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An Agency Perspective of Auditor Change in Small Firms

Kevin Keasey Robert Watson

This paper uses an agency theory perspective to develop an understanding of the determinants of auditor change for small firms in the United Kingdom. The paper, therefore, extends the existing literature (see Williams [22] and Francis and Wilson [9]) from a consideration of auditor change for large firms in the United States to small firms in the U.K. The results indicate that small U.K. firms have a greater propensity to change their auditors subsequent to the receipt of a first-time audit qualification, to a change in the composition of their board of directors, to a change in their use of external loan capital, and when their existing loans are not secured. The results indicate some support for the agency arguments examined, though there is also evidence of auditor 'accommodation' being sought.

INTRODUCTION

The recent growth in the phenomenon of auditor change has raised fears concerning the independence of auditors. It is sometimes suspected that the decision to change auditors is the consequence of firms 'shopping around' for more accommodating monitors, that is, auditors who are more willing to agree to clients' wishes. Fears such as these seem to lie behind recent attempts, such as the U.K. government's proposed implementation of the EC's Eighth Company Law Directive (DTI [7]), to make it more difficult and costly for firms to dismiss their auditors and to limit the extent of economic dependence of auditors on individual clients.

Nevertheless, the desire of firms to seek accommodating auditors is unlikely to provide the only, or even the most important, reason for changing auditors. Other reasons for change may include a need for a more specialized, better quality or cheaper audit service, or be due to a change in the contracting environment (i.e., the arrival of a new management team/chief executive, a rapid change in either the size or nature of the client's operations).

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The available empirical evidence seems to bear this out. A number of empirical studies (i.e., Chow and Rice [4], De Angelo [6], Schwartz and Menon [19], Crasswell [5], Williams [22], Francis and Wilson [9]) have found an association between changes in auditors and such factors as

- (i) changes in corporate management,
- (ii) the receipt of a qualified audit report,
- (iii) the extent of non-audit services provided,
- (iv) the industry specialization of the audit firm,
- (v) the financial condition of the client company,
- (vi) changes in share bonus schemes, and
- (vii) changes in the diffusion of share ownership.

However, the existing research on auditor change has been exclusively concerned with the large, publicly-quoted, company sector. This concentration on large firms is somewhat surprising given that there are arguments that suggest auditor changes might be more frequent within the small firm sector. For instance, many of the costs associated with changing auditors, particularly search and setup costs, are likely to be relatively lower for small firms than for large firms. Nevertheless, it may be that for very small firms the opportunity costs of the owner's time in searching for a new auditor may be very expensive. Auditor independence may also be more of a problem within this sector because of the lack of regular public scrutiny by capital market interests. As Moizer [16] has noted, both listed companies and their auditors have a strong economic interest in maintaining independence:

Auditors who are perceived to be more independent and hence more likely to report a breach by management, will be valued more highly by the capital market. The greater the reputation enjoyed by auditors, then the greater will be the increase in market value of the companies audited by them and hence the greater will be the fees that they can command for audit services (p. 36).

However, many important features of the small firm sector, such as a lack of separation of ownership from control, the much less stringent financial reporting and other regulatory requirements and the very wide variety of audit firms that are able to audit their accounts, reduce the applicability of this line of reasoning. Thus, much of the large firm research findings will be of limited relevance to this sector. This paper, however, utilizes the large firm agency-based models of Williams [22] and Francis and Wilson [9] to guide the empirical analysis of auditor change in the U.K. small firm sector.

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The paper is organized into four sections. The first section develops a general model of auditor change for small firms. The second section describes the data set, the model, the variables and the empirical methods. The third section presents the empirical findings and the final section discusses the results in the light of the existing literature.

AGENCY PERSPECTIVES AND AUDITOR CHANGE IN SMALL FIRMS

This section briefly describes Williams' and Francis and Wilson's models of auditor change. The models are then developed to take into account differences in the ownership structure, regulatory and other environmental features so as to make them applicable to small firms in the U.K. Williams' model of auditor change is derived from an agency setting characterized by uncertainty, information asymmetries and conflicting interests between managers (agents) and shareholders (principals) and other contracting entities. In this setting, the possibility of both ex ante (adverse selection) and ex post (moral hazard) opportunism exists (see Jensen and Meckling [11]). From this perspective, the demand for auditing is motivated by the need for reliable and accurate financial information to reduce the manager's superior information position. This has provided a rationale for the "traditional" stewardship function of auditing. By providing the means whereby the performance of managers can be monitored, the moral hazard problem can be largely ameliorated by the appointment of independent external auditors. A similar agency perspective is adopted in the Francis and Wilson paper.

In the large firm studies, the major focus has been upon the conflict between managers and shareholders (owners). However, this particular type of conflict will not normally be important for the majority of small firms because of their close company status. Broadly speaking, a close company is a company under the control of five or fewer people and their associates, which includes close family members (see Burns and Dewhirst [3]). The agency problems that arise between stockholders and management are, therefore, of reduced importance for close companies since the director/ managers are usually the major stockholders. However, there is the possibility of conflict arising between the owner/managers and other contracting entities such as external lending institutions (banks and venture capitalists) and other creditors. Agency theory suggests that debtholders are concerned with the possibility of wealth transfers to stockholders. Reviewing the arguments of Eichenseher and Shields [8], Palmrose [18], and Simunic and Stein [20]. Francis and Wilson note that if managers are more concerned with the interests of stockholders than debtholders, then increases in debt

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contracts should lead to a demand by debtholders for tighter audits. Essentially, this argument views the equity of a levered firm as a call option (see Black and Scholes [2]) in that increasing levels of debt lead owner/managers (of close companies) to take on increasingly risky projects since they benefit from the upside risk but bear no more downside risk as debt levels increase.

Francis and Wilson, however, contrast with this hypothesis concerning new debtholders, the hypotheses developed by Healy and Lys [10] and Johnson and Lys [12] for existing debt. These authors argue that, since managers prefer to take actions that benefit stockholders rather than debtholders (especially the case for close companies where owners and managers are synonymous) they will be motivated to change to more accommodating auditors because this will allow value to be switched from debtholders to stockholders. This argument is based on the fact that, while existing debt agreements can be monitored, existing debtholders are usually not in a position to alter the conditions pertaining to these contracts. Thus, unless explicitly prohibited from doing so, owner/managers will normally be able to change their auditor without requiring the agreement of existing debtholders. This argument needs to be conditioned, however, by the possibility that the debt may need to be 'rolled-over' in the future. The debt bonding perspective adopted in this paper recognizes that where there is a high level of existing debt, the owner/managers may have both strong incentives and the ability to change to more 'accommodating' auditors but also, when new debt is required, the debtholders are likely to demand less 'accommodating' auditors. Thus owner/managers will attempt to engage auditors that satisfy external lenders' requirements while being accommodating to their own needs.

From this agency perspective of auditing, Williams developed the following three concepts that help explain how certain events might lead to auditor change:

- (1) Changes in the client's contracting environment
- (2) Auditor competence
- (3) Client reputation

We take some of these broad concepts and develop new proxy variables that are relevant to auditor change for small firms in the U.K.

(1) Change in Client's Contracting Environment

The agency perspective of auditing, portrays the demand for auditing as arising from the set of contracts that exist within a firm. If the set of contracts changes then this could give rise to a change in the demand for auditing services. Three operational variables are derived to allow for changes in principal-agent contracts.

 X_1 = number of changes in directors in the two years immediately prior to an auditor switch. This is included because the arrival or departure of directors is a major factor in determining principal-agent contracts within close companies.

 X_2 = absolute change in firm size. Williams argues that rapid change in firm size can be a measure of new principal-agent contracts. Growth or decline will create new contractual agreements. For instance, owners may become separate from managers as growth occurs. In addition, customers and suppliers may join/leave the firm as it changes the scale of its operations. Of course, client size or growth could also be associated with the employment of larger audit firms due to technology or audit efficiency arguments. No attempt is made in this paper to determine the specific reasons why auditor change may be associated with client size and/or growth.

 X_3 = absolute change in loans/total assets. This is designed to capture changes in the involvement of external loan capital suppliers in the firm. For instance, a firm that greatly increases its reliance on external loan capital may be required to engage a new auditor acceptable to the suppliers of the new loan(s). Alternatively, a firm that has substantially reduced its reliance on loan capital may now wish to employ a different, and possibly cheaper, auditor.

(2) Auditor Competence/Supply

The second concept discussed by Williams relates to the competence/ effectiveness of the auditor. He argues that principals (for close companies, this will also include debtholders) would want to change an ineffective auditor. However, as is argued below, it is difficult to empirically determine directly when an auditor is seen as being ineffective. Accordingly two variables are developed that may capture notions of auditor competence/ effectiveness. At the same time it needs to be recognized, however, that these variables may be proxying for supply conditions rather than effectiveness.

 X_4 = does the auditor belong to the top 20 firms of auditors in terms of fee income (see Accountancy [1]) or otherwise. Auditors belonging to the top 20 auditors may be considered as having reasonably uniform and high levels of expertise. In contrast, the set of non-top 20 auditors are likely to

have a wider range and generally lower levels of expertise as compared to the top 20 audit firms. We, therefore, hypothesize, at the most general level, that changes in the demand for auditor effectiveness are more likely to result in a change of auditor if the firm employs a non-top 20 audit practice than if it employs a top 20 audit firm.

 $X_5 =$ firm size in year prior to auditor change. We hypothesize that the smaller firm will find it easier to change auditors, for whatever reason (including disagreements over effectiveness), than larger firms. This is because the smaller firm will have a larger potential supply of effective auditors than the larger firm. Even the smallest (i.e., one person) audit firm is able, and legally permitted, to undertake the auditing tasks of the smallest firms. In contrast, when firms demand a more substantial or specialized auditing services, then the effective supply diminishes. For this reason, it is rare indeed for the largest (few hundred or so) listed companies to be audited by any audit firm not belonging to the 'Big-8.'

(3) Client Reputation

The third concept discussed by Williams is that a firm may seek a change of auditor if management perceive that their reputation has been tarnished. However, only firms with a substantial degree of external involvement with loan creditors and outside (non-director) shareholders, are likely to have a strong motive to protect their reputations. Thus, under this heading we distinguish three sets of variables relating to audit qualifications (X_6), financial condition (X_7) and the extent of external interest in the firm (X_8 to X_{10}).

 X_6 = receipt of a first time 'Small Company' audit qualification in the year prior to change. A firm may seek to avoid the 'bad news' and costs (Crasswell [5]) associated with further qualification by changing auditors. However, in contrast to the large firm literature on audit qualifications, the receipt of the small firm audit qualification is generally viewed as lacking in information content because many auditors have a general tendency to issue them (see Page [17] and Keasey, Watson and Wynarczyk [14]). Nevertheless, we include the receipt of a first time audit qualification as an explanatory variable, because previous work by Keasey and Watson [13] into financial distress prediction has shown that first time qualifications do convey useful information. Other types of qualification are not examined (despite the results of Crasswell [5]) because of their comparative rarity.

 X_7 = change in earnings/total assets. This variable is included to capture the financial health of the company. As argued by Williams, and Schwartz

and Menon [19], firms with declining financial health are more likely to change auditors in an attempt to keep the 'bad news' from external parties. While there is little agreement over which variables capture the health of the small firm (see Storey et al. [21] for a discussion of this point), it would seem reasonable to expect increasing (decreasing) returns on assets to be indicative of general financial health (impending distress).

 $X_8 = \text{loans/total assets.}$

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 $X_9 =$ secured loan (1 = yes; 0 = no).

 X_{10} = number of non-director shareholders.

These variables are intended to capture the degree of external involvement/interest in the company. As argued above, companies with proportionately higher loans have a greater incentive to change to more accommodating auditors. In contrast, firms with loans secured on their business assets may be constrained in their choice of auditors and thus are less likely to change auditors. This is because, in order to be assured that their investment is being adequately protected, most mortgage agreements contain provisions which require the agreement of the mortgage holder before any change in auditors can take place. In other words, principals cautious enough to secure their loans on tangible assets ensure that the monitoring of the enterprise cannot be adjusted to the benefit of the loan recipient. Similarly, firms that have a greater number of shareholders that are not involved in the day-to-day management of the business are also less likely to change auditors because of the need to retain the confidence of these investors.

DATA, VARIABLES AND EMPIRICAL METHODS

Data

As the data used in this paper has already been described in an earlier article (see Keasey, Watson and Wynarczyk [14]) it it is only briefly described here. In the U.K. there is a statutory requirement for all limited liability firms, irrespective of size, to lodge their annual audited accounts with the Registrar of Companies at Companies House. The authors are not aware of a comparable dataset for the U.S. The data used in this study comes from Companies House records and consists of 180 single-plant, independentlyowned manufacturing companies operating in the Northeast of England for 1979-1982. While some concerns may be expressed over the age and regional nature of this data, the authors believe such concerns are largely unfounded. Regarding the regional nature of the data, it is difficult to see why the situation with respect to auditing would be any different for the Northeast of England as compared to other areas. In terms of the age of the data, it is difficult to see why the environments faced by small firms should have changed so dramatically so as to alter the conclusions of the present analysis.

Given the nature of the variables, some of which are computed over a two year period, this data set provides sufficient observations for the construction of two annual models, each with 180 observations, and one 'pooled' model consisting of 360 observations. For these 360 observations, Table 1 gives the frequencies of the types of auditor change that occurred. In terms of the arguments presented in the previous section, the empirical analysis is restricted to auditor changes where the instigators of change were the firms rather than the auditors. In other words, if an auditor put him/ herself forward for reappointment in the notes to a set of accounts, then any change of auditor in the year following the accounts is assumed to be a result of firm actions rather than auditor instigation. Of the 360 observations, 84 (or 23.3%) had an auditor change for 'firm' reasons and 0 at the behest of the auditors. While this figure for auditor change seems high as compared to the figures from existing studies (these generally range from 3-15%; see Crasswell [5] for a review), the present sample is concerned with small firms as compared to the large firms of previous studies. The large pool of potential auditors for the small firm market would suggest, in the first instance, that small firms are more likely to change auditors because for the majority there are potentially lower search costs. This argument receives some support from the fact that 69 of the 84 auditor changes were from one small audit firm to another audit firm. In addition to the availability of supply small

Table 1 Auditor Changes						
No change		276				
Change from Small Audit Firm to Small Audit Firm	69					
Change from Small Audit Firm to Large Audit Firm	0					
Change from Large Audit Firm to Small Audit Firm	0					
Change from Large Audit Firm to Large Audit Firm	15					
TOTAL Changes		84				
TOTAL Cases		360				

argument, it would seem reasonable to expect more auditor switching for small firms, as compared to large, because of the potentially large changes in their growth, profitability, size, etc. (see Storey et al [21]). While there is no direct support from Table 1 for this hypothesis, in that there is no evidence of switching between small and large audit firms, it is possible that changing auditors within the two (broadly defined) categories is sufficient to meet the needs created by such changes.

In an ideal empirical setting the auditor switch dependent variable would be defined/measured so as to reflect the change in auditor 'quality' achieved by any switch. Given the nature of the data available for small firms, the quality categorization was restricted to top 20 and non-top 20. As it turned out there were no switches between these two categories for the present sample. This does not, however, imply that switches have been between equal 'quality' auditors. For both the non-top 20 and top 20 sets of auditors are likely to have ranges of audit 'quality.' However, given the local nature of the audit market for small firms and the fact that auditor reputations will be locally based, it is difficult to see how a robust measure of auditor quality could be defined for small firm studies. Accordingly, the empirical analysis of this paper is restricted to a consideration of explanations of auditor change without reference to 'changes in quality'. Finally, as a check on the consistency of this approach, the empirical analysis was conducted for the overall sample of 84 auditor changes and for the 69 auditor changes between small audit firms. As the empirical results were essentially the same for both samples, discussion is restricted to the overall sample results.

Variables

Given the data available from Companies House, and the arguments presented in the previous section, the general model used to determine which factors influence the changing of auditors is as follows:

$$Y=f(X_1, X_2, \ldots X_{10})$$

Where Y is the dependent variable, coded 1 if a firm switched auditors and 0 otherwise. The definition of the independent variables are detailed in Table 2. The sample was randomly selected from a wide range of industries and as the industry dummy variables were not statistically significant when included, in the equations, they are not included in the present analysis.

	Independent Variable
$\overline{X_1}$	is defined as the number of changes in directors over the previous two years.
X_2	is defined as the natural log of the absolute change in total assets over the previous two years.
X_3	absolute change in loans/total assets over the previous two years.
X_4	is a dummy variable, coded 1 if the audit firm in the prior year was among the top 20 largest auditing practices and as 0 otherwise.
X_5	is defined as the natural log of total assets in the prior year.
X_6	is a dummy variable, coded 1 if a first time small company audit qualifica- tion was received the previous year and 0 otherwise.
X_7	change in disposable profit/total assets over the previous two years.
X_8	total loans/total assets in the previous year.
X9	secured loan, coded 1 if a firm has a secured loan and 0 otherwise.
X_{10}	the total number of non-director shareholders.

Table 2

Empirical Methods

Given the nature of the dependent variable, and the existence of dichotomous and continuous independent variables, the univariate results were derived using chi-square tests and student *t*-tests where appropriate. In terms of the multivariate analysis, the presence of a dichotomous dependent variable and dichotomous independent variables suggests that a form of logit analysis is the most suitable multivariate estimating technique. The present results were derived via the BMDP2 hierarchical stepwise logit package. As logit analysis is now a well-established research technique in accounting and finance, further description is not given here.

EMPIRICAL RESULTS

The empirical evidence presented here is based on the full pooled data set of 360 observations. The full pooled data set has been employed because the empirical results for the two individual years of data were not significantly different from one another or from the pooled data set. The bivariate Pearson correlation matrix coefficients (see Appendix) indicate that, while some of the independent variables are significantly correlated with one another, they are not of a magnitude which would suggest a serious multicollinearity problem.

SECTION A	SECTION A: Categorial Variables (X4, X6 and X9)					
	Switched	Non-Switched	Total	X_2		
X4						
Auditor size						
Top-20	15	55	70			
Non-top-20	<u>69</u>	<u>221</u>	<u>290</u>	0.2		
Total	$\overline{84}$	276	360			
X6						
Audit Qualification						
Yes	14	27	41			
No	<u>70</u>	<u>249</u>	319	3.0*		
Total	$\frac{70}{84}$	276	360	5.0		
X9	01	270	500			
A9 Secured Loan						
Yes	42	183	225			
				7.3***		
No	$\frac{42}{24}$	93	$\frac{135}{860}$	1.3***		
Total	84	276	360			
(Sta	ndard deviat Switched	ions in parentheses Non-Switched) Total	T-value		
			10101	1 00000		
X_1						
Change in directors	2.01	1.47	1.60	2.4***		
	(1.93)	(1.33)	(1.51)			
X ₂						
Absolute change in total assets	2.34	2.41	2.39	0.3		
-	(1.63)	(2.07)	(1.97)			
	(******	(4.01)	(
X ₃	(1.00)	(2.01)	(
	(1.00)	(2.07)	()			
Absolute change in loans	18.4	15.2	17.7	1.8**		
	18.4	15.2	17.7	1.8**		
Absolute change in loans divided by total assets	. ,			1.8**		
Absolute change in loans divided by total assets X5	18.4 (18.2)	15.2 (13.2)	17.7 (17.2)	1.8**		
Absolute change in loans divided by total assets	18.4 (18.2) 6.56	15.2 (13.2) 6.79	17.7 (17.2) 6.74			
Absolute change in loans divided by total assets X ₅ log total assets	18.4 (18.2)	15.2 (13.2)	17.7 (17.2)			
Absolute change in loans divided by total assets X ₅ log total assets X ₇	18.4 (18.2) 6.56	15.2 (13.2) 6.79	17.7 (17.2) 6.74			
Absolute change in loans divided by total assets X ₅ log total assets X ₇ Change in profits divided by	18.4 (18.2) 6.56 (1.38)	15.2 (13.2) 6.79 (1.52)	17.7 (17.2) 6.74 (1.49)	1.3		
Absolute change in loans divided by total assets X ₅ log total assets X ₇	18.4 (18.2) 6.56 (1.38) 0.4	15.2 (13.2) 6.79 (1.52) 5.2	17.7 (17.2) 6.74 (1.49) 4.1			
Absolute change in loans divided by total assets X ₅ log total assets X ₇ Change in profits divided by total assets	18.4 (18.2) 6.56 (1.38)	15.2 (13.2) 6.79 (1.52)	17.7 (17.2) 6.74 (1.49)	1.3		
Absolute change in loans divided by total assets X ₅ log total assets X ₇ Change in profits divided by total assets X ₈	$ 18.4 \\ (18.2) \\ 6.56 \\ (1.38) \\ 0.4 \\ (24.5) $	15.2 (13.2) 6.79 (1.52) 5.2 (31.2)	$ \begin{array}{r} 17.7 \\ (17.2) \\ 6.74 \\ (1.49) \\ 4.1 \\ (29.8) \end{array} $	1.3 1.5		
Absolute change in loans divided by total assets X ₅ log total assets X ₇ Change in profits divided by total assets	$ 18.4 \\ (18.2) \\ 6.56 \\ (1.38) \\ 0.4 \\ (24.5) \\ 35.8 $	15.2 (13.2) 6.79 (1.52) 5.2 (31.2) 32.5	$ \begin{array}{r} 17.7 \\ (17.2) \\ 6.74 \\ (1.49) \\ 4.1 \\ (29.8) \\ 33.3 \\ \end{array} $	1.3		
Absolute change in loans divided by total assets X_5 log total assets X_7 Change in profits divided by total assets X_8 loans divided by total assets	$ 18.4 \\ (18.2) \\ 6.56 \\ (1.38) \\ 0.4 \\ (24.5) $	15.2 (13.2) 6.79 (1.52) 5.2 (31.2)	$ \begin{array}{r} 17.7 \\ (17.2) \\ 6.74 \\ (1.49) \\ 4.1 \\ (29.8) \end{array} $	1.3 1.5		
Absolute change in loans divided by total assets X_5 log total assets X_7 Change in profits divided by total assets X_8 loans divided by total assets X_{10}	$18.4 \\ (18.2) \\ 6.56 \\ (1.38) \\ 0.4 \\ (24.5) \\ 35.8 \\ (21.5) \\ 100000000000000000000000000000000000$	$15.2 \\ (13.2) \\ 6.79 \\ (1.52) \\ 5.2 \\ (31.2) \\ 32.5 \\ (22.7) \\ $	$17.7 (17.2) \\ 6.74 (1.49) \\ 4.1 (29.8) \\ 33.3 (22.4)$	1.3 1.5 1.2		
Absolute change in loans divided by total assets X ₅ log total assets X ₇ Change in profits divided by total assets X ₈ loans divided by total assets	$ 18.4 \\ (18.2) \\ 6.56 \\ (1.38) \\ 0.4 \\ (24.5) \\ 35.8 $	15.2 (13.2) 6.79 (1.52) 5.2 (31.2) 32.5	$ \begin{array}{r} 17.7 \\ (17.2) \\ 6.74 \\ (1.49) \\ 4.1 \\ (29.8) \\ 33.3 \\ \end{array} $	1.3 1.5		

Table 3 Univariate Relationships Between Auditor Changes and the Independent Variables

Notes: * = Sig at 10%

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** = Sig at 5%

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*** = Sig at 1%

Univariate Results

As can be seen from Section A of Table 3, of the three dichotomous variables considered only the Auditor Size variable (X_4) is not significant at 10% confidence levels. The secured loan variable (X_9) is significant at 1% confidence levels and indicates that relatively fewer of the firms that changed auditors had loans secured on their assets. The Small Company Audit Qualification variable (X_6) , though consistent with arguments detailed earlier, is only just significant at 10%. Section B of the table presents the univariate statistics for the continuous variables. While the relative magnitudes of these variables for firms that changed auditors and those that did not are generally in the expected direction, only the change in directors and change in loan variables are statistically significant at 5% confidence levels.

Multivariate Results

The multivariate logistic function results are shown in Table 4. Section A of the table presents the logistic function when all ten independent variables are entered directly, while Section B presents the hierarchical stepwise logit function results where entry is controlled by a statistical significance level of 10%. The results for both functions are very similar in that the five significant variables in the full logistic function $(X_1, X_3, X_6, X_8 \text{ and } X_9)$ are also included, and have the same signs and magnitudes, in the restricted stepwise function shown in Section B. Discussion is, therefore, directed to the stepwise function.

The significant variables in the stepwise function are all of the 'correct' sign. The function indicates that firms were significantly more likely to change their auditors if they

- (i) experienced more changes in directors (X_1) ,
- (ii) experienced relatively large changes (positive or negative) in their use of loan capital (X_3)
- (iii) had received a first-time Small Company Audit Qualification in their previous set of accounts (X_6) ,
- (iv) had relatively high levels of loan capital (X_8) , and
- (v) did not have a loan secured on their business assets (X_9) .

In terms of an agency perspective, the primary motivation for changing auditors appears to be due to changes in the contracting environment (changes in both the ownership and control of the company and changes in the use of loan capital), a relatively high reliance upon external debt capital

SECT	TION A: Logistic Function: All Varia	bles Included
Variable	Coefficient	T-value
<i>X</i> ₁	0.245	2.9***
X_2	0.061	0.7
X3	2.112	2.3***
X4	-0.322	0.9
X5	-0.112	0.9
X6	0.642	1.7*
X7	-0.498	1.1
X_8	1.291	1.9*
X9	-0.708	2.5***
X ₁₀	-0.15	0.2
Constant	-0.677	0.8
ikelihood ratio test =	⁼ 28.5 with 10 d.f.	
$Chow R^2 = 0.09$		
Predictive acccuracy =	79.2%	

Table 4

SECTION E	3: Stepwise Logistic Function: Probab	oility to Enter 0.10
Variable	Coefficient	T-value
$\overline{X_1}$	0.230	2.8***
X_3	1.827	2.0**
X_6	0.666	1.8*
X_8	1.507	2.4**
X9	-0.781	3.0***
Constant	-1.421	4.3***
Likelihood ratio test =	25.6 with 6 d.f.	
Chow $R^2 = 0.08$		
Predictive acccuracy =	78.9%	

and the absence of external debtholder constraints as represented by the existence of secured loans. Client reputation effects, in the form of the receipt of a first-time qualification are also significant.

DISCUSSION AND CONCLUSIONS

In a recent paper, Crasswell [5] noted that auditor switching by large Australian firms was related to the receipt of an audit qualification. This result confirmed that of an earlier piece of work by Chow and Rice [4] on large U.S. firms. However, it could be argued that both of these studies overly concentrated on establishing the significance/non-significance of audit

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qualifications for auditor switching, rather than considering a wider set of explanatory variables. When Williams [22] adopted an agency view of auditor switching, he found an auditor industry specialization variable, longevity of audit engagement variable and a client negative media publicity variable to be significant in explaining why large U.S. firms changed auditors. He found no statistical support for the argument that firms change auditors in response to receiving an audit qualification.

The results presented in this paper, in one sense support those of Williams, in that there is positive evidence for a number of the agency arguments investigated. The results, however, also contrast with those of Williams in that the significance of the receipt of a first-time audit qualification variable suggests that some small firms may change auditors partly to secure more accommodating monitors. More importantly, in terms of statistical significance, is that the firms investigated here tended to have a greater propensity to change auditors if they experienced relatively large changes in their use of external loan capital, if they had relatively high levels of loan capital and if none of these loans were secured. The results, therefore, offer support for the agency arguments investigated and indicate that some small firms in the U.K. may change auditors to obtain more accommodating monitors.

APPENDIX

X_2	.10									
X_3	14	14								
X_4	.02	.32	.02							
X_5	.20	.54	.35	.07						
X_6	.05	.06	.06	.11	.02					
X_7	.05	06	17	11	.16	09				
X_8	16	27	.41	11	41	.05	11			
X 9	.01	.14	01	0.07	.29	.06	.08	.05		
X_{10}	.07	03	02	07	.06	10	.03	11	.07	
AC	.15	02	08	02	06	.09	07	.06	14	.03
	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}

Correlation Coefficients

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