Auditor choice in the Belgian nonprofit sector: a behavioral perspective

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This study investigates auditor choice in Belgian nonprofit organizations from a behavioral perspective. We investigate whether auditor choice in favor of an auditor with a high (versus low) level of sector specialization is associated with the importance that nonprofit organizations attach to six auditor attributes: competence/integrity/deontology, working relationship with management, audit fee, practical execution of the audit, client oriented analysis and suggestions, and sector expertise. It is important to understand the criteria underlying this choice as it has been revealed in the extant literature that auditor sector specialization improves audit quality and financial statement information. We find that nonprofit organizations attaching higher value to sector expertise and client oriented analysis and suggestions are significantly more likely to choose an auditor with a higher level of sector specialization. From this finding we derive a number of recommendations for the audit profession and for policy makers.

Keywords: auditor choice, auditor sector specialization, nonprofit organizations, behavioral study, Belgium.

1. Introduction

In the wake of corporate scandals and failures the external audit function has attracted significant attention from legislators, regulators, and the media in recent years. Policy makers have considered increased regulation of external audit all over the world (Sarbanes Oxley reforms in the US, Cadbury Committee in the UK, Code Tabacksblatt in the

Netherlands, Code Lippens in Belgium). Audit quality and its information risk reducing role have become more important than ever to corporate investors and other stakeholders. The focus on for-profit, publicly traded corporations in prior audit research is caused by the fact that audit quality is particularly important for corporations that are dependent on external capital markets to raise funds. However, not only for-profit corporations, but also nonprofit organizations had their share of governance-related scandals (Hempel and Borrus, 2004). "An unfolding list of questionable dealings (...) has caused public confidence in charities to plummet" (The Washington Post, 2002). Financial reporting problems with nonprofit organizations have led legislators worldwide to examine governance and accountability issues in the nonprofit sector. 'New Public Management' is a global reform in governmental and nonprofit organizations to make financial reporting more transparent and to professionalize management. Inspired by this reform the Belgian legislator imposed a legal requirement for all very large nonprofit organizations to have their financial statements monitored by an independent external auditor starting from 2006[1]. Nonprofit organizations have a significant role in the Belgian economy. They deliver about 5% of gross domestic product (GDP) and employ 11.5% of the total salaried workforce (Koning Boudewijn Stichting, 2008). Their impact on the Belgian economy has increased since the start of the decade thanks to vigorous growth that has consistently outstripped the equivalent rate in the rest of the economy. Given nonprofit organizations' strong reliance on government grants, donations and volunteers, it is important to improve their accountability, to consider the monitoring provided by the external auditor and to understand the selection of the auditor. The present study is performed among 282 Belgian nonprofit organizations and examines a number of behavioral criteria playing a role in nonprofits' choice decision in favor of an

[1] Very large nonprofits are organizations that employ more than 100 full-time equivalent employees; or exceed at least two of the following criteria: 50 full-time equivalent employees, total revenue of 6,250,000 EUR, and balance sheet total of 3,125,000 EUR.

auditor with (more versus less) sector specialization. This choice decision is important because of its potential impact on audit quality, which regulators and legislators seek to address. The use of sector specialization as a proxy for audit quality has been supported in recent empirical auditing research. It has been found that sector specialists are better able to detect errors (Owhoso et al., 2002) and are more likely to require compliance with auditing standards (O'Keefe et al., 1994). Firms audited by sector specialists have lower discretionary accruals and higher earnings response coefficients (Balsam et al., 2003; Krishnan, 2003), demonstrate higher client satisfaction (Behn et al., 1999) and apply higher disclosure levels (Dunn and Mayhew, 2004). Also in the nonprofit sector empirical evidence confirms that industry specialization is an important audit quality characteristic. Auditors specialized in the education sector are found to be associated with decreased levels of GAAS reporting violations (O'Keefe et al., 1994) and with decreased audit quality deficiencies noted in quality control reviews (Deis and Giroux, 1992, 1996). Auditors specialized in government auditing are revealed to demonstrate higher audit quality as perceived by the local governments' finance officers (Lowensohn et al., 2007).

Given the legislative focus on external auditing in nonprofit organizations in order to improve their governance and financial statement quality, and given the empirical evidence that auditors with sector expertise offer greater audit quality, our study focuses on the choice decision made by nonprofit organizations in favor of an auditor with (more versus less) sector expertise. We study this choice decision from a behavioral perspective. This perspective implies the identification of a number of relevant auditor attributes which are perceived (more versus less) important to clients in choosing an auditor. We identified a set of relevant auditor attributes through an extensive literature review, we operationalized each auditor attribute by means of multiple statements and we questioned these statements in a large-scale survey addressed to 1,000 nonprofit organizations. The aim is to detect whether the

importance attached to certain auditor attributes during the most recent auditor choice decision process, is related to the current auditor's level of sector specialization. We control for the nonprofit organizations' resource dependence context.

Regression analysis reveals a significantly positive relation between the current auditor's level of sector specialization on the one hand, and the importance attached to the auditor attributes sector expertise (*SECTOR_EXP*) and client orientation (*CLIENT_FOCUS*) during the most recent auditor choice decision process on the other hand. More specifically, the results reveal that nonprofit organizations that have chosen an external auditor with higher levels of sector specialization, attach significantly greater importance to an auditor's number of clients in the same sector, to an auditor's understanding of the client's sector and organization, to an auditor's capability to provide added value, useful suggestions and guidance on accounting principles and to an auditor's willingness to conduct client service reviews. The main conclusions are that (1) non-profit organizations know which auditors are sector specialists and which are not, (2) there clearly is a segment of sector specialists, (3) sector specialists should stress in company profile descriptions and tenders their sector expertise and their client oriented focus in order to gain the full potential of clients that are eager to engage a sector specialist, (4) sector specialists should invest in sector-specific training and in their client orientation in order to meet client expectations and to promote client loyalty, (5) policy makers could stress the importance of auditor attributes that are perceived to belong to sector specialists in order to encourage selection of a sector specialist and thus audit quality. The positive relationship between financial debt ratio, measuring resource dependence context, and choice of a sector specialist, supports that sector specialization is a proxy for audit quality.

2. Sector Specialist Auditors and Behavioral Choice Criteria

Auditor choice has been widely studied in the extant literature. The large majority of auditor choice research focused on the choice for a BigN or a NonBigN audit firm and studied objective (non-behavioral) determinants of auditor choice, mainly grounded in agency theory. In the following paragraphs we justify and further elaborate our focus on the choice of a sector specialist adopting a behavioral perspective.

2.2 Choice of a Sector Specialist Auditor

BigN versus NonBigN membership as focus of auditor choice research (e.g. Tate, 2007; Hope et al., 2008) is due to the consistent evidence in the Anglo-Saxon literature that BigN auditors are quality differentiated from NonBigN auditors. For example, accounting errors are less likely to be observed in financial statements of BigN clients (DeFond and Jiambalvo, 1991), BigN auditors are confronted with lower litigation rates (Palmrose, 1988), earnings response coefficients are significantly higher for BigN clients (Teoh and Wong, 1993) and BigN auditors use lower quantitative materiality levels (Blokdijk et al., 2003). In a Belgian context, however, Sercu et al. (2002) and Vander Bauwhede and Willekens (2004) were not able to detect quality differences between BigN and NonBigN audit firms. According to Khurana and Raman (2004) the perception of BigN performing higher-quality audits than NonBigN is primarily a function of the litigation environment. An auditor's insurance role ('deep pockets'), and consequently perceived quality, is magnified in a more litigious environment like the US but is of less importance to investors in other environments like Belgium (Van Caneghem, 2010). The Belgian stock market is very small (Weets and Jegers, 1997), which implies that the large majority of auditor clients are privately held firms, which decreases the threat of litigation. Moreover, in Belgium both Big4 and NonBig4 audit firms need to provide the same level of assurance: at maximum 3 million Euro for non-listed clients

and 12 million Euro for listed clients. The 'Instituut van de Bedrijfsrevisoren' (IBR - Belgian Institute of Auditors) primarily stresses the information risk reducing role of auditors, not their assurance role (De Wolf, 2011). And last but not least, in comparison with other European countries (France, Germany, The Netherlands and the UK), Belgium counts 2 to 5 times less auditors, taking into account differences in GDP. Consequently, the 925 certified auditors in Belgium are able to fulfill the needed number of mandates that allows them to develop high levels of sector expertise (l'Echo, 2011). Given the Belgian context and given the recent stream of literature that supports the use of sector specialization to proxy for audit quality (reduction of information

risk), we focus on the level of sector specialization in this study[2]. A sector specialist's extensive knowledge of the client's business environment, sectoral accounting practices and potential ''abusive'' accounting practices, is an information risk reducing factor for investors and other stakeholders. Structural shifts by audit firms in the direction of greater sector focus suggest that industry specialization plays an increasingly important role in enhancing audit quality (Hogan and Jeter, 1999; Solomon et al., 1999).

We measure auditor sector expertise at signing auditor-level and based on the total number of nonprofit audits performed within a dataset of 3,353 audited Belgian nonprofit organizations. This measure solves some problems associated with the conventional measurement applied in the extant literature, being sector expertise at office or audit firm level based on sales within the specific client's sector. A measure of sector expertise at office or audit firm level is mainly based on the assumption that auditors are homogeneous within the audit office or firm as all auditors within this office or firm are assigned the same expertise score. Though, auditor expertise is uniquely held by individual partners through

[2] The legal obligation for Belgian very large nonprofit organizations to have their financial statements monitored dates from 2006, thus is very recent. However, a substantial number of nonprofit organizations in our dataset (64.54%) had their financial statements monitored by an external auditor before 2006 for several reasons (voluntarily, due to an obligation by a subsidizing or supervisory authority, or due to a specific sectoral regulation), which guarantees sufficiently high levels of auditor specialization in the sector under study.

their deep personal knowledge of local clients and cannot be readily captured and uniformly distributed by the firm to other offices (Carcello and Nagy, 2004), even to other auditors/partners within the office (Chin and Chi, 2009). In a related vein prior studies show that most of the knowledge in any organization, including an audit firm, is tacit knowledge (Bonner, 2000; Knechel, 2000). If an audit firm's culture norms encourage knowledge hoarding as a source of power or job security, auditors may refrain from sharing what they know (Vera-Munoz et al., 2006). In line with these arguments Chin and Chi (2009) revealed that sector expertise measured at signing auditor-level is more relevant than at audit-firm/office-level in explaining audit quality (preventing financial statement mis- and restatements). Next, the measure for sector expertise in this study is client-based, not sales-based. It is possible, and likely, that an auditor employed in a small audit firm performs many nonprofit audits, thereby being an expert, but he may not claim a larger share of sales within the nonprofit auditing market when compared to a non-expert auditor employed in a large international audit firm providing a few audits to larger nonprofit organizations. The very likely situation in a nonprofit setting where an auditor has a number of small nonprofit clients and has developed the knowledge base to be a specialist may be captured by a number-of-clients-based measure and not by a sales-based measure (Balsam et al., 2003; Tate, 2007; Chin and Chi, 2009). In line with these arguments we use a client-based measure of sector expertise to avoid a bias towards large clients.

By using a number-of-clients-based measure of sector expertise at signing auditor level we are able to study choice of a sector specialist in a dataset comprising both Big4 and NonBig4 clients, without the risk that results are driven by the Big4/NonBig4 concept. In comparison with other frequently used measures of sector expertise the current measure is namely less likely to be correlated with the Big4/NonBig4 dichotomy (.099 in the current dataset). Prior research on the choice (and audit quality) of a sector specialist almost

exclusively focused on samples of clients audited by BigN firms only due to the focus on firm- or office-level measures of sector specialization (Balsam, 2003; Krishnan, 2003; Ferguson et al., 2003; Francis et al., 2005; Chin and Chi, 2009; Ettredge et al., 2009)[3].

2.2 Auditor choice from a behavioral point of view

Prior studies examining the choice for a (Non)BigN or (non) sector specialist auditor focused on objective economic variables like debt ratio, growth and financial distress and mainly adopted an agency theory perspective to propose hypotheses. In contrast with the majority of prior research, we study the selection of an auditor with sector expertise from a behavioral perspective. We do control, however, for more conventional objective factors, namely reliance on financial debt, reliance on government grants and firm size.

The few existing behavioral studies on auditor choice (Addams and Allred, 1994, 2002; Rummel et al., 1999; Stanny et al. , 2000; Sands and McPail, 2003) demonstrate three shortcomings. First, they are restricted to identifying and rank ordering auditor attributes perceived important to clients when choosing an(y) auditor. These prior studies do not make the link with the specific choice made. The aim of this study is to identify perceptual choice criteria (auditor attributes) considered important by clients that choose a specific auditor, namely an auditor with sector expertise. A second shortcoming of prior behavioral auditor choice studies is that, with the exception of Sands and McPhail (2003), all these studies use one-item measures to capture auditor attributes. As suggested by Roberts (1999) we use multiple statements per auditor attribute to improve the reliability and validity of the underlying constructs. A third shortcoming is that the extant behavioral auditor choice

[3]In the US, the audit report of a publicly listed company contains the signature of the audit firm and the city in which the audit firm is located, but does not include the signing auditor's identity. Therefore, the extant studies on sector specialization are primarily based on firm- or office-level measures of sector specialization. The latter type of measures have the disadvantage to be correlated with the BigN/NonBigN dichotomy, leading Ettredge et al. (2009) for example to state that "Use of dependent variables that capture whether clients of «only» Big N auditors choose industry leaders avoids confounding the demand for Big N audits with demand for audits provided by industry specialists". The Belgian legislation, however, also requires audit reports to include the identity of the signing auditor. This regulation provides us with a setting to measure sector expertise at signing auditor level.

literature exclusively focused on for-profit corporations (in the US and Australia). Given the argument of Tate (2007) that " the culture, organizational structure, and financial needs of nonprofit organizations are different from that of the for-profit sector, and therefore, the monitoring needs provided by external auditors may be different" there are reasons to believe that the choice decision of non-profit organizations may be different from that of for-profit corporations. Hence, the contribution of studying auditor choice in nonprofits (in Belgium).

The advantage of a behavioral approach is that it enables us to formulate a number of recommendations in order to encourage the selection of a sector specialist. This might contribute to an increase in audit quality among nonprofit organizations. Governmental (e.g. subsidizing) authorities for example could promote the auditor attributes perceived to belong to sector specialists, and sector specialists could try to gain full client potential by stressing the auditor attributes desired by clients that are looking for a sector specialist.

In practical terms the behavioral perspective implies the identification of a number of relevant auditor attributes which are perceived (more versus less) important to clients in choosing an auditor. We identified relevant attributes of auditors on the basis of the behavioral auditor choice literature (Addams and Allred, 1994, 2002; Rummel et al., 1999; Stanny et al., 2000; Sands and McPail, 2003), the behavioral auditor switching literature (Addams and Davis, 1994; Beattie and Fearnley, 1995; Addams et al., 1996; Magri and Baldacchino, 2004) as well as the behavioral professional services literature (Bojanic, 1991; Higgins and Ferguson, 1991; Scott and Van der Walt, 1996). From the aforementioned behavioral studies we identified the following relevant auditor attributes: technical competence, credibility (with dimensions such as good reputation and integrity), customer focus (timely services, quick responses and proactivity), access/availability (proximity, accessibility to audit staff and partners, approachability in general sense), personal working relationship (individualized attention, personality fit), audit fee (fee level, fee structure,

method of pricing), range of non-audit services (tax, legal, human resources, etc.) and sector specialization (experience and expertise in the client's sector). We refer to Sands and McPhail (2003, p. 116) for a useful overview of the relevant behavioral literature and as a justification of the identified auditor attributes. Based on the auditing literature (Duff, 2004; Sands and McPhail, 2003) and a number of interviews with experienced members of the accounting profession we operationalized each auditor attribute by means of multiple statements. We included the 44 developed statements in a survey and questioned by means of a 5 point scale to what extent each statement was important as a choice criterion during the selection process of the current auditor (1= not important at all, 5= very important). As the research technique applied in this study, factor analysis, has no means of differentiating the relevant from the irrelevant items (Hair et al., 1998), we had to remove those statements that were considered not important in the choice of an auditor. This reduction process resulted in ten statements being deleted, including all (eight) statements regarding non-audit services, and two statements regarding respectively international scope and proximity of the audit firm. The auditor's ability to provide non-audit services clearly is not an important choice criterion among Belgian nonprofits. The other relevant auditor attributes identified from the literature, were still represented by at least two statements. The remaining 34 statements were reduced to a smaller number of factors using factor analysis. Both the Kaiser-Meyer-Olkin (K-M-O) measure of sample accuracy (0.924) and the Barlett test (4799.231^{***}) indicate that the input correlation matrix is amenable to factor analysis. A Varimax rotation of the factor matrix yielded six significant factors with an eigenvalue greater than one (Table 1). These factors together accounted for over 60% of the variance in the scale items. A loading factor of 0.45 or higher (Hair et al., 1998) was used for item selection resulting in 29 statements loading significantly onto six factors or auditor attributes. The six factors or auditor attributes also were tested for reliability using Cronbach's coefficient alpha. The six auditor attributes

exhibited well over the 0.60 reliability level suggested by Hair et al. (1998). The six resulting auditor attributes demonstrate good comparability with the attributes identified in the prior literature (Beattie and Fearnley, 1995; Magri and Baldacchino, 2004; Sands and McPhail, 2003).

<Insert Table 1 near here>

Our aim is to identify those auditor attributes of which the perceived importance matters in the nonprofit organizations' choice decision in favor of an auditor with (more versus less) sector expertise. In the next section, we develop a number of hypotheses for the auditor attributes identified through the factor analysis.

3. Literature Review and Hypothesis Development

Despite the fact that the legal requirement for very large Belgian non-profit organizations to have their financial statements monitored, was introduced only recently (i.e., as from 2006 onwards), almost 65% of the nonprofit organizations in our dataset had their financial statements monitored by an external auditor before 2006 for several reasons (voluntarily, due to an obligation by a subsidizing or supervisory authority, or due to a specific sectoral regulation). Untabulated survey responses suggest that Belgian nonprofit organizations have clear perceptions regarding the auditing market and its auditors, which is thus not surprising. Around 45% of the respondents indicated in the survey that auditor choice was based on positive word-of-mouth and recommending by colleagues in the sector, subsidizing authorities, umbrella organizations or others. Word-of-mouth as a communication tool in the Belgian auditing sector is of considerable importance due to the prohibition of advertising. The importance of personal recommendations to accountants and auditors has been stated in the literature as well (Young and Denize, 1995). Further, about 15% of the respondents selected an auditor based on prior experiences with the auditor. These experiences originate

from nonprofit organizations that underwent financial statement audits before 2006, or from nonprofit board members that occupy board mandates in for-profit organizations as well. There is thus quite extensive communication and experience regarding auditors and their attributes in the nonprofit sector, implying that the resulting perceptions may drive auditor choice. This fact legitimates the behavioral/perceptual approach adopted in this study.

While the six auditor attributes, identified by means of factor analysis, are probably attractive to all clients, we will try to identify those auditor attributes that are significantly more (or less) attractive to clients selecting an auditor with more sector specialization. We will subsequently develop hypotheses for the auditor attributes competence/deontology/reputation (*COMP*), relationship with management (*RELATION_MGT*), client-oriented analysis and suggestions (*CLIENT_FOCUS*), practical execution (*PRACT_EXECUTION*), audit fee (*FEE*) and sector expertise (*SECTOR_EXP*).

Technical competence (Eichenseher and Shields, 1983) and **Integrity-Competence-Reputation** (Beattie and Fearnley, 1998) have been revealed in prior research as most important auditor characteristics wanted by clients. There is evidence that the latter criteria should exist in any individual audit firm before the firm is considered as a potential auditor (Sands and McPhail, 2003). Therefore, while an auditor's competence/deontology/reputation is very important choice criteria, we do not expect these attributes to matter in the choice between an auditor with more versus less sector specialization. Both sector and non-sector specialists should possess a level of knowledge and integrity that is consistent with professional standards. We hypothesize that:

H1: The importance that clients attach to an auditor's competence/deontology/reputation is <u>not</u> related to the choice of an auditor with more sector expertise.

In order to identify potential perceptions with regard to how sector and non-sector specialists differ in their **working relationship with management**, we rely on some generally acknowledged characteristics of high-performance and expert auditors as proxies for sector specialist auditors. One can assume that a sector specialist will attain higher levels of performance and expertise than a non-sector specialist when performing an audit in the sector of specialization. The literature on high-performance and expert auditors captures these constructs by means of performance evaluations that auditors achieve and auditors' self-perceptions regarding expertise in a certain audit domain (Abdolmohammadi et al., 2004; Abdolmohammadi and Shanteau, 1992; McKnight and Wright, 2011; Tan and Libby, 1997). It is revealed in this literature that high-performance and expert auditors differentiate themselves by their interaction and communication skills, their proactivity, their inclination to take responsibility and their client business awareness. Technical knowledge and ability is the least distinguishing factor between high and low performance and expert auditors (which is in line with H1). On the basis of these findings we expect that sector specialists are more likely to have interaction with management, to be aware of and to consider the client's interests and to take up their responsibilities regarding the general meeting of shareholders and the audit committee. Given the high degree of word-of-mouth and communication regarding auditors and their attributes in the Belgian nonprofit sector, we hypothesize that:
H2: The importance that clients attach to an auditor's relationship with management is <u>positively</u> related to the choice of an auditor with more sector expertise

Audit fee relates to a fair audit fee in accordance with the delivered audit work, and to a clear tender substantiated by detailed cost information. Results regarding the impact of auditor industry expertise on the level of audit fees to date have been contradictory, both in the for-profit (Pearson and Trompeter, 1994; Craswell et al., 1995; Cullinan, 1998) and the

nonprofit sector (Ward and Elder, 1994; Deis and Giroux, 1996). Thus, overall, the evidence for an "expertise" audit fee premium is somewhat mixed. Counteracting forces are at work. On the one hand, clients may be willing to pay more for an auditor with perceived expertise in the sector (market-based approach) and sector specialists need to keep their sector knowledge up to date, which requires training and sector-specific investments, increasing costs and thus audit fees (cost-based approach). On the other hand, sector specialists benefit from economies of scale, reducing the cost per client and consequently audit fees (cost-based approach) (Cullinan, 1998). Next, we expect that if a potential future mandate is within the domain of expertise an auditor is better able to assess the risks associated with this task, and to assess the evidence needed to address this risk. Consequently, we expect that sector specialists are able to provide more detailed tenders and cost information. To our knowledge there are no prior empirical studies to confirm our expectations, though. Given the mixed evidence regarding audit fee and the lack of prior empirical evidence regarding detail of cost information we do not propose a hypothesis.

Client oriented analysis and suggestions refers to the auditor focusing on the client's problems, needs and being proactive. Sector specialization enables auditors to identify and address sector specific problems and issues more thoroughly than auditors who do not have that domain-specific knowledge (Brown and Raghunandan, 1995). Further it is revealed by Abdolmohammadi et al. (2004) and McKnight and Wright (2011) that high-performance and expert auditors demonstrate higher levels of proactivity and client business awareness. It is thus very likely that sector specialists are better able to provide clients with help and suggestions regarding their sector- and organization-specific problems. Therefore, we hypothesize that:

H3: The importance that clients attach to an auditor's client oriented analysis and suggestions is positively related to the choice of an auditor with more sector expertise.

The **practical execution** of the audit relates to flexibility in scheduling audit visits, minimization of disruption, stability in the composition of the audit team, approachability and timely delivery of reports. With regard to timeliness it is revealed in the literature that sector specialists need a shorter time to get familiarized with the client's financial reporting system, resolve complex accounting issues more quickly, display greater efficiency in performing the external audit and demonstrate a shorter audit report lag compared to their non-specialist counterparts (Habib and Bhuiyan, 2011; Hammersley, 2006; Solomon et al., 1999; Owhoso et al., 2002). Potentially, these former characteristics of sector specialists are also associated with a minimization of disruption during the execution of the audit. Concerning the stability of the audit team, the literature only suggests that this dimension differs between large and small audit firms. A lack of audit team stability is primarily found among Big4 audit firms (Magri and Baldacchino, 2004). With regard to the remaining dimensions (flexibility in scheduling audit visits and approachability) no prior evidence is available to our knowledge. Despite the lack of evidence comprising all dimensions under consideration, we posit the hypothesis that:

H4: The importance that clients attach to an auditor's practical execution of the audit is positively related to the choice of an auditor with more sector expertise.

The last auditor attribute identified from the factor analysis is **sector expertise**, implying good knowledge of the client's sector and serving other clients within the client's sector. If clients attach importance to the latter dimensions they would normally be more inclined to choose an auditor with higher levels of sector expertise. The necessary condition,

however, is that the auditors with higher levels of sector expertise are known. As the survey responses suggest extensive communication regarding auditor attributes in the nonprofit sector we expect that there is a well-known segment of sector specialist auditors, and thus we hypothesize that:

H5: The importance that clients attach to an auditor's sector expertise is positively related to the choice of an auditor with more sector expertise.

Prior research related to auditor choice has adopted an agency theory framework to develop and test hypotheses. From an agency theory perspective the demand for auditing results from the information asymmetry between contracting agents in organizational settings (Jensen and Meckling, 1976). In the case of high information asymmetry, the degree and quality of required external monitoring is higher. Higher auditor quality results in better information (Teoh and Wong, 1993; Balsam et al., 2003; Dunn and Mayhew, 2004). Auditing will reduce agency risk (information risk) through better quality information. An auditor's extensive knowledge of the client's business environment, sectoral accounting practices and potential ''abusive'' accounting practices is perceived by stakeholders/investors as an information risk reducing factor. Hence, higher agency problems are associated with the choice of an auditor with sector specialization. The unique characteristics of nonprofit organizations suggest that this principal-agent conflict-based approach must be modified for the nonprofit setting because of the absence of owners (Vermeer et al., 2006; Tate, 2007). In nonprofits the mix of revenue sources greatly affects the contracting environment, and this is expected to have an effect on an organization's auditor choice decision (Tate, 2007). We use a resource dependency theory framework (Pfeffer and Salancik, 1978) to identify a number of control variables (Vermeer et al., 2006; Tate, 2007). Two of the primary sources of funding

for nonprofits are governments (grants) and creditors (debt), resulting in two control variables capturing respectively reliance on grants and reliance on debt.

Nonprofits that receive government grants need to meet additional reporting and internal control requirements, need to demonstrate that they are fiscally responsible with government-provided resources and are subject to greater scrutiny from legislators, the media, and the public (Vermeer et al., 2006). Accordingly, nonprofits that receive government grants demand for increased monitoring, which they can satisfy by choosing a higher quality auditor (e.g. DeFond, 1992).

Also the reliance on financial debt introduces a need for increased monitoring (Jensen and Meckling, 1976). The reliance on financial debt causes creditor-borrower conflicts because the borrower has incentives to take risks in using the borrowed funds or to carry out the objectives of the nonprofit potentially conflicting with the desires of the creditor (Vermeer et al., 2006). The existence of debt is thus likely to be associated with the choice of an auditor with sector expertise.

A third control variable is the size of the nonprofit organization. Larger organizations are more complex, are more likely to be scrutinized by the public and the media and hence can have increased demand for monitoring. Audits of larger firms are likely to involve greater complexities than are those of smaller firms (Gist, 1992). Beattie and Fearnley (1995) find evidence that the need for auditors' industry specialization is more important to larger firms than to smaller firms.

4. Methodology

4.1 Research Population and Data collection

The research population comprises Belgian nonprofit organizations that had their financial statements monitored by an external auditor during the period 2006-2008. On the basis of

archival research at the IBR 3,353 nonprofit organizations that meet this criterion have been identified. The sample population has been established by reducing the 3,353 organizations by means of random selection to 1,000 nonprofit organizations.

The data to conduct this study are collected from three sources: a national survey addressed to these 1,000 Belgian nonprofit organizations, the nonprofit organizations' financial statements, and archival research at the IBR.

The survey, sent in the summer of 2010 and addressed to the nonprofits' chairmen of the board, yielded 282 usable responses or a response rate of 28.2%[4]. The questionnaire contained three sections. In the first section, respondents had to provide some general information (i.e., the name and unique number of the organization; and the respondent's function within the organization). In the second section, respondents had to provide the following information with respect to the financial statement audit: (i) name of the auditor (for the period 2006 up to 2009); (ii) the reason for the external financial statement audit; (iii) whether the financial records of the organization are screened by another external party; (iv) the perceived benefits of an external financial statement audit; and (v) scores with respect to their level of satisfaction with and loyalty towards the audit firm. The third section contained a 44-item 5-point Likert scale, questioning the degree of importance attached to 44 auditor dimensions during the auditor choice process relating to the current auditor.

Besides the survey data, this study also makes use of archival data collected at the IBR (to measure sector specialization), and of publicly available financial data (to measure total assets and the financial debt ratio) (cf. infra).

The 282 usable respondents to our survey comprise nonprofits that are well representative for the research population of 3,353 firms in terms of organizational size and

[4] We received 312 responses, or a 31.2% overall response rate, but omitted 30 nonprofits from the dataset due to missing answers in the survey and difficulties relating to auditor identification.

nonprofit subsectors[5]. Chi-square tests reveal no significant differences between respondents and non-respondents with respect to firm size (total assets) and nonprofit subsector. The only exception is a small overrepresentation of respondents within the education and research subsector. Further, with regard to the auditor attributes *COMP*, *RELATION_MGT, CLIENT_FOCUS*, *PRACT_EXECUTION*, *FEE* and *SECTOR_EXP* independent sample t-tests reveal no differences between early and late respondents[6]. However, concerning the dependent variable, independent sample t-tests reveal an overrepresentation of auditor choice in favor of a sector specialist among the early respondents compared to the late respondents. The respondents to our survey are thus more interested in an auditor with sector expertise than the non-respondents. From a positive point of view this eases the identification of behavioral/perceptual determinants of auditor choice in favor of a sector specialist in our dataset.

4.2 Statistical Model and Operationalization of variables

To test the hypotheses we run the following OLS regression:

$$\text{CHOICE_SECTOR_SPECIALIST} = \beta_0 + \beta_1 * \text{COMP} + \beta_2 * \text{RELATION_MGT} + \beta_3 * \text{FEE} + \beta_4 * \text{PRACT_EXECUTION} + \beta_5 * \text{CLIENT_FOCUS} + \beta_6 * \text{SECTOR_EXP} + \beta_7 * \text{SCREENING_SUBS_AUTH} + \beta_8 * \text{FIN_DEBT_RATIO} + \beta_9 * \text{LNTA}$$

The dependent variable *CHOICE_SECTOR_SPECIALIST* equals the natural logarithm of the chosen auditor's number of nonprofit clients relating to bookyear 2008. Sector expertise is thus measured at the level of the chosen signing auditor (not the audit

[5] Six nonprofit subsectors are identified: (1) culture, sports and recreation; (2) education and research; (3) healthcare; (4) social service; (5) advocacy; and (6) other.

[6] The idea behind the latter tests is that late respondents (respondents to the follow-up survey) are more likely to resemble non-respondents than do immediate respondents (Moore and Tarnai, 2002).

firm), and is based on the total number of nonprofit audits that he/she performed in bookyear 2008 within the 3,353 audited Belgian nonprofit organizations. This information was collected by means of archival research at the IBR. The survey, sent in the summer of 2010, questioned choice criteria relating to the 'current auditor'. Given the compulsory three-year auditor mandate in Belgium, this 'current auditor' refers to the auditor verifying the financial statements of book years 2007, 2008 or 2009. Sector specialist data dating from verifications of book year 2008 are thus appropriate to cover this period. We note that the correlation between *CHOICE_SECTOR_SPECIALIST* and the Big4/NonBig4 dichotomy is very low in the present dataset (.099), which excludes interference with the Big4/NonBig4 concept.

The main independent variables relate to the importance attached to six auditor attributes: competence/deontology/reputation, relationship with management, audit fee and tender, client-oriented analysis and suggestions, practical execution of the audit, and level of sector expertise. The dimensions underlying these auditor attributes were questioned in a survey. By means of a factor analysis on these dimensions, six auditor attributes have been established. These auditor attributes are included in the regression analysis by means of their rotated factor scores, respectively *COMP, RELATION_MGT, FEE, CLIENT_FOCUS, PRACT_EXECUTION, SECTOR_EXP*.

As control variables we consider a number of objective characteristics that relate to the nonprofit's resource dependence context: reliance on financial debt, reliance on government grants and size of the nonprofit organization. Reliance on financial debt is captured by means of the financial debt ratio (*FIN_DEBT_RATIO*) equaling long-term financial debt divided by total assets, averaged over the years 2008 and 2009. To mitigate the impact of outliers, the financial debt ratio is winsorized at 2.5% and 97.5%. Reliance on government grants is proxied by a dummy variable screening by a subsidizing authority (*SCREENING_SUBS_AUTH*), with 1 implying that there is a (complementary or

overlapping) screening of the financial statements by a subsidizing authority, and 0 implying that there is no such screening. Due to a wide divergence of subsectoral regulations within the nonprofit sector, financial reporting in the Belgian nonprofit sector is far from uniform (Verbruggen et al., 2011). This lack of uniformity makes a correct and consistent calculation of the percentage of subsidies in total operating revenue impossible and hence we use the more rudimentary dummy variable screening by a subsidizing authority. The size of the organization (*LNTA*) is calculated as the natural logarithm of total assets in year 2008.

5. Empirical Results

5.1 Descriptive Statistics and Correlations

We begin by presenting descriptive statistics (Table 2) and pair-wise correlations (Table 3) of the regression variables. With regard to the dependent variable Table 2 reveals that a Belgian auditor who is active in the nonprofit sector (i.e. performed at least 1 audit in this sector in 2008) on average performed 15.76 nonprofit audits in 2008. There is wide variation in auditor sector specialization as the number of nonprofit audits per auditor ranged from 1 to 56 nonprofit audits in 2008.

<Insert Table 2 near here>

Descriptives with regard to the six established auditor attributes reveal that clients attach much to very much importance to the attributes competence/deontology/reputation, audit fee/tender and practical execution. The auditor's working relationship with management, client orientation and sector expertise are perceived somewhat lower in importance (between neutral and important). Apparently, there is a potential opportunity to improve the appeal of sector expertise as a valuable auditor attribute. At first glance, nonprofit clients seem prone to such efforts as they demonstrate a positive attitude towards

the external audit according to the survey answers. According to untabulated survey answers more than 80% of the respondents consider the external financial audit as useful for increasing the quality of financial statements, more than 50% consider the financial audit as useful to legitimate grants and 18% undergo an external audit on a voluntary basis. The descriptives relating to the control variables reveal that 56% of the nonprofits in the dataset undergo a screening of their financial statements by a subsidizing authority. The financial debt ratio is on average 18.89% and ranges from 0% to 97%. Mean total assets equal 11 million Euro. Total assets range from 82,000 Euro to 200 million Euro in the dataset.

<Insert Table 3 near here>

The correlation matrix (Table 3) demonstrates very small correlations between the independent variables. Multicollinearity is thus not an issue. The dependent variable, *CHOICE_SECTOR_SPECIALIST*, is significantly and positively correlated with the importance attached to an auditor's sector expertise and client focus and with the financial debt ratio, which is in harmony with the expectations.

5.2 Main Results

<Insert Table 4 near here>

The regression results are presented in Table 4. A first finding is that nonprofits attaching importance to an auditor's sector expertise are significantly more inclined to engage an auditor with higher levels of sector specialization. More specifically, nonprofits considering it important that an auditor has good knowledge of the sector and has many clients in the sector eventually choose an auditor with a higher level of sector specialization. This finding

confirms hypothesis H5. This finding indicates that there is a segment of auditors specialized in the nonprofit sector and that this segment is well known to the nonprofit organizations. The extensive reliance on word-of-mouth and knowledge from prior experiences, mentioned by the survey respondents, probably accounts for this finding.

A second finding is that nonprofits granting high value to an auditor's client orientation eventually choose an auditor with a higher level of sector specialization. This implies that nonprofit organizations perceive sector specialists to be more likely to understand what is happening within the client's organization. to provide useful suggestions and to identify examples of added value, to provide guidance on accounting principles and to conduct client service reviews. This finding is in line with hypothesis H3. As expected, an auditor with a high degree of sector specialization is better able to understand the client's organization, to provide useful suggestions and to provide auditor assistance that goes beyond basic GAAP (Behn et al., 1997). They possess sector specific knowledge and expertise that they can use to assist clients.

The importance attached to an auditor's competence/integrity/deontology, practical execution of the audit, relationship with management, and audit fee is not related with the choice decision in favor of an auditor with (more versus less) sector specialization. These auditor attributes are relevant when choosing an auditor (Table 2), but do not significantly differ between sector and non-sector specialists according to the perceptions of nonprofit organizations (Table 4).

The competence/deontology/reputation attribute is presumably considered as an essential auditor attribute that every auditor should possess. This insignificant finding is in line with hypothesis H1 and with prior studies (Beattie and Fearnley, 1998; Sands and McPhail, 2003; McKnight and Wright, 2011).

Further, the value attached to an auditor's relationship with management is not found to be associated with auditor choice in favor of (more versus less) sector specialization, which is in contrast with hypothesis H2. Sector specialists are thus not perceived to communicate better with the organization's management or to take up their responsibilities better towards the organization's management.

Next, the analyses reveal that the importance attached to an auditor's practical execution plays no role in nonprofits' choice decision relating to an auditor with (more or less) sector specialization. In contrast with hypothesis H4, sector specialists are not believed to deliver reports more timely, to cause less disruption and to be more approachable. In part this may be explained by the fact that the alleged efficiency of sector specialists (Habib and Bhuiyan, 2011; Hammersley, 2006; Solomon et al., 1999; Owhoso et al., 2002) is merely one aspect of better timeliness and lower disruption. Other important aspects are the commencement and the further timing of the audit work, which are not obviously or self-evidently related to auditor sector specialization.

Finally, the importance attached to audit fee and audit tender is found not to matter in the auditor choice decision under study. Sector- and non-sector specialists are not perceived to differ concerning these attributes, which is in harmony with inconclusive prior evidence (Ward and Elder, 1994; Deis and Giroux, 1996).

With regard to the control variables, only the financial debt ratio is found to be significantly related to auditor choice in favor of a sector specialist. This finding indicates that creditors (banks) view audits provided by sector specialists as having higher quality, which is in line with prior research (Owhoso et al., 2002; O'Keefe et al., 1994; Balsam et al., 2003; Krishnan, 2003). The reliance on government grants, proxied by screening by a subsidizing authority, is not found to be significantly related to the choice of a sector specialist. Potential reasons for this unexpected finding are twofold. First, the agency

problems faced by subsidizing governments may be lower than those faced by for example banks, implying that subsidized organizations do not demand a higher quality auditor. Related to this, the existence of governmental screening may reduce the need for an additional high quality monitoring mechanism (Vermeer et al., 2006) like an auditor with sector expertise. Second, the proxy used to measure reliance on government grants may be too rude and may not adequately capture the extent of reliance on governments grants, but merely the reliance on it. Organizational size is not found to be related to the choice of a sector specialist. Prior research did reveal that larger organizations are more likely to appoint higher quality auditors (e.g. Tate, 2007), but measured higher quality auditors in terms of Big4/NonBig4 membership. Given the lack of correlation between Big4/NonBig4 membership and sector specialization in the present dataset, it is not surprising to find an insignificant relationship.

5.3 Sensitivity analyses

We performed several sensitivity analyses.

We considered two alternative measures for the dependent variable. First, we transformed the dependent variable into a dummy, capturing the choice for an auditor with high (1) versus low (0) sector specialization. In order to withhold a sufficient number of observations in both groups (0/1), we considered the top 50% and the top 40% sector specialists as cut-points to dichotomize the dependent variable. The logistic regressions revealed precisely the same findings as our main regression results. Second, we computed a more accurate dependent variable, considering sector specialization at the level of six nonprofit subsectors. The main results of this paper relate to expertise in the nonprofit sector at a broad level, viewing the entire sector as homogeneous. However, (signing) auditors may also specialize in the types of nonprofits they audit. For example, one auditor might

specialize in colleges and universities or hospitals, while another might specialize in religious or environmental organizations. Six nonprofit subsectors can be distinguished, defined by the Belgian umbrella organizations (cfr. Footnote 5). When (signing) auditor sector expertise is measured at the level of these nonprofit subsectors (the number of audits performed by an individual auditor in a specific nonprofit subsector), the regression results reveal exactly the same findings.

Next, a number of additional control variables were added to the regression model. The growth of the nonprofit organization has been included (mean growth of total assets during the 2007-2009 period) because growth leads to a relatively greater need for additional external financing. Anticipating the need for financing, managers of such organizations may retain higher quality auditors to signal to fund providers that their financial statements are of higher quality. Also ROA has been included. Five dummy variables representing the six nonprofit subsectors have been included as well. Certain nonprofit subsectors are subject to more governmental regulations than other nonprofit subsectors. Hence, it is possible that in certain subsectors it is more likely to engage a sector specialist. None of these additional control variables appeared to be significant, and the inclusion of these variables did not alter the main regression results.

6. Conclusion

The external audit function has recently attracted significant attention from legislators, regulators, and the media. Although most of the focus has been on for-profit corporations, legislators have started to examine governance and accountability issues in the nonprofit sector as well. One element of governance and accountability is the external audit. The choice of an external auditor with a high level of sector specialization is an important dimension of audit quality and could improve governance, accountability and financial

reporting quality among nonprofit organizations. Given the Belgian research setting, auditor sector specialization is a more relevant measure for audit quality than the Big4/NonBig4 dichotomy (Sercu et al., 2002;Vander Bauwhede and Willekens, 2004).

The goal of this study is to identify behavioral choice criteria playing a role in nonprofit organizations' decision to engage an auditor with a higher or a lower level of sector specialization. More specifically, we investigated whether the choice in favor of an auditor with more versus less sector specialization is associated with the importance that nonprofit organizations attach to six auditor attributes: competence/integrity/deontology, working relationship with management, audit fee, client oriented analysis and suggestions, practical execution of the audit, and sector expertise. We identified these six behavioral auditor attributes (factors) by means of factor analysis out of 44 auditor dimensions, which were questioned in a large scale survey, addressed to 1,000 Belgian nonprofit organizations (response rate 28.2%). We also made use of archival data collected at the IBR and of financial data publicly available by means of the Belfirst database.

This study revealed that nonprofit organizations attaching great value to the auditor attributes 'sector expertise' and 'client oriented analysis and suggestions' eventually choose an auditor with a higher level of sector specialization. However, the importance attached to the choice criteria 'competence/integrity/deontology', 'practical execution of the audit', 'relationship with management' and 'audit fee' does not drive the auditor choice decision under study.

This study leads to a number of conclusions and recommendations. First, the finding that nonprofit organizations' importance attached to auditor sector expertise ultimately leads to the selection of an auditor with sector expertise, learns that in the perception of clients there is undoubtedly an auditor category with the reputation of sector specialist and that this perception is correct. Despite the legal obligation for Belgian nonprofit organizations to have

their financial statements monitored being very recent (since 2006) and despite the prohibition of advertising by audit firms, this type of information is apparently well known. We found that perceptions regarding auditors are shaped by prior experiences with auditors and substantial levels of communication and word-of-mouth among clients. Second, our findings provide ways not to lose the reputation of being a sector specialist auditor. The results revealed that clients perceive and expect sector specialists to perform high on sector expertise and client orientation. Consequently, in order to avoid client dissatisfaction, reputation loss and auditor change, sector specialists should strive to exhibit these two auditor attributes at maximum when performing the audit. More specifically, they should invest on a continuous basis in sector specific expertise (training, software, etc.) and they should focus on understanding the client's organization, answering questions, and providing useful suggestions. Third, in order to encourage the choice of sector specialists and thus audit quality in the nonprofit sector, policy makers, umbrella organizations and (subsidizing) governments could promote the auditor attributes that characterize sector specialists. These auditor attributes, sector expertise and client focus, are on average perceived lower in importance by nonprofit organizations than the other four auditor attributes (Table 2). There is thus quite some potential in this respect to increase the appeal of sector specialists. To this end governments could stress the value that sector specialists can provide to nonprofit organizations, for example by providing client oriented advice during the audit (e.g. as a solution for non-profit organizations' lack of specialized accounting personnel) or by increasing disclosure quality. Fourth, also sector specialists themselves can encourage choice in favor of sector specialists and thus audit quality in the nonprofit sector. In order to convince the full potential of clients that are looking for a sector specialist, sector specialists should stress their sector-specific knowledge and their client orientation in company profile descriptions and tenders. Finally, as the relationship between the financial debt ratio (proxy

for monitoring demand) and choice in favor of a sector specialist is found to be positive, sector expertise is considered an indicator of audit quality in the Belgian non-profit auditing market.

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