The Determinants of Auditor Changes in the Voluntary Sector: Evidence from UK Charities

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ABSTRACT

The market for audit services in any given country comprises distinct sub-markets, typically listed private sector, unlisted private sector, charity and non-charity not-for-profit. Audit market research has focused heavily on the private sector. Auditor change studies have examined a wide range of factors that could trigger a change decision, including agency variables, corporate governance characteristics, top management changes and opinion shopping. However, to our knowledge, no study has previously examined auditor changes in the charity sector in any country. The objective of the present paper is to investigate the generalisability of auditor change determinant models developed in the private sector and to identify factors that are peculiar to the charity sector. Based on a large dataset of 276 UK charities (138 that changed auditor between 1999 and 2003 and a matched set of charities), this study develops a logit regression model of the determinants of auditor change. The results show that charities are more likely to change auditor if the incumbent auditor is ‘top tier’, if the new auditor has greater expertise in the charity sector, if the charity has an audit committee and if the charity income has fallen significantly. In contrast with the private sector, the desire to reduce the audit fee is not a determinant of change. This probably reflects the relatively low audit fees paid by charities.

Keywords: auditor change; auditor switching; auditor-client realignment; charity sector; voluntary sector
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1. Introduction

In many countries, the voluntary, third sector (of which the charity sector is the largest element) is growing in significance as governments and communities look beyond the two-sector model of state and market. This is due to rising disillusionment with private market solutions and political and fiscal constraints on state-centred institutions. However, it is extremely difficult to obtain accurate, up-to-date data on the economic significance of this sector, and the boundaries of the sector are not clear, ranging from broad to narrow definitions. Nevertheless, it has been estimated that the broadly-defined non-profit sector expended £47.1 billion in 1995, representing 6.6% of GDP (rising to 9.2% if adjusted for the value of volunteer hours).i Moreover, between 1991 and 2001, income growth was 32%, with income from government increasing by 40% (Kendall, 2003, p.21; pp.37-38).

Not surprisingly, this growth has been associated with increasing concerns about the accountability of charities. The monitoring incentives of key stakeholder groups (i.e. beneficiaries and donors) are much weaker than in the case of for-profit organisations, where investors have direct economic incentives to assure themselves of good stewardship and management. In recent years, UK regulators have sought to improve the quality of charity reporting, through successive revisions of the charity Statement of Recommended Practice (SORP). This SORP has become almost a statutory code through the regulatory policy of the Charity Commission (Pianca and Dawes, 2004). The current SORP was issued by the Charities Commission in 2000, and updated in 2003 to reflect new FRSs. A revised SORP will apply for accounting periods beginning on or after 1 March 2005 (www.charity-commission.gov.uk). The SORP recommendations are additional to the requirements of the Companies Act 1985, the Charities Act 1993 and Financial Reporting Standards issued by the Accounting Standards Board.

The statutory audit is a primary accountability mechanism. The requirement for an independent, external audit applies to charities that exceed specified size thresholds.ii Smaller charities may also have an audit requirement under the provisions of their governing documents. The appointment and remuneration of the auditors of unincorporated charities is left to the trustees.
The market for audit services in any given country comprises distinct sub-markets, with the major sub-markets being listed private sector, unlisted private sector, charity and non-charity not-for-profit. Audit market research has focused heavily on the private sector, the main issues being examined being audit market concentration, auditor changes, auditor selection and audit pricing. These issues are interrelated: voluntary auditor change is a two-stage process – the decision to change auditor is followed by the selection of a new auditor.iii Changes occurring across the market as a whole affect concentration, while audit fee level is one factor that can trigger a change and influence selection. Auditor change studies (also termed auditor switching and auditor-client realignment) have examined a wide range of factors that could trigger a change decision, including agency variables, corporate governance characteristics, top management changes and opinion shopping.

In the UK, the structure of the charity sector audit market differs significantly from the listed company sector. The latter is highly concentrated - in 2002 the Big Five firms audited 83% by number of audits and 90% based on audit fees (Beattie, Goodacre and Fearnley, 2003). By contrast, the Big 4 audited just 17.3% of the top 2,933 charities by number and 24.6% based on audit fees (Caritas, 2004, pp.1.48-1.49). In a study of audit pricing, Binder Hamlyn emerges as a non-top tier specialist charity auditor in the UK (Beattie et al., 2001).iv

To our knowledge, no study has previously examined auditor changes in the charity sector in any country. Given the growing demand for accountability in this sector and the crucial role of external audit, the objective of the present paper is to begin to fill this void in our knowledge. Specifically, it seeks to investigate the generalisability of auditor change determinant models developed in the private sector to the charity sector and also to identify factors reflecting the particular characteristics of the sector.

The remainder of this paper is structured as follows. Section two reviews the prior literature on auditor change, virtually all of which relates to the private sector. Section three develops and presents the charity auditor change model. Methods are described in section four, while results are presented and discussed in section five. A final section summarises and concludes.
2. Prior literature

The extant auditor choice literature covers auditor selection and auditor change. The auditor change process has two stages - the auditor change decision and the new auditor selection decision (Francis and Wilson, 1988). Although no comprehensive, well-specified theory of these decisions currently exists, theoretical and empirical research conducted over the past 25 years has provided a framework for addressing the issues.

Theoretical work is grounded in agency theory and information economics. In both cases, the demand for audit services arises primarily from the existence of information asymmetries. In agency theory, an independent audit serves to reduce the agency costs arising from self-interested behaviour by agents (managers). The level of such costs varies across organisations, depending on variables such as company size, gearing and management share ownership. In information economics, the selection of credible auditors is used to signal management’s honesty (Dopuch and Simunic, 1980; 1982).

The level of agency costs and differential signalling incentives therefore suggest that there is a heterogeneous demand for audit services, characterised by DeAngelo (1981 a, b) as different levels of audit quality. DeAngelo (1981b) argues that auditor size is a surrogate for audit quality. The second wave of audit quality research identified industry specialisation as an additional auditor quality indicator (Francis, 2004). It is generally argued that the auditor change decision is triggered either by a change in company circumstances (e.g. growth or a change in top management) or by specific problems and disagreements with the auditor. Of particular interest has been the link between audit opinion and auditor change, especially given the concerns over opinion-shopping that emerged in the competitive environment of the 1990s.

Auditor selection studies seek to explain the choice of existing auditor for a group of companies at a given point in time. The majority of empirical work has been directed towards auditor selection (e.g. Francis et al., 1999; Abbott and Parker, 2000, Beasley and Petroni, 2001, Citron and Manalis, 2001) and the second stage of the auditor change process (e.g. Francis and Wilson, 1988; Johnson and Lys, 1990; DeFond, 1992; Abbott and Parker, 2000, Woo and Koh, 2001). Studies of the latter type generally seek to explain shifts in quality between the incoming and outgoing auditor.
Most empirical studies of the auditor change decision (i.e. the first stage of the auditor realignment process) have been archival studies that use statistical analysis to explore the association between the dichotomous change/not change decision variable and variables of interest. While early studies employed only univariate tests (usually chi-squared tests of association) to examine single variables of interest (e.g. McConnell, 1984; Schwartz and Menon, 1985; Craswell, 1988; DeBerg et al., 1991; Gul et al., 1992), the use of multivariate logit models has now become the norm (e.g. Williams, 1988; Chaney et al., 1997, Ritson et al., 1997, Woo and Koh, 2001, Moizer, Porter and Mohamed, 2001, Hudaib and Cooke, 2002). It is argued, based on contingency theory, that ‘auditor changes are likely to be induced by combinations of cross-theme factors’ (Haskins and Williams, 1990, p.56).

The relationship between audit opinions and auditor change (opinion-shopping) has been a particular focus of the literature. A positive association between auditor change and receipt of a qualified audit opinion in the year preceding change has been found by some studies (Chow and Rice, 1982; Smith, 1986; Craswell, 1988; Gul et al., 1992, Citron and Taffler, 1992; Krishnan et al., 1996, Woo and Koh, 2001, Hudaib and Cooke, 2002), while others do not find a significant link (Schwartz and Menon, 1985; Williams, 1988; Haskins and Williams, 1990; Ritson et al., 1997). Fewer studies examine whether opinion-shopping is successful by examining the subsequent year audit opinion. However those that do conclude that opinion shopping is generally unsuccessful (Chow and Rice, 1982; Smith, 1986). Gómez-Aguilar and Ruiz-Barbadillo (2003) report that, for their sample of Spanish companies that changed auditor following a qualification, the likelihood of a subsequent qualification is significantly related to the quality of the new auditor selected. Krishnan (1994) explores the possibility that changers receive a more conservative treatment from their auditors than non-changers and that it is this, rather than the qualified opinion itself, that triggers the change. Using a simultaneous equations model, Krishnan et al. (1996) find evidence of two-way causation between the propensity of the client company to change auditors and that of the auditor to issue a qualified opinion.

The literature also identifies a range of other factors that can trigger change. In particular, financial distress, the need for different services (caused by the issue of new securities or growth), auditor characteristics (such as top tier or industry specialisation) and company size have been the variables most frequently examined empirically. Both the issue of new securities and growth can lead client companies to seek to increase the quality of their
auditor. It is argued that client satisfaction with top tier of specialist auditors is likely to be higher than otherwise, reducing the propensity to change.

Results from empirical studies are mixed. The propensity to change auditors has been found to be significantly positively associated with financial distress (Schwartz and Menon, 1985, Hudaib and Cooke, 2002), initial public offerings (Menon and Williams, 1991), growth (Chaney et al., 1997), disagreements (DeAngelo, 1982), length of the auditor-client relationship (Levinthal and Fichman, 1988; Williams, 1988), direct solicitation (Chaney et al., 1997), top management change (Hudaib and Cooke, 2002) and receipt of adverse media publicity by the client company (Williams, 1988). A significant negative association has been found for top tier auditor (Krishnan, et al., 1996, Woo and Koh, 2001, Hudaib and Cooke, 2002), industry specialisation (Williams, 1988; Chaney et al., 1997, Ritson et al., 1997, Woo and Koh, 2001) and size (Krishnan, et al., 1996, Chaney et al., 1997, Hudaib and Cooke, 2002).

However, in other studies, no significant association has been found for: distress (Krishnan, et al., 1996), initial public offerings (Krishnan, et al., 1996, Chaney et al., 1997, Woo and Koh, 2001), growth (Williams, 1988; Krishnan et al., 1996; Ritson et al., 1997, Woo and Koh, 2001), top tier auditor (Ritson et al., 1997), industry specialisation (Krishnan et al., 1996), size (Woo and Koh, 2001), top management change (Williams, 1988, Ritson et al., 1997), audit fee change (Ritson et al., 1997, Woo and Koh, 2001, Hudaib and Cooke, 2002) or level of non-audit service provision by the incumbent (DeBerg et al., 1991).

The other method that has been used to investigate the auditor change decision is the survey method, in which company management is asked directly about the reasons for auditor change. Early studies were open-ended in nature (e.g. Burton and Roberts, 1967; Carpenter and Strawser, 1971; Bedingfield and Loeb, 1974), however more recent studies have used closed-form questions that incorporate insights from theoretical advances and prior empirical studies (e.g. Beattie and Fearnley, 1995; 1998). The most frequently stated reasons for auditor change reported by Beattie and Fearnley (1998) were: audit fee level; dissatisfaction with audit quality; and changes in top management.

Roberts et al. (1990) is the only non-private sector study of auditor change of which we are aware. It focuses on stage one of the change process, using data on public school districts in
Texas. In the logit model, auditor change was positively associated with audit fee reduction, internal control non-compliance and school board non-compliance and negatively associated with size. Insignificant variables were qualified audit opinion, administrative non-compliance, bond issue in following year, change in school board membership and change in superintendent.

While many of the factors associated with auditor change in the private sector can be expected to apply also to the charity sector, there are differences in the audit context that should be incorporated in developing a model of the auditor change decision. Some variables are not relevant in the charity setting, others may have a different relevance, and new variables might require inclusion. Although charities can have corporate status, they do not seek to raise equity capital from the financial markets and so IPOs do not arise. Acquisitions are also not a feature of the sector.

The concept of financial distress for charities is perhaps rather different, with distress occurring if income is not sufficient to meet planned programme expenditure. The change in income is a possible proxy although where charities have been set up to fulfil a specific, time-limited purpose, a significant decline towards the end of the organisation’s natural life would be expected and not indicate financial distress. The concept of industry specialist applies to the charity sector in a different way from the private sector. At one level, the charity sector itself can be considered a separate ‘industry’ from an audit perspective, in that the entire sector has associated with it a specialist body of audit knowledge. At a more detailed level, however, the charity sector is seen as comprising different ‘fields of activity’ (such as education and social care) that are conceptually comparable to industry groups in the private sector (Kendall, 2003, p.22). It is notable that, in 2004, the top eight firms (based on total income audited) did not include Ernst & Young, one of the Big Four (Caritas, 2004, p.1.48).

Beattie et al. (2001) discuss the differing nature and extent of audit risks in the charity sector. They note that, while charity trustees have similar responsibilities to company directors, there is no body of shareholders to sue an auditor for negligent work and hence litigation loss. Nevertheless, charity audit risks are, arguably, higher than for the private sector and the large audit firms, post-Enron, have been reported to be reducing the risk profile of their client portfolio, which could mean that some charity audit changes are
involuntary!! Beattie et al (2001) also report that charity auditors do not appear to always change a market-rate audit fee.

There are a number of significant methods choices to be made in undertaking an empirical study of the auditor change decision using archival data. One concerns whether the entire population of non-changers should be included or should a matched sample approach be adopted. A second is whether the independent variables should be measured as levels or changes. Francis and Wilson (1988) were the first to consider this issue explicitly, arguing that ‘even if “changes” in agency costs are insufficient, in themselves, to motivate a costly auditor switch, it is still possible that the existing “levels” of agency costs could be an important factoring the choice of the new auditor, given that a decision to change has been made for other reasons’ (p.669). The length of time period over which to measure changes is a third operational choice to be made. Williams (1988) uses either a two or three year period, ex ante model. In their stage 2 selection model, Francis and Wilson (1988) use three years preceding for change variables.

3. Charity auditor change model

The objective of the present study is to develop and estimate a model of the charity auditor change decision, specifically the first stage of that decision. The occurrence of audit change is relatively infrequent, so there is a large disparity between the number of observations of audit change charities and non-changers. This creates difficulties in logistic regression (Stone and Rasp, 1991) so, in common with several previous studies, our approach is to use a matched sample of changers and non-changers in the logistic regression model. Many (but not all) of the variables used in private sector studies are applicable to the charity sector.

One of the distinctive features of the methods used here is that we recognise that minor changes in a charity’s circumstances are unlikely to be sufficient to trigger a change of auditor. Thus, we seek to identify ‘significant’ changes in several of the variables. ‘Significant’ changes are identified by reference to the cross-sample distribution in each variable but this necessarily introduces an element of subjectivity in setting the hurdle for ‘significant’ change. In view of this, we also assess the robustness of the results to these somewhat arbitrary hurdles.
Williams (1988) identifies three concepts which might help to explain why certain events trigger a change of auditor: changes in the organisation’s contracting environment, organisational reputation and auditor effectiveness. While recognising that these concepts are not mutually-exclusive, they do provide a useful framework for discussing potential determinants for auditor change in charities.

**Changes in contracting environment**

Significant changes in a charity’s contracting environment may precipitate a change of auditor, initiated by either new agents within the charity or by a new external principal.

**Management change**

There are several reasons why a change of management may lead to a change of auditor: if the incumbent auditor is closely associated with the prior management; if the new manager is seeking a fresh approach; or if the new manager has had favourable prior dealings with the new auditor (Williams, 1988). In view of the wide variation in organisational and management structures adopted in charities it is necessary to adopt a wide definition of management for this variable. The dummy variable *offch* reflects this, taking a value of 1 if there is any change in the major officers of the charity (chair of the governing or executive body, chief executive officer or treasurer) in either the year of auditor change (year t) or the preceding year (year t-1).

**Change in financing**

Similarly major changes in the level of financing of the charity may lead to new principal-agent relationships or may require a change in the level of monitoring by the principal. As a result, management may voluntary seek an auditor of different quality, or may be encouraged to do so by the principal. For example, a charity which is undergoing a significant ‘scale’ change (i.e., increase or decrease in size), whether voluntarily or not, may wish to change auditor either to increase funders’ confidence, or to reflect the fact that a prestigious auditor is no longer perceived as necessary, or perhaps affordable, by managers. Alternatively, charities funded by public bodies such as local authorities or governmental agencies may have audit-quality conditions imposed on them by the grant-making principal.

There are two major categories of charity, fund-raisers and grant-makers, and each tends to have relatively distinctive features. Fund-raisers typically have comparatively large income
but small assets and grant-makers the opposite. Consequently, we adopt two measures of financial growth. First, a dummy variable (\textit{incgrowth}) is set to 1 if there was a significant (greater than 50% over the two years to the year of auditor change) rise in income. Second, a dummy variable (\textit{fundgrowth}) identifies a significant (greater than 100%) rise in funds over the two year period. We also identify significant changes, up or down, in the public funding of each charity. Separate dummy variables were used to identify charities with a significant (change of 20%) increase (\textit{pubfndrise}) or decrease (\textit{pubfndfall}) in public funding over the two years to the year of auditor change.

Finally, a measure relating to a significant increase in the use of debt finance by charities was incorporated. This has the potential to require greater monitoring by the debt-providing principal and the increased gearing also increases the risk of the charity with potential to harm its reputation (so this variable could also be categorised under charity reputation below). Consequently, there may be an incentive to seek a higher quality auditor. The dummy variable (\textit{distrbor}) is set to 1 if long-term borrowings increase by 20% or more between year t-2 and year t.

\textbf{Charity reputation}

Managers might seek to increase confidence in the charity following circumstances which have impacted upon the charity’s reputation. For example, management may believe that the receipt of a qualified audit opinion is unjustified, or may disagree with the incumbent auditor over accounting principles. This may encourage management to change auditor (often described as ‘opinion-shopping’). The variable \textit{audrep} is 1 if the charity is subject to a non-standard audit report in either the year of audit change or the preceding year.

Also, poor performance may lead management to change auditor to bolster confidence in the charity (and in their own ability). In the private sector, distressed companies have been observed to change auditors more often than healthy firms (Shwartz and Menon, 1985). Significant poor performance (distress?) is captured in two separate dummy variables set equal to 1 to represent a fall of 20% or more in the two years to the year of audit change for income (\textit{distrinc}) and for total funds (\textit{distrfunds}).

In recent years, in recognition of their increasing importance, charities have been seeking to increase their professionalism. One aspect of this has been to follow the private company
sector’s focus on improving corporate governance. In particular, some charities have begun to adopt mechanisms for separating management from dealing directly with auditors via the use of audit committees. There are several reasons why the existence of an audit committee may increase the likelihood of auditor change. First, the charity may attempt to distinguish itself from ‘competing’ charities by adopting best practice governance. If it does not currently have the ‘highest quality’ auditor, then it may decide to change to such an auditor. Alternatively, management may see auditor and audit committee as (partial) substitute governance mechanisms, so may choose to downgrade audit quality. Further, audit committee members may seek to protect themselves against personal reputation damage by appointing a ‘high quality’ auditor. The dummy variable \( \text{audcom} \) equals 1 if there is any evidence of an audit committee in the financial statements of the charity.

**Audit effectiveness**

**Auditor quality**

The very nature of the charity sector requires a high level of trust that the charity managers will seek to use the funds provided to them efficiently and effectively for the intended purpose. Such trust is a prerequisite for continued funding for each charity. Thus charity managers have an incentive to appoint high quality auditors to demonstrate their good stewardship over the funds provided. Typically, either or both of two measures have been used to proxy for auditor quality: auditor ‘brand-name’ (i.e., Big 6) and auditor industry specialization. \( \text{Big6} \) identifies charities that were audited by one of the large international auditing firms in the year preceding auditor change. The total charity sector market shares of new and incumbent auditors are compared in the relative market share proxy (\( \text{relmktsh} \)). The market shares are derived from the Caritas Top 3000 charities database and are based on the number of charity audits carried out by the new (incumbent) audit firm as a proportion of the total number of charities recorded in the ‘Top 3000’ book. While the total number of charities recorded each year varies, this has an insignificant effect on our measure.

**Audit fees**

In the private sector, reduction in audit fees has been found to be a major reason for audit change. While audit fees are much lower in the charity sector (Beattie et al., 2001), it is interesting to investigate whether this observation carries over to charities. Our proxy for the
change in audit fee (\textit{audfee}) is audit fee in the year of change (new auditor) measured relative to the audit fee in the preceding year (incumbent), consistent with that adopted in several previous audit change or selection studies. This proxy is positive for an increase in audit fees so a negative relationship with likelihood of audit change is hypothesised.

This yields the following model specification for auditor change:\textsuperscript{x}

\[
\text{auditor change} = f(\text{offch}; \text{incgrowth}; \text{fundgrowth}; \text{pubfndrise}; \text{pubfndfall}; \text{distrbor}; \text{distrinc}; \text{distrfunds}; \text{audrep}; \text{audcom}; \text{Big6}; \text{relmktsh}; \text{audfee})
\]

Table 1 provides a full listing of the specific variables used, their definitions and variable labels. The expected coefficient sign is positive for all variables except \textit{audfee}. Data relating to the first year of the incoming auditor is subscripted \( t \); thus data relating to the last year of the incumbent (outgoing) auditor is subscripted \( t-1 \). The basic form of the model tested is an \textit{ex ante} model, with audit change modelled as a \textit{response} to changes in charity characteristics. It is essentially a changes (rather than a levels) model, since it is changes in variables that are expected to trigger the change in auditor.

[Table 1 about here]

4. Methods
4.1 Sample selection
To identify a sample of charities that changed auditor we used the annual publication ‘Top 3000 Charities’, published by CaritasData. This database is available in hard copy form and, more recently, also on a CD-ROM (discontinued in 2004) and online at the Caritas website (Caritas, various years). It includes selected financial and non-financial information extracted from the latest annual report and accounts published by the charity and provided to Caritas at the time of going to press. It includes the top 2,000 charities by expenditure, funds and income, which, allowing for overlap across the three rankings, gives rise to the profiling of approximately 3,000 top charities.

Using the lists of ‘Auditors and their charity clients’ contained in the 1999 and 2003 hard copy books, we identified charities that had changed auditor at some point during this four-year period (hereafter ‘changers’). This process initially yielded 511 audit changers, of
which 25 were identified as due to audit firm mergers or name changes using Boys (2003). These were eliminated, as were changes involving the National Audit Office and District Audit Office, to leave 486 changes.

As there is no central publicly accessible database of charity accounting information, it was necessary to obtain the relevant information for undertaking the study direct from the charities themselves. Contact details were obtained from the Caritas database and we wrote to all changers requesting a copy of their full audited financial statements, together with their annual report if a separate document, for the two consecutive years involving their auditor change. After one set of follow-up requests, 233 charities supplied the information requested. For these charities, we sought matching charities that had not changed auditor (hereafter ‘non-changers’). There were five matching criteria:

- area of activity;
- percentage of expenditure in area of activity;
- charity type, i.e. grant-maker or fund-raiser;
- year of change (accounts available for matcher);
- size (based on expenditure).

The Caritas CD-ROM uses a three-level hierarchical classification of area of activity, represented by a six-digit code (two digits per level). Although the vast majority of charities have 100% of their expenditure in a single area of activity, some do not. Within this classification, charities are ranked by expenditure. The matching procedure was as follows:

1. Identify charities in the same area of activity (third level) with the same percentage of expenditure in that area (normally 100%), of the same type and with accounts available for the year of change.
2. Select the charity closest in size, provided this was not more than 20% smaller or 40% larger than the changer (the asymmetrical band reflects the positive skewness in size).
3. In the few cases where no acceptable matcher was available using these criteria, we applied progressively less restrictive area of activity levels until an acceptable match was found.
Letters requesting financial information for the same two years as the changer were sent to all non-changers. After one follow-up request, information for 133 non-changers was obtained. For the remaining 100 changers, the next closest matcher was determined and contacted for information; 29 usable responses were obtained. This finally resulted in a basic dataset of 162 pairs of changers and non-changers for which we had relevant financial information. Missing data further constrained the sample size to 138 pairs for the basic model.

4.2 Data collection
Data was manually extracted from two sources – the annual Caritas databases and the charity annual report and accounts. Details of grants received from the public sector, income and funds were extracted from the Caritas database. Details of gearing, change in top officers (executive management body and governing body), audit report type, audit fees were extracted from annual reports. A detailed description of the variables is shown in Table 1.

5. Results
5.1 Incidence of auditor change
For the overall four-year period 1999-2003, a total of 486 auditor changes was found among charities included in the top 3000 charities database, representing an annual rate of change of 4.0%. This is broadly comparable with that in the UK listed corporate sector. Beattie and Fearnley (1994, Table 4) report a rate of 5.0% for continuing companies over the period 1988 to 1991, Moizer and Porter (2004, p.27) report a rate of 2.3% from 1990 to 2000.

5.2 Descriptive statistics
To provide an indication of the relative importance of charities, Table 2 provides information on the size of the 276 charities in the final sample. Overall, for the year prior to auditor change, the charities had a mean (median) income of £9.1m (£3.0m) and total funds of £29.1m (£4.1m). As expected, given the matching process, the average size of changers and non-changers was not significantly different. Charity audit fees are relatively small with a mean (median) of £12,600 (£7,000) overall. On average, audit changers have statistically significantly (at the 10% level) higher average audit fees in the year prior to auditor change. However, the audfee variable shows that they experience a median decline in audit fee of 1.9% on average compared to an increase of 3.8% for non-changers (significant at the 1%
level); the almost identical mean audit fee change for the two groups suggests that outliers may be distorting the means. The remaining continuous variable relmktsh provides a somewhat mixed picture, with changers apparently moving to auditors with higher (lower) market share according to the mean (median). In fact, 50 (63) of the changers selected a new auditor with at least a 20% higher (lower) market share.

The dichotomous variables do not suggest major differences between changers and non-changers apart from the two final variables. Charities which change auditor are more likely to have an audit committee and to have an incumbent Big6 auditor. The latter observation is in stark contrast to most private sector company studies which typically show a negative coefficient (Krishnan et al., 1996; Woo and Koh, 2001).

5.3 Estimation of basic model
The basic logistic regression model results are provided in Table 3. These suggest that of the hypothesised potential determinants, four have some impact on the likelihood of a charity changing its auditor. The strongest determinant is the Big6 variable which suggests that charities having a Big6 auditor are more likely to change auditor. Charities appear more likely to change auditor to move to an auditor with greater specialism in the charity sector (proxied by market share). The presence of an audit committee also seems to increase the probability of changing auditor. Finally, there is weak evidence that a fall in income may lead to a change.

6. Summary and conclusions
The objective of the study was to identify, for the first time, the determinants of auditor change in the UK charity sector. A logistic regression model of auditor change was
estimated using data for a sample of 138 charities that changed their auditor together with a matched set of non-changers. This showed that, in direct contrast with prior results for listed companies, charities are more likely to change auditor if their incumbent auditor is one of the Big 6. Taken with the apparent move towards greater charity audit specialists, this may reflect charities’ desire for auditors with a greater focus on the voluntary sector, in which the Big 6 dominance is far lower (Beattie et al., 2001). Alternatively, it may indicate a tendency for Big 6 auditors to reduce their involvement in the voluntary sector. It is also interesting to note the influence of audit committees on auditor change, an observation which has not been previously reported. Further work is required to test the robustness of the results to the specific proxies used in this basic model.
Notes

i This definition includes political parties and religious congregations.

ii A full statutory audit is required for incorporated and unincorporated charities in England and Wales and incorporated charities in Scotland with an annual gross income over £250,000 (Charity Commission, 2002; OSCR, 2004, para. 3c). Unincorporated Scottish charities whose gross annual income or expenditure in the year (or either of the preceding two years) exceeds £100,000 also require a full statutory audit (OSCR, 2004, para. 3c).

iii ‘Involuntary’ auditor changes occur when audit firms merge or are taken over.

iv Binder Hamlyn merged with Arthur Andersen in 1994, although 7 offices continued to use the Binder Hamlyn name – this name disappeared with the demise of Andersen.

v Wallace (1980) identifies insurance as a third source of demand, whereby the auditor’s professional liability insurance serves to indemnify investors and creditors against financial losses. It is not clear how this applies to unincorporated charities, although charity trustees might wish to indemnify themselves against accusations of improper or negligent discharge of their duties.

vi The IPO setting is a special category of auditor selection study (e.g. Menon and Williams, 1991; Firth and Smith, 1992; Bedard, Ettredge and Johnstone, 2001; Lee et al. (2003).

vii Anderson et al. (1993) and Firth (1999) examine the change decision in the special setting of corporate takeovers.

viii Smith (1986) does not undertake any statistical tests, simply reporting frequencies.

ix Krishnan et al., (1996) use a similar approach for one variable by measuring growth as a dummy 1 if a firm’s growth rate of assets was in the top quartile.

x Since a size-matched sample is used, it is not necessary to include size as a separate control variable.

xi Six charities requested a fee, three referred us to the company registrar, and 69 responded but did not send accounts, stating that they were too busy or had sent the required accounts to the archives; 166 simply did not respond, while nine were unusable for various other reasons.

xii The 5% trimmed means confirm this: the mean increase in audit fee for audit changers is 3.4%, less than half the increase of 8.0% experienced by non-changers.
References


Caritas (various years), Top 3000 Charities (hard copy); Top 10,000 Charities (CD-ROM and online at [www.topcharities.com](http://www.topcharities.com).


<table>
<thead>
<tr>
<th>Variable description</th>
<th>Variable label</th>
<th>Expanded variable description</th>
<th>Basic Model Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditor change</td>
<td>AUDCH</td>
<td>1 if auditor change; otherwise 0</td>
<td></td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in client contracting environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management change</td>
<td>OFFCH</td>
<td>Change in chair of governing body or chair, CEO or CFO/treasurer of executive body, in either t-1 or t</td>
<td>1 if any change; otherwise 0</td>
</tr>
<tr>
<td>New financing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income measure</td>
<td>INCGROWTH</td>
<td>1 if total income rises by 50% between t-2 and t; otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Funding measure</td>
<td>FUNDGROWTH</td>
<td>1 if total funds rises by 100% between t-2 and t; otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Public funding</td>
<td>PUBFNDRISE</td>
<td>Change in grants received from government, public and other bodies (the sum of ‘local authority funding’ and ‘other public funding’); 1 if public funding as a proportion of income rises by 20% between t-2 and t; otherwise 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PUBFNDFALL</td>
<td>Change in grants received from government, public and other bodies (the sum of ‘local authority funding’ and ‘other public funding’); 1 if public funding as a proportion of income falls by 20% between t-2 and t; otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Financial distress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income measure</td>
<td>DISTRINC</td>
<td>Change in total income</td>
<td>1 if total income falls by 30% between t-2 and t; otherwise 0</td>
</tr>
<tr>
<td>Funding measure</td>
<td>DISTRFUNDS</td>
<td>Change in total funds</td>
<td>1 if total funds falls by 30% between t-2 and t; otherwise 0</td>
</tr>
<tr>
<td>Gearing measure</td>
<td>DISTRBOR</td>
<td>Change in long-term borrowing (LTB)</td>
<td>1 if LTB increases by 20% between t-2 and t; otherwise 0</td>
</tr>
<tr>
<td>Client reputation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit report</td>
<td>AUDREP</td>
<td>1 if non-standard in t-1; otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Existence of an audit committee</td>
<td>AUDCOM</td>
<td>1 if any evidence of an audit committee; otherwise 0</td>
<td></td>
</tr>
<tr>
<td>Audit effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditor market share</td>
<td>RELMKTSH</td>
<td>Relative market share of new and incumbent auditor based on number of charity audit clients</td>
<td>market share new auditor_t / incumbent auditor_t-1</td>
</tr>
<tr>
<td>Big 6 auditor</td>
<td>BIG6</td>
<td>1 if incumbent auditor is Big 6; otherwise 0</td>
<td>(audit fee_t / audit fee_t-1) - 1</td>
</tr>
<tr>
<td>Audit fee</td>
<td>AUDFEE</td>
<td>Change in audit fee level new vs incumbent</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Changers (n=138)</th>
<th>Non-changers (n=138)</th>
<th>Overall (n=276)</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td><strong>Continuous</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total income £m</td>
<td>10.5</td>
<td>3.1</td>
<td>7.7</td>
<td>2.6</td>
</tr>
<tr>
<td>Total funds £m</td>
<td>23.1</td>
<td>4.3</td>
<td>35.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Audit fees £000</td>
<td>15.1</td>
<td>7.4</td>
<td>10.2</td>
<td>5.9</td>
</tr>
<tr>
<td>LT debt £000</td>
<td>161.8</td>
<td>0</td>
<td>396.2</td>
<td>0</td>
</tr>
<tr>
<td>RELMKTSH</td>
<td>14.87</td>
<td>0.96</td>
<td>1.03</td>
<td>1.00</td>
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<tr>
<td>AUDFEE</td>
<td>0.106</td>
<td>-0.019</td>
<td>0.105</td>
<td>0.038</td>
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<tr>
<td><strong>Discrete</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>OFFCH</td>
<td>33</td>
<td>23.9%</td>
<td>32</td>
<td>23.2%</td>
</tr>
<tr>
<td>INCGROWTH</td>
<td>15</td>
<td>10.9%</td>
<td>20</td>
<td>14.5%</td>
</tr>
<tr>
<td>FUNDGROWTH</td>
<td>19</td>
<td>13.8%</td>
<td>14</td>
<td>10.1%</td>
</tr>
<tr>
<td>PUBFNDRISE</td>
<td>7</td>
<td>5.1%</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>PUBFNDFAIL</td>
<td>8</td>
<td>5.8%</td>
<td>5</td>
<td>3.6%</td>
</tr>
<tr>
<td>DISTRIC</td>
<td>14</td>
<td>10.1%</td>
<td>8</td>
<td>5.8%</td>
</tr>
<tr>
<td>DISTRFUNDS</td>
<td>5</td>
<td>3.6%</td>
<td>8</td>
<td>5.8%</td>
</tr>
<tr>
<td>DISTRBOR</td>
<td>4</td>
<td>2.9%</td>
<td>6</td>
<td>4.3%</td>
</tr>
<tr>
<td>AUDREP</td>
<td>5</td>
<td>3.6%</td>
<td>5</td>
<td>3.6%</td>
</tr>
<tr>
<td>AUDCOM</td>
<td>29</td>
<td>21.0%</td>
<td>13</td>
<td>9.4%</td>
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<tr>
<td>BIG6</td>
<td>62</td>
<td>44.9%</td>
<td>41</td>
<td>29.7%</td>
</tr>
</tbody>
</table>

Notes
1. *, **, *** differences significant at 10%, 5%, 1% using t-test, Mann-Whitney or chi-square
2. Variables measured in year prior to auditor change (time t-1)
Table 3: Logistic regression results (dependent variable = audit change)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted sign</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFCH</td>
<td>+</td>
<td>0.171</td>
<td>0.604</td>
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<tr>
<td>INCGROWTH</td>
<td>+</td>
<td>-0.208</td>
<td>0.649</td>
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<tr>
<td>FUNDGROWTH</td>
<td>+</td>
<td>0.410</td>
<td>0.366</td>
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<tr>
<td>PUBFNDRISE</td>
<td>+</td>
<td>0.765</td>
<td>0.399</td>
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<tr>
<td>PUBFNDFAIL</td>
<td>+</td>
<td>0.114</td>
<td>0.871</td>
</tr>
<tr>
<td>DISTRINC</td>
<td>+</td>
<td>0.883</td>
<td>0.080</td>
</tr>
<tr>
<td>DISTRFUNDS</td>
<td>+</td>
<td>-1.037</td>
<td>0.139</td>
</tr>
<tr>
<td>DISTRBORG</td>
<td>+</td>
<td>-0.773</td>
<td>0.300</td>
</tr>
<tr>
<td>AUDREP</td>
<td>+</td>
<td>0.423</td>
<td>0.568</td>
</tr>
<tr>
<td>AUDCOM</td>
<td>+</td>
<td>0.837</td>
<td>0.036</td>
</tr>
<tr>
<td>RELMKTSHE</td>
<td>+</td>
<td>0.302</td>
<td>0.002</td>
</tr>
<tr>
<td>BIG6</td>
<td>+</td>
<td>1.256</td>
<td>0.000</td>
</tr>
<tr>
<td>AUDFEE</td>
<td>-</td>
<td>-0.331</td>
<td>0.346</td>
</tr>
<tr>
<td>Intercept</td>
<td>-</td>
<td>-1.301</td>
<td>0.000</td>
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</tbody>
</table>

No of observations: 276

Overall model:
Chi-square: 78.39, p-value: 0.000
Nagelkerke $R^2$: 33.0%

*, **, *** significant at the 10%, 5% and 1% level

Classification Table

<table>
<thead>
<tr>
<th>Actual status</th>
<th>Predicted</th>
<th>% correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-change</td>
<td>Change</td>
</tr>
<tr>
<td>Auditor non-change</td>
<td>102</td>
<td>36</td>
</tr>
<tr>
<td>Auditor change</td>
<td>39</td>
<td>99</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>135</td>
</tr>
<tr>
<td>Overall accuracy rate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>