditors are also found in Belgium (Willekens and Achmadi 2003) and Norway (Hope and Langli 2010, Hope et al. 2012), and for the Top-6 auditors in Sweden (Sundgren and Svanström 2012a).

Access to credit

Most private companies need external financing, and their ability to raise equity may be limited by e.g. insufficient private wealth that the owners can invest in the firm or reluctance to open up for new owners. Therefore, gaining access to credit, primarily through banks, is often of vital importance. Audited accounting information and personal interviews are two important sources of information used by lenders (Berry and Robertson 2006). In the presence of asymmetric information, lenders may respond to uncertainty about a borrower’s creditworthiness by simply not accepting loan applications. Uncertainty may be reduced for firms that engage an auditor in a voluntarily audit regime, voluntarily hire a high quality auditor or two auditors in regimes where one auditor is mandatory, but may increase for firms that receive modified audit opinions.

Hope, Thomas, and Vyas (2011: 937) use survey data from the World Bank (close to 50,000 manufacturing and service firms from 68 countries) and find that audited financial information “is

associated with lower perceived financing constraints". Allee and Yohn (2009), using private US firm data (see below), find that firms with audited financial statements have lower probabilities of getting a loan denial compared to firms with non-audited financial statements. Thus, both studies imply that auditing eases firms' access to credit. Niemi and Sundgren (2012) analyze if modified audit opinions reduce the likelihood of obtaining credit from institutional lenders among Finish SMEs and thus increase the use of trade credit, but they fail to find any relationship. The non-importance of modified audit opinion supports the experimental evidence in Wright and Davidson (2001) who analyze the effect of auditor attestation on commercial lending decisions. They found that bankers' risk assessment and loan approval decisions for a privately-held company in the wholesale cleaning supply industry were not affected by whether there was no attestation, a review or an audit.

Cost of debt

One effect of reduced agency costs from auditing is that it reduces financiers' lending costs. In a competitive market, this reduction will be passed on to lenders. Thus firms that voluntarily engage an external auditor are expected to obtain loans at lower interest rates than firms without an auditor.

Blackwell et al. (1998) analyzed the association between actual interest rates paid and the degree of external verification of the borrowers' financial statement for 212 small, private US firms, and found that audited companies pay lower interest rates than unaudited companies after controlling for firm-specific risk factors and relevant loan characteristics. The size-matched sample showed that the interest rate of audited companies was 25 basis points lower than those of unaudited companies. The estimated interest saving was 30 to 50 per cent of audit fees paid. Minnis (2011) also finds significantly lower interest rates for audited firms using a large sample of private US firms (25,784 firm-year observations from 12,616 unique firms from 2001-2007): The interest rate is on average 69 basis point lower for audited firms (varying between 25 and 105 basis point depending on model), which amounts to an interest saving of 25,000 USD (or 6 per cent of net profit before tax) for the average sample firm. However, the US evidence is mixed, as Allee and Yohn (2009) and Cassar (2011), using data collected by the Federal Reserve Board in 2003 (the National Survey of Small Business Finances), do not find lower interest rates for firms with audited financial statements. These researchers use the interest rates on the firms' most recent loans and they control for, among other things, the terms of the loan (e.g. fixed or floating rate and whether there is collateral for the loan). Lack of support for better terms on debt is also found by Fortin and Pittman (2007) who analyze the yield spreads and credit ratings on bonds issued by private firms. This is contrary to findings for

public firms, which are that Big N auditors are associated with lower cost of debt (see De Franco et al. 2011)

Kim et al. (2011) exploit the Korean environment, where all firms except those with total assets less than approximately USD 7 million are required to have their financial statements audited, to assess the effect the cost of debt. Using a large sample (72,577 firm-year observations from the years 1987-2002), they find a larger reduction in interest rates than those reported by Blackwell et al (1998). Depending on the estimation method used, the average interest cost savings from a voluntary audit range from about 56 to 124 basis points. They also report a significant reduction in interest rates for those that engage an auditor for the first time.

The studies by Blackwell et al (1998), Kim et al. (2011) and Minnis (2011) analyze the effect on interest rates in environments where auditing is voluntarily. Karjalainen (2011) analyzed a sample of 3,890 unique Finnish firms (10,799 firm-year observations from 1999-2006) that all were subject to statutory auditing. Subject to firm size, Finnish firms may choose between auditors with no professional certification, HTM-auditors (which are regarded as the second-tier auditors) and KHT auditors (which are regarded as first-tier auditors). The Big N firms are also present in Finland and firms may also choose to have multiple auditors. Thus, there are different sets of auditors to choose from that have different degrees of perceived quality. Karjalainen (2011) documents that the presence of Big N-auditors or multiple auditors is associated with lower cost of debt. Karjalainen (2011) also finds that firms receiving modified audit opinions have higher interest rates (and lower accruals quality) than firms with clean opinions. Using Spanish data, Cano-Rodriguez and Alegria (2012) also find that Big N auditors are associated with lower interest rates for private firms (but not for public firms).

Credit ratings

Kim et al. (2011) and Minnis (2011) among others compute firms' interest rates using information from the income statement and the balance sheet. Inferring interest rates from financial statements has several potential problems, see Cassar (2011) for a thorough discussion. To illustrate, it is more likely that unaudited firms have unrecognized liabilities compared to audited firms, since auditors perform checks that all liabilities are recognized with the correct amounts while no such controls are performed in unaudited statements. Thus, since liabilities are the denominator in the interest rate calculation, audited firms may by construction get lower interest rates and this may explain the

reduction in interest rates that are documented in studies using interest rates inferred from financial statements.

Lennox and Pittman (2011) circumvent the problems with interest rate calculations by using credit rate scores as the dependent variable. Their purpose is to analyze if statutory auditing suppresses valuable information because a firm's ability to signal low credit risk is reduced. In statutory audit regimes, firms may choose a high quality auditor or not, while in voluntary audit regimes they also have the option to not hire an auditor. Lennox and Pittman (2011) utilize the change in audit regulation in the UK that made it possible for a number of private firms to opt out of an audit for the first time in 2004 (i.e. auditing was statutory for all sample firms in 2003, but not in 2004). The results show that firms that remain audited get a significant upgrade in credit rating while those that opt out get an even larger downgrade. Since there is no change in the assurance effect of auditing for those that remain audited, the upgrade can be attributed to the signaling effect for firms that for the first time are able to signal their willingness to be audited. The opt-out companies were less likely to appoint Big N auditors and paid lower audit fees under the mandatory regime relative to the companies that remained audited. The authors suggests that the benefits from requiring these companies to be audited are likely to be small since they privately contract for a low level of audit assurance when audits are legally required.

The notion that auditing matters and is valued by credit rating agencies is further supported by Zerni, Haapamäki, Järvinen and Niemi (2012) who find among other things that private Swedish companies that engage two auditors have a better credit rating than companies hiring 'only' one auditor.

Proceeds from sale of shares

De Franco et al. (2011) analyze how audit choices impact share prices of private firms by testing if owners who sell all shares or firm's assets obtain higher proceeds if they hired a Big N auditor. For public firms, research has documented that Big N auditors are perceived to provide higher audit quality than non-Big N, which for example explains why private firms that undergo an initial public offering (IPO) obtain higher IPO prices (see De Franco et al. (2011) for references). However, IPO firms are not comparable to those studied by De Franco et al. (2011) since only IPO firms can be expected to make heavy investments in governance systems prior to the IPO. Contrary to IPO firms, the firms analyzed by De Franco et al. (2011) provide no offer documents to investors, analysts, media or the SEC. Thus, to reduce information risk, the owners of the selling firms have incentives to hire high quality auditors. De Franco et al. (2011) document substantial decreases in enterprise value

by not hiring Big N auditor. Different techniques give different estimates, but the drop in enterprise value varies from \$1.9 million to \$5.2 million in stock-purchased private firms, which is significant given that the median enterprise value ranged from \$14 million to \$18 million. The net benefit of hiring a Big N auditor is not analyzed, but since not all owners of private firms engage a Big N auditor prior to a sale the costs are likely to be substantial.

Internal value of audits

An audit may benefit the auditee because it may contribute to reduced internal agency problems or the auditor may e.g. suggest improvements in process efficiency and assist in regulatory compliance (Knechel et al. 2008). However, the potential internal benefits are likely to be highly individual and have not been given much attention in empirical audit research.

Abdel-Khalik (1993: 35) argues that, while “fully private companies do not have the risk of moral hazard emanating from separation of ownership and control, they are subject to the problems of moral hazard “internal” to the operation of the firm.” When firms grow larger and delegation of responsibilities is necessary, direct supervision is no longer effective. Instead internal control systems serve as a way to control subordinates’ behaviors, and the audit may (via the feedback given to management) directly or indirectly enhance the quality and effectiveness of such systems. In essence, an audit can (partly) compensate for organizational loss of control in hierarchical organizations. The role of auditing for management control in more complex organizations is supported in Hay and Davis (2004). The fact that the firm hires an auditor is likely to reduce the risk that individuals take self-maximizing actions that are detrimental to the firm.

Collis, Jarvis and Skerratt (2004) found a positive association between demand for auditing in the UK and the degree to which management perceived the audit as i) improving the quality of financial statements, and ii) a control of internal books and records. These relationships are also confirmed in Niemi et al. (2012), using private company data from Finland. Audit serving as a remedy for weaknesses of internal controls may especially be the case in SMEs, where systems, controls, routines and policies are less formal and less developed. Based on the outcome of the audit procedures, management may receive suggestions about how to improve internal controls and administrative routines.

By hiring an auditor, the firm gains access to expertise. The possibility to ask the auditor for technical assistance and advice may be especially valuable for managers in SMEs which often lack competence in e.g. accounting and taxation. Svanström and Sundgren (2012) show that small private firms

frequently use the incumbent auditor for different types of non-audit services, while services provided by other audit firms are purchased only by a small proportion of firms. They find that the length of the auditor-client relationship and good experiences of the quality of audit work are positively related to the purchase of non-audit services from the incumbent auditor, but negatively associated with the use of consulting services from other audit firms. The role of the auditor goes beyond just providing assurance in many SMEs, but the NAS primarily lies within auditor's core competence such as accounting, taxes and some legal issues, and only rarely includes more strategic support services such as budgeting and investments.

Auditor choice and client firm characteristics

The reasons why companies voluntarily engage an auditor, or choose a specific auditor in a statutory auditing regime, are complex and likely to vary across companies and countries. As for public firms there are certain characteristics related to size, complexity and risk that partly explain why firms choose a high quality auditor over a low quality auditor in a statutory auditing regime. The same variables are also important drivers of why firms voluntarily engage auditors when auditing is voluntarily. The variables capturing these characteristics are commonly incorporated as control variables in audit choice tests, and we do not discuss these variables here.

As for public firms, private firm research documents positive associations between voluntarily hiring an auditor or a high quality auditor and agency conflicts measured as e.g. the degree of separation between ownership and management or level of (unsecured) debt (Carey et al. 2000; Chaney et al 2004; Clatworthy et al. 2009; Collis et al. 2004; Hope et al. 20012; Knechel et al. 2008; Niemi et al. 2012). However, the private firm setting has enabled researchers to advance our understanding of agency conflicts beyond what is possible when using public firms due to greater variation in the data. Lennox (2005) hypothesized that there is a non-linear relationship between managerial ownership (which varies between 0 and 100 per cent for private firms) and demand for high quality auditors measured by Big N auditors: "First, there is a divergence-of-interests effect, such that managers with smaller shareholdings have weaker incentives to act in outside shareholders' interests. Second, there is an entrenchment effect, such that managers with larger shareholdings have greater control over the company and therefore greater scope for acting in their own private interests" (Lennox 2005: 207). Thus, the demand for high quality auditors is predicted to be higher at the low and at the high region of managerial ownership. Using a sample of large UK private firms, the hypothesis is supported.

The importance of agency conflicts are also documented by Hope et al. (2012) who use a sample of predominantly small and medium sized private firms. They document that the likelihood of choosing a Big N auditor “decreases with ownership concentration, level of ownership by the second largest owner, and family relationships between the board and the largest owner” (p. 513). However, no relationship is found between the choice of a Big N auditor and CEO ownership in the main tests. Neither is any relationship found between choice of Big N and the family relationship between the CEO and the major shareholder and between the CEO and board members. Hope et al. (2012: 513) attribute the insignificant results to “the trade-off between the benefits of more credible reporting from using a Big 4 auditor versus the potential costs of increased fees associated with a Big 4 auditor and the reduced ability of the CEO (or the CEO’s family) to extract resources from the firm.”

Due to the multifaceted value of auditing, an audit may be demanded for other reasons than minimizing agency costs. The positive relationship between firm size and the voluntarily hiring of an auditor (Senkow et al. 2001, Collis et al. 2004 and Francis et al. 2011) could be caused by auditing generating more multidimensional value for larger and more complex companies (Knechel et al. 2008). Research in the UK and Ireland, summarized in Collis et al. (2004), shows that the main users of statutory audits are the directors of small companies. Further, Collis et al. (2004: 97) document that the primary determinants of auditing in small UK firms are managers’ perception “that audit improves the quality of information and/or provides a check on internal records” and the educational level of the principal director, and at these two factors are more important than firm size and agency relationships with lenders. Niemi et al. (2012), from a sample of Finnish private companies, identify a positive relationship between voluntary audits and use of an external accountant for financial accounting services, but a negative relationship between audits and use of tax advisory services from an external accountant. Taken together, audits seem to have a wider function in private companies than just working as a monitoring device for controls of agency conflicts.

UNRESOLVED ISSUES AND FUTURE RESEARCH

Our knowledge about auditing of private firms is sparse compared to that of public firms. This gives ample opportunities for research that advance theory and insight about the role of auditing in general and among private firms in particular.

The role played by auditing in private firms is not clearly understood, which is probably caused by the heterogeneity of private firms (addressed above and further discussed below) and the difficulties of measuring the costs (of which the audit fee may be of minor importance) and the benefits of auditing.

Here, more research is needed. We need to address the issues with theories and tests that embrace the particularities of private companies in institutional settings and environment that differ from country to country.¹⁰ Thus, what does an audit really mean for private firms and why do private firms demand (high quality) auditors?

The available empirical evidence is dominated by researchers that more or less have asked the same questions as those that have been addressed for public companies, adjusted for particularities of the private firm setting. While this is valid and important due to the differences that exist between public and private firms (as outlined above), the strategy does not take full advantage of the unique opportunities provided by the private firm segment. Francis (2011) presents a general framework where six factors are seen as the drivers of audit quality: audit input; audit processes; accounting firms; audit industry and audit markets; institutions; and economic consequences of audit outcomes. Each of these factors is suited for analyses, and numerous examples of unanswered questions for researchers to investigate are given in text. Numerous questions are also found in Knechel et al. (2012) and Causholli et al. (2010). We believe these surveys will spur a researcher's imagination and ingenuity when they are read with the following suggestions in mind: (i) Explain carefully why results for public firms may or may not generalize to private firms, i.e. why should we (not) expect something different? (ii) Develop ideas, theories, hypotheses and research designs that take advantages of the differences that exist between private and public firms, i.e. what can we learn from studying private firms that cannot be learned from analyzing public firms? (iii) Collect data from different sources using different techniques and utilize the greater variation in the data to conduct more robust tests than is possible using public firm data only.

As shown above, a number of studies have tested if (higher quality) auditing lowers cost of debt and improves credit ratings for private firms. Two of these studies, Minnis (2011) and Pittman and Lennox (2011), are noticeable examples of excellent private firm research. The reason is not how they document benefits of auditing in terms of lower interest expenses or better credit ratings, but because they add new insight about the role of auditing in general. Minnis (2011) identifies a mechanism that makes audited financial statements more useful: The accrual component of earnings, which is the soft part of earnings subject to possible earnings management, becomes a better predictor of future cash flow. Pittman and Lennox (2011) are able to isolate the signaling effect of voluntary purchase of audit from the assurance effect. Therefore, they are able to document that mandatory auditing suppresses a company's ability to send signals beyond what is possible when auditing is voluntary, and that "it is difficult to force companies to privately contract for stringent

audits if they would choose not to be audited voluntarily” (Lennox and Pittman 2011). We welcome more of these types of studies.

In auditing research, it is common to measure e.g. industry specialism by the proportion of clients’ sales or assets within a particular industry and economic bonding by a particular client’s fees relative to the total fees from all clients. When such measures are computed using data from public firms the measures do not capture that audit firms also serves private companies. The resulting measurement errors may threaten the validity of the results as the measures computed using public data only may be systematically biased. There are numerous private firms that on average are as large as listed firms, and private firms outnumber public firms. Thus, we do not know how good a proxy the measures of e.g. industry expertise or economic dependence are, and if systematic measurement errors can explain some of the mixed results that exist.¹¹ For those analyzing private firms, it may be important to account for the effects that can occur because some auditors of private firms also audit public firms (which is an easier task than analyzing public firms and control for auditors’ private firm activities due to public data being much easier available than private firm data).

One caveat with many studies of private firms is their tendency to treat private firm as one homogeneous group.¹² Lack of data that enable controls for firm heterogeneity beyond those captured by accounting numbers, industry affiliation, and auditor type is the likely cause of treating all private firms as equal. We accept that research implies making assumptions and simplifications. However, the correlated omitted variable problem deserves more attention in private firm research than in public firm research because the impact is likely to be more severe.¹³ An example is that the importance of heterogeneity in ownership and governance structures are often neglected, which raises the possibility that effects ascribed to test variables might disappear when adequate controls are included.

A substantial subset of private firms is controlled by families.¹⁴ Family firms may have fewer internal agency problems than others because kinship and marriage align goals and incentives between managers and owners, but there are other differences. In their review article, Stewart and Hitt (2012) sort the differences between family and non-family firms into eight categories: ownership, governance, returns, rewards, networks, leadership, careers and management. For instance, family firms might differ from non-family firms “in their capacity to develop and leverage intangible assets such as social capital, trust, reputation, and tacit knowledge”, and “[e]conomic and financial performance may be compromised in preference for creating and preserving types of socioemotional wealth (SMW) such as perpetuating family name, values, control, and employment, or supporting a

desirable lifestyle” (Sharma and Carney 2012: 233). For such reasons, significant differences exist between family and non-family firms, and the family effect correlates with variables typically included in the tests such as size, growth and profitability, even though the results are mixed (Steward and Hitt 2012). More importantly, family variables are likely to correlate with the test variables used in audit research. For instance, the choice of a Big N auditor might correlate with family control because of less need to hire a Big N auditor due to fewer internal agency conflicts in family firms; the interest expenses might be lower in family firms because families obtain better terms due to long-lasting relationship with the bank or higher willingness to use private wealth as collateral; and family firms might exhibit higher earnings quality because family owners fear that questionable accounting choices will damage the good name of the family if revealed to the public. Thus, there are reasons to expect systematic correlations between family variables usually not included in the tests and the variables that are of primary interest.¹⁵ The best solution to the omitted variable problem is to incorporate the relevant variables into the test or to use tests and methods that make the relevant variables redundant.¹⁶ If omitted variable problems cannot be avoided, the researchers should acknowledge the limitation and provide a caveat that makes the reader aware of this limitation and also discuss how omitted variables may impact the results.¹⁷

Access to data on private firm is an obstacle in many countries – the data is simply not available or not as easily available as the data for public firms. This calls for wider search for available data sources. For instance do banks, credit agencies, tax authorities and other governmental agencies and international organization collect data which should be utilized by researchers? Another option is to collect data through surveys (see Allee and Yohn 2009 for a good example) or field research. Cooperation with audit firms and regulatory bodies may also give access to data. It may be easier to guarantee anonymity of audit firms and/or clients in the private firm segment compared to the public firm segment because there are many more audit firms and clients to choose from. We encourage greater ingenuity in how to obtain data.

SUMMARY

In this paper, we highlight the differences between audits of private and public firms and review and synthesize the relatively sparse empirical evidence on audits of private firms. Compared to audits of public firms, little is known about private companies in general and their auditing choices and the pros and cons of auditing of private firms in particular.

The traditional definition of audit quality is the ability to both discover and report on material misstatements. Existing evidence indicates that auditors take the potential negative effects of agency conflicts in an auditee's ownership and governance structure into account when they plan and execute the audit program, to ensure that financial statements are free for material misstatements. To the extent that there is a systematic relationship between provision of non-audit services and audit quality, it seems to be positive, indicating that there is a spillover from provision of non-audit services to auditing. Audit quality seems to increase with client-specific knowledge and partner tenure, but decrease when auditors approach retirement age or when they become too busy (measured by number of assignments). The detrimental effect of being busy at the partner level may not be observable at audit firm level. However, the results indicate that audit quality is more heterogeneous among the smallest audit firms and that audit firms apply different strategies to gain market shares (including meeting the demand for low quality audits in statutory audit regimes).

Contrary to the results for public firms, the apprehension that large audit firms deliver audits of higher quality than small audit firms does not receive unanimous support. Inadequate controls for auditee, audit partner/office/firm and country specific factors and different measures of audit quality may explain part of the mixed results. In short, our interpretation is that most studies indicate that Big N firms are more sophisticated, deliver audits of higher quality and charge higher fees than non-Big N firms, and that the Big N firms' incentives to deliver audits of higher quality increase with the extent to which the auditee exposes the audit firm to risk.

The benefits of private company audits are multifaceted and vary considerably across companies. While agency factors are important drivers of voluntary audits and the choice of high quality auditors, there are also other drivers. The evidence suggests that voluntary audit eases access to credits, reduces cost of capital and improves credit ratings and can also to some extent be of internal value to the auditee. Overall, evidence suggests that audits of private companies are valued by users of audited financial statements (among them the management of the auditee is an important user), but whether or not benefits exceed costs is firm-specific.

The private firm setting is different from the more homogeneous public firm segment. This makes it necessary to verify the generalizability of results from public firm studies. Even more importantly, the uniqueness of the private firm setting gives researchers opportunities to investigate questions that cannot be addressed using public firm data. Some of these questions may provide regulators with useful insights, for instance related to provision of non-audit services (no detrimental effect of non audit services has so far been found), the imposition of statutory auditing (which suppresses firms'

abilities to signal their type because they are denied the option of voluntarily engaging an auditor) and the costs and benefits of auditing (none of the studies document cost of debt savings that exceed the direct audit fees paid by the client, and the total costs of auditing is likely to be high). Thus, by exploiting the particularities of the private firm segment, we believe researchers have great potential for advancing our understanding of the role of auditing.

REFERENCES

- Abdel-Khalik, A. R., 1993. Why Do Private Companies Demand Auditing? A Case for Organizational Loss of Control. *Journal of Accounting, Auditing & Finance*, 8(1), pp. 31-52.
- Ajona, L.A., F.L. Dallo, and S.S. Alegría, 2008. Discretionary Accruals and Auditor Behaviour in Code-Law Contexts: An Application to Failing Spanish Firms. *European Accounting Review*, 17(4), pp. 641-666.
- Allee, K. D., and T. L. Yohn, 2009. The demand for financial statements in an unregulated environment: An examination of the production and use of financial statements by privately held small businesses. *The Accounting Review*, 84(1), pp. 1–25.
- Arruñada, B., 1999. The Provision of Non-Audit Services by Auditors: Let the Market Evolve and Decide. *International Review of Law and Economics*, 19(4), pp. 513-31.
- Arruñada, B., 2011. Mandatory accounting disclosure by small private companies. *European Journal of Law and Economics*, 32, pp. 377–413
- Australia Bureau of Statistics, 2001. Small Business in Australia, 2001. Available at <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/1321.0>, visited 20. November 2012.
- Ball, R. and L. Shivakumar, 2005. Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), pp. 83-128.
- Ball, R. and L. Shivakumar, 2006. The Role of Accruals in Asymmetrically Timely Gain and Loss Recognition. *Journal of Accounting Research*, 44(2), pp. 207-242.
- Bauwhede, H.V. and M. Willekens, 2004. Evidence on, the Lack of) Audit-quality Differentiation in the Private Client Segment of the Belgian Audit Market. *European Accounting Review*, 13(3), pp. 501–522.
- Beck, P.J. and M.G.H. Wu, 2006. Learning by Doing and Audit Quality. *Contemporary Accounting Research*, 23(1), pp. 1-30.
- Berry, A. and J. Robertson, 2006. Overseas bankers in the UK and their use of information for making lending decisions: Changes from 1985. *The British Accounting Review* 38: 175-191.
- Blackwell, D., T. Noland, and D. Winters, 1998. The Value of Auditor Assurance: Evidence from Loan Pricing. *Journal of Accounting Research*. 36: 57–70.
- Burgstahler, D.C., L. Hail, and C. Leuz, 2006. The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review*, 81(5), pp. 983-1016.
- Cano-Rodriguez, M., 2010. Big Auditors, Private Firms and Accounting Conservatism: Spanish Evidence. *European Accounting Review*, 19(1), pp. 131–159.
- Cano Rodriguez, M., and S.S. Alegria, 2012. The value of audit quality in public and private companies: evidence from Spain. *Journal of Management & Governance*, 16(4), pp. 683-706
- Carey, P., R. Simnett, and G. Tanewski, 2000. Voluntary Demand for Internal and External Auditing by Family Businesses. *Auditing: A Journal of Practice and Theory* 19, Supplement, pp. 37-51.
- Carello, J.V, A. Vanstraelen, and M. Willenborg, 2009. Rules Rather than Discretion in Audit Standards: Going-Concern Opinions in Belgium. *The Accounting Review*, 84(5), pp. 1395-1428.
- Cassar, G., 2011. Discussion of The Value of Financial Statement Verification in Debt Financing: Evidence from Private U.S. Firms. *Journal of Accounting Research*, 49(2), pp. 507-528

- Causholli, M., M. De martinis, D. Hay, and W.R. Knechel, 2010. Audit Markets, Fees and Production: Towards An Integrated View of Empirical Audit Research. *Journal of Accounting Literature*, 29, pp. 167-215.
- Chaney P., D. Jeter, and L Shivakumar, 2004. Self-Selection of Auditors and Audit Pricing in Private Firms. *The Accounting Review*, 79(1), pp. 51-72.
- Choi, J.H., C. Kim, J.-B. Kim, and Y. Zang, (2010). Audit Office Size, Audit Quality, and Audit Pricing. *Auditing: A Journal of Practice & Theory*, 29(1), pp. 73-97.
- Clatworthy, M.A., G.H. Makepeace, and M.J. Peel, (2009). Selection bias and the Big Four premium: new evidence using Heckman and matching models. *Accounting and Business Research*, 39(2) pp. 139-166.
- Collis, J., R. Jarvis, R. and L. Skerratt, 2004. The demand for the audit in small companies in the UK, *Accounting and Business Research*, 34(2), pp.87–100.
- Collis, J., 2010. Audit Exemption and the Demand for Voluntary Audit: A Comparative Study of the UK and Denmark. *International Journal of Auditing*, 14, pp. 211–231
- Coram, P., J. Ng, and D. R. Woodliff, 2004. The effect of risk of misstatement on the propensity to commit reduced audit quality acts under time budget pressure. *Auditing: A Journal of Practice & Theory*, 23(2), pp. 159–167.
- DeAngelo, L., 1981. Auditor Size and Audit Quality. *Journal of Accounting and Economics*, 3, pp. 183-199.
- De Franco, G., I. Gavious, J.Y. Jin, and G.D. Richardson, 2011. Do Private Company Targets that Hire Big 4 Auditors Receive Higher Proceeds? *Contemporary Accounting Research*, 28(1), pp. 215-262.
- Dyer Jr., W. Gibb., 2006. Examining the "Family Effect" on Firm Performance. *Family Business Review*, 19(4), pp. 253-273.
- ESCP Europe, 2011. Study on the effects of the implementation of the acquis on statutory audits of annual and consolidated accounts including the consequences on the audit market. Final Report, November 9th.
- European Commission, 1978. Fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54(3)(g) of the Treaty on the annual accounts of certain types of companies.
- European Commission, 2006. DIRECTIVE 2006/46/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 June 2006 amending Council Directives 78/660/EEC on the annual accounts of certain types of companies, 83/349/EEC on consolidated accounts, 86/635/EEC on the annual accounts and consolidated accounts of banks and other financial institutions and 91/674/EEC on the annual accounts and consolidated accounts of insurance undertakings.
- European Commission, 2006. DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Council Directive 78/660/EEC on the annual accounts of certain types of companies as regards micro-entities.
- European Commission, 2010. GREEN PAPER. Audit Policy: Lessons from the Crisis.
- Fortin, S. and J.A. Pittman, 2007. The Role of Auditor Choice in Debt Pricing in Private Firms. *Contemporary Accounting Research*, 24(3), pp. 859-96
- Francis, J.R., 2011. A Framework for Understanding and Researching Audit Quality. *Auditing: A Journal of Practice & Theory*, 30(2), pp. 125–152

- Francis, J.R., I.K. Khurana, X. Martin, and R. Pereira, 2011. The Relative Importance of Firm Incentives versus Country Factors in the Demand for Assurance Services by Private Entities. *Contemporary Accounting Research*, 28(2), pp. 487–516.
- Gaeremynck, A, S Van Der Meulen, and M. Willekens, 2008. Audit portfolio characteristics and client financial reporting quality, *European Accounting Review*, 17 (2) pp. 243-270.
- Goodwin, J., 2011. Audit Partner Busyness and Audit Quality. Working paper, The Hong Kong Polytechnic University.
- GAO, 2008. Audits of public companies. Continued Concentration in Audit Market for Large Public Companies Does Not Call for Immediate Action. United States Government Accountability Office.
- De Franco, G. I. Gavigous, J.Y. Jin, and G.D. Richardson, 2011. Do Private Company Targets that Hire Big 4 Auditors Receive Higher Proceeds? *Contemporary Accounting Research*, 28(1), pp. 215–262.
- Hay, D. and D. Davis, 2004. The Voluntary Choice of an Auditor of Any Level of Quality. *Auditing: A Journal of Practice and Theory*, 23(2), pp. 37-53.
- Hope, O.-K., and J.C. Langli, 2010. Auditor Independence in a Private Firm and Low Litigation Setting. *The Accounting Review*, 85(2), pp. 573-605.
- Hope, O.-K., J.C. Langli, and W.B. Thomas, 2012. Agency conflicts and auditing in private firms. *Accounting, Organizations, and Society*, 37, pp. 500–517
- Hope, O.-K., W.B. Thomas, and D. Vyas, 2011. Financial Credibility, Ownership, and Financing Constraints in Private Firms. *Journal of International Business Studies*, 42, pp. 935-957.
- Johnson, E., I.K. Khurana, and K.J. Reynolds, 2002. Audit-Firm Tenure and the Quality of Financial Reports. *Contemporary Accounting Research*, 19(4), pp. 637–660.
- Karjalainen, J., 2011. Audit Quality and Cost of Debt Capital for Private Firms: Evidence from Finland. *International Journal of Auditing*, 15, pp. 88–108.
- Kelley, T., and L. Margheim, 1990. The impact of time budget pressure, personality, and leadership variables on dysfunctional auditor behavior. *Auditing: A Journal of Practice & Theory*, 9(2), pp. 21–42.
- Knechel, W.R., G.V. Krishnan, M.B. Pevzner, L. Shefchik, and U. Velury, 2012. Audit Quality: Insights from the Academic Literature. *Auditing: A Journal of Practice & Theory*, In-Press.
- Knechel, W.R., L. Niemi, and S. Sundgren, 2008. Determinants of Auditor Choice: Evidence from a Small Client Market. *International Journal of Auditing*, 12, pp. 65–88.
- Kim, J.-B., D.A. Simunic, M.T. Stein, C.H. Yi, 2011. Voluntary Audits and the Cost of Debt Capital for Privately Held Firms: Korean Evidence. *Contemporary Accounting Research*, 28(2), pp. 585–615.
- Lennox, C., 2005. Management Ownership and Audit Firm Size. *Contemporary Accounting Research*, 22(1), pp. 205-227.
- Lennox, C.S., and J.A. Pittman, 2011. Voluntary Audits versus Mandatory Audits. *The Accounting Review*, 86(5), pp. 1655-1678.
- Lennox, C.-S., J.R. Francis, and Z. Wang, 2012. Selection Models in Accounting Research. *The Accounting Review*, 87(2), pp. 589-616

- López, D. and G.F. Peters, 2012. The Effect of Workload Compression on Audit Quality. *Auditing: A Journal of Practice & Theory*, 31(4), pp. 139–165.
- Nobes, C., 2010. On Researching into the Use of IFRS by Private Entities in Europe. *Accounting in Europe*, 7(1), pp. 213-217.
- Niemi, L, 2004. Auditor Size and Audit Pricing: Evidence from Small Audit Firms. *European Accounting Review*, 13(3), pp. 541-560.
- Niemi, L. and S. Sundgren, 2012. Are Modified Audit Opinions Related to the Availability of Credit? Evidence from Finnish SMEs. *European Accounting Review*, 21(4), pp. 767–796.
- Niemi, L., J.Kinnunen, H.Ojala, and P.Troberg, 2012. Drivers of voluntary audits in Finland: To be or not to be audited? *Accounting and Business Research*, 42(2): 169-196.
- Minnis, M., 2011. The Value of Financial Statement Verification in Debt Financing: Evidence from Private Firms. *Journal of Accounting Research*, 49, pp. 457–506.
- Salman, F.M. and E. Carson, 2009. The Impact of the Sarbanes-Oxley Act on the Audit Fees of Australian Listed Firms. *International Journal of Auditing*, 13, pp. 127–140
- Senkow, D.W., M.D. Rennie, R.D. Rennie, and J.W. Wong, 2001. The audit retention decision in the face of deregulation: Evidence from large Canadian Corporations. *Auditing: A Journal of Practice & Theory*, 20 (2), pp. 101-113.
- Sharma, P. and M. Carney, 2012. Value Creation and Performance in Private Family Firms: Measurement and Methodological Issues. *Family Business Review*, 25(3), pp. 233–242.
- Stewart, A. and M.A. Hitt, 2012. Why Can't a Family Business Be More Like a Nonfamily Business? Modes of Professionalization in Family Firms. *Family Business Review*, 25(1), p. 58-86.
- Sundgren, S. and T. Svanström, 2012a. Audit Office Size, Audit Quality, and Audit Pricing: Evidence from private firms. *Accounting and Business Research*, forthcoming.
- Sundgren, S. and T. Svanström, 2012b. Auditor-in-Charge Characteristics and Going Concern Reporting. Working paper, BI Norwegian Business School and University of Vaasa.
- Svanström, T., 2012. Non-audit Services and Audit Quality: Evidence from Private Firms. *European Accounting Review*, forthcoming.
- Svanström, T. and S. Sundgren, 2012. The demand for Non-Audit Services and Auditor-Client Relationships - Evidence from Swedish Small and Medium-Sized Companies. *International Journal of Auditing* 16: 54-78.
- Van Tendeloo, B., and A. Vanstraelen, 2008. Earnings Management and Audit Quality in Europe: Evidence from the Private Client Segment Market. *European Accounting Review*, 2008, 17(3), pp. 447-469.
- Wright, M.E. and R.A. Davidson, 2000. The Effect of Auditor Attestation and Tolerance for Ambiguity on Commercial Lending Decisions. *Auditing: A Journal of Practice & Theory*, 19(2), pp. 67-81.
- Wymenga, P., V. Spanikova, A. Barker, J. Konings, and E. Canton, 2012. EU SMEs in 2012: at the crossroads. Annual report on small and medium-sized enterprises in the EU, 2011/12. Ecorys, Rotterdam.
- Zahra, S.A., J.C. Hayton, and C. Salvato, 2004. Entrepreneurship in Family vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture. *Entrepreneurship: Theory & Practice*, 28(4), pp. 363-381.

Zerni, M., E. Haapama, T. Jarvinen, and L. Niemi, 2012. Do Joint Audits Improve Audit Quality? Evidence from Voluntary Joint Audits. *European Accounting Review*, 21(4), pp. 731–765.

Willekens, M. and C. Achmadi, 2003. Pricing and supplier concentration in the private client segment of the audit market: market power or competition? *The International Journal of Accounting*, 38, pp. 431-455.

¹ By public firms we mean firms that sell stocks or bonds to individual investors in public markets or have their stocks or bonds traded in organized markets. Private firms are non-public firms. The legal definition of public firms varies between jurisdictions, and in many countries public firms encompass more firms than those that are listed (Nobes 2010). Businesses may be organized in different legal forms and for non-listed firms a variety of legal forms are possible subject to national legislation. We restrict our discussion to firms with limited liability in order to ease the exposition. For the same reason we disregard not-for-profit organizations, municipalities, and firms that operate in industries with specific regulation due to their significance to the society or because they hold assets for a broad group of outsiders (e.g. financial institutions as banks and insurance companies, utilities, trade unions and charities).

² The fourth EU directive sets out the minimum requirements for the preparation, content and disclosure of annual accounts for private and public firms, and the directive is implemented in all the member states. Member states may allow small firms to prepare abridged accounts and to only make the accounts available at the company's registered office (European Commission 1978, article 47). In many EU countries national law requires filing of annual accounts by a public registry. The thresholds defining small companies are reviewed every fourth year. As of 2012 firms that do not exceed two of the three following criteria are regarded as small companies in the fourth directive: total assets \leq EUR 4 400 000 €; net turnover \leq 8 800 000 €; and average number of employees \leq 50 (European Commission 2006). These thresholds set out the maximum values, and member states may decide lower thresholds. In 2009 it was proposed that micro entities should be exempted from the accounting directives (European Commission 2009). According to the proposal, micro entities are firms which on their balance sheet dates do not exceed two of the three following criteria: total assets \leq 500,000 €, net turnover \leq 1,000,000 €, and average number of employees \leq 10.

³ <<The figure will be updated>>

⁴ The empirical evidence we cover in this review uses data from Belgium, Korea, Finland, France, Netherlands, Norway, Spain, Sweden, UK and US, which we assume partly reflects data availability and partly the domicile of the researchers. There are data available for a number of countries, and the Orbis database covers 65,000 listed companies and more than 100 million private companies from around the world (<http://www.bvdinfo.com/Products/Company-Information/International/ORBIS.aspx>, visited November 22, 2012). In addition do tax authorities, banks, credit rating agencies, central banks, governmental statistics offices, and international organizations collect data which may be available for researchers.

⁵ We refer to the largest international audit firms as Big N. Until 1989 there were eight firms (Arthur Andersen, Arthur Young & Co, Coppers & Lybrand, Ernst & Whinney, Deloitte Haskins & Sells, Peat Marwick Mitchell, Price Waterhouse and Touche Ross). In 1989 the Big Eight was reduced to Big Six due to the merger of Ernst & Whinney and Arthur Young into Ernst & Young and the merger of Deloitte, Haskins & Sells and Touche Ross into Deloitte & Touche. In 1998 PricewaterhouseCoopers was formed by a merger between Price Waterhouse and Coopers & Lybrand, reducing Big Six to Big Five. When Arthur Andersen ceased to exist in 2002 after the Enron scandal, the number of large international auditing firm was reduced to four.

⁶ The relationship between fee and industry expertise is hard to interpret as “there is no clear consensus as to whether specialization leads to superior audit quality (i.e. effectiveness), increasing audit efficiency, or a less competitive market” (Causholli, De Martinis, Hay, and Knechel 2010: 171).

⁷ Niemi (2004), using actual billing hours from Finish auditing firms, finds that the larger audit firms deliver more audit hours than smaller audit firms.

⁸ Knechel et al. (2012) summarize the evidence for public firms and show that audit quality, proxied with these outcome measures, is positively associated with Big N-auditors, industry experts, experienced auditors and the size of the audit office.

⁹ Unconditional conservatism refers to the tendency to understate assets and/or overstate liabilities without considering economic outcomes. For instance may firm decide immediate expensing of all internally generated assets irrespective of whether capitalizing will give better matching of revenues and expenses or not. Conditional conservatism refers to the asymmetric treatment of unrealized gains or losses, where unrealized losses are charged to the income statement when expected while a much higher degree of certainty is required to recognize unrealized gains. Conditional conservatism improves contracting efficiency and is therefore viewed as increasing accounting quality. Unconditional conservatism does not since choosing alternatives that reduce income/assets/equity by default reduces the informational value of financial statements (for instance not capitalize internally generate assets when the asset meets the recognition criteria).

¹⁰ The environments faced by public firms in different countries are much more homogeneous compared to the environments that surround private firms. Also managers and owners incentives are more homogeneous due to the common need of satisfying the capital markets expectations regarding firm specific information and a competitive return.

¹¹ Goodwin (2011), who analyzes Australian listed firms, finds that 29 percent of all audits are performed by audit partners that have only one or two clients and that the average auditors signs off 2,52 audits. It is hard to imagine that an auditor can be regarded as independent if all income comes from one or two clients. Thus, it is obvious that most auditors of public firms must have private clients.

¹² This is not particular for auditing studies, but for also for studies in accounting (see e.g. Ball and Shivakumar 2006 and Burgstahler, Hail, and Leuz 2006).

¹³ ¹³ Similar to accounting and auditing research using public firms, there is a selection problem also in private firm studies that might bias the results because firms are not randomly allocated to discrete groups (i.e. stay public or go private; voluntarily choose an auditor or not, choose a Big N auditor or not; and manipulate earnings or not). For discussion of the selection problem, we refer to Lennox, Francis, and Wang (2012) and Clatworthy et al. (2009).

¹⁴ «Research suggests that 80 percent of all businesses in the United States are family owned (Daily and Dollinger 1992) and family businesses contribute between 50 percent and 60 percent of U.S. gross domestic product (Francis 1993; Upton 1991). Similar findings have been reported in the UK (Stoy Hayward and The London Business School 1989, 1990), Western Europe (Lank 1995), and Australia (Smyrnios and Romano 1994; Smyrnios et al. 1997). Providing further evidence of the contribution of family business to the economy, La Porta et al. (1999) and Schleifer and Vishny (1986) find that the ownership structure of even large public companies is characterized by controlling stockholders who are more often families, usually the founder or their descendants.» (Carey, Simnett, and Tanewski 2000 p. 37).

¹⁵ It may also be important to take into account that family firms by no means are free from agency conflicts. According to (Dyer 2006: 260), family firms may serve as “the breeding grounds for relationships fraught with conflict”. Thus, family firms are not homogeneous due to e.g. varying degree of family ownership and family involvement in boards and management. For instance are some founder-led while other are owned and managed by subsequent generations, which may have implications for family firms willingness and ability to take risk (Zahra, Hayton, and Salvato 2004: 364) and performance (Stewart and Hitt 2012).

¹⁶ Hope et al. (2012) incorporate variables capturing family ownership, family involvement in boards and management, and family ties between owners, board members and CEOs into the tests. Hope and Langli (2010) supplement association tests with change tests. Many variables that account for firm heterogeneity in ownership, board composition and management in private firms are stable over time, and if they are constant these variables disappear in the change tests. Cano Rodríguez and Alegría (2012) is an example of the use of panel data techniques that controls for unobserved firm-specific variables that are constant over time.

¹⁷ Minnis (2011) address omitted variables in one paragraph (in section 5.7). Cassar (2011) discusses Minnis (2011), and he greatly expands the discussion of how omitted variable may threaten the results in Minnis (2011). The strength of the discussion of omitted variable in both studies is that they exemplify by suggesting specific variables that are omitted.

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