Volume 3 No. 1
October 2004

MALAYSIAN ACCOUNTING REVIEW

Contents

UNIVERSITI TEKNOLOGI MARA

MALAYSIAN INSTITUTE OF ACCOUNTANTS

MALAYSIAN ACCOUNTING REVIEW

Address all correspondence to:

Journal Administrator
Malaysian Accounting Review
Faculty of Accountancy
Universiti Teknologi MARA
40450 Shah Alam, Selangor, MALAYSIA

e-mail: norha614@slam.uitm.edu.my, dr.normah@accountant.com or dibra571@salam.uitm.edu.my

MALAYSIAN ACCOUNTING REVIEW

Volume 3 No. 1
October 2004

Sponsored by:

Universiti Teknologi MARA

Malaysian Institute of Accountants
& Malaysian Accountancy Research and Education Foundation

CONTENTS

AUDIT LAGS IN SCOTTISH LOCAL AUTHORITY FINANCIAL REPORTING

Asmah Abdul Aziz
Faculty of Accountancy
Universiti Teknologi MARA

and

David Heald
Department of Accountancy & Finance
University of Aberdeen
Scotland

Abstract

Timeliness has been regularly identified as an essential characteristic of effective financial reporting, in both the public and private sectors. This paper systematically investigates the timeliness of Scottish local authority financial reports over the study period 1989-90 to 1995-96. It considers how audit lags can be measured and provides descriptive statistics, before setting out its empirical methodology. It innovates in terms of using Fixed Effects regressions and of then reformulating the problem in terms of non-compliance with externally imposed ceilings on audit lags, so that Logit regressions can be estimated. The regression results on audit lag provide a reasonably consistent picture, whether using OLS or Fixed Effects methodology. The auditing variables are shown to be important: audit lag increases when there is an audit qualification, when there is a change in auditor, and when the audit is done by the Accounts Commission (a public body), rather than a private auditor.

INTRODUCTION

Timeliness has been regularly identified as an essential characteristic of effective financial reporting, in both the public and private sectors (Drebin, Chan and Ferguson, 1981). The financial reporting of UK public bodies has increasingly moved away from cash accounting towards the adoption of commercial accounting principles (UK GAAP), though somewhat modified to reflect particular public sector circumstances and not necessarily consistent across the public sector. There is a considerable literature on the role of local authority financial reporting, viewing annual reports and accounts as a mechanism of accountability between local authorities and their citizen-taxpayers. Much emphasis has been placed upon whether local authorities complied with relevant regulations and standards, and with the degree of uniformity of published accounts (Jones and Pendlebury, 1982; Chandler and Cook, 1986; Jones and Pendlebury, 1991). Bowerman and Gray (1999) examined the role of the management letters prepared by auditors, though not publicly disclosed. One of the themes emerging from this body of research has been the difficulty of identifying users of UK local authority financial reports (Jones, 1992; Lapsley, 1992), with it becoming clear that the presumed wider user community may not exist (Butterworth, Gray and Haslam, 1989).

Scotland, one of the constituent countries of the United Kingdom, has always had a local government system structurally different from that in England, and which has been controlled from Edinburgh rather than London. Nevertheless, though there are some institutional differences in audit regulation, accounting regulations are largely uniform across the United Kingdom, not least because of the role of the Chartered Institute of Public Finance and Accountancy, the professional body to which many local authority accountants belong. Financial reporting in Scottish local authorities in the late 1980s was researched in a series of papers (Kilgour and Lapsley, 1988; Collins, Keenan and Lapsley, 1991) published jointly by the Institute of Chartered Accountants of Scotland and the Scottish branch of the Chartered Institute of Public Finance and Accountancy. The concerns about a lack of uniformity and consistency echoed the findings about England.

Having studied annual reports and accounts for the two financial years 1984-85 and 1985-86, Kilgour and Lapsley (1988) conducted a postal questionnaire of finance officers and auditors. Although they mentioned that 'there has been some slippage' in closing the accounts by 31 August, the dates on which the annual accounts were certified by the auditors were not examined. It was noted that the accounts were produced some time after the financial year end, but this issue was not pursued. Collins, Keenan et al. (1991, p. 38) reported that more timely information 'was not raised by any of the interested parties' that they contacted, 'but, in our view, earlier dissemination of reports would improve their relevance'.

This paper systematically investigates the issue of timeliness in Scottish local authority financial reports. In the 1980s and 1990s, the relationship between central government and local authorities in Scotland severely deteriorated, as manifested in disputes about tax and expenditure limitation powers held by the Scottish Office, and about Compulsory Competitive Tendering of the provision of local authority services. This conflict culminated in a reorganisation of local government on 1 April 1996 (Himsworth, 1995; Midwinter, 1995), which was imposed by the Scottish Office and not consensual in the way in which the previous 1975 reorganisation had been. A major exercise in document collection succeeded in acquiring the annual accounts of all 65 local authorities for the period 1989-90 to 1995-96 (the last year of the local authorities established in 1975).

The paper is structured in the following way. Section 2 examines the question of timeliness, first considering how audit lags can be measured and then providing descriptive statistics on Scottish local authorities during the study period. Section 3 summarises relevant research on audit lags, considering both the empirical methodology and the variables found to be statistically significant. Section 4 sets out the empirical methodology of this paper, highlighting how it innovates in terms of using Fixed Effects regressions (Hsiao, 1986; Baltagi, 1995) and of then reformulating the problem in terms of non-compliance with externally imposed ceilings on audit lags, so that Logit regressions can be estimated.

Section 5 reports the regression results generated by the different approaches: Ordinary Least Squares (OLS); Fixed Effects; and Logit. Section 6 draws conclusions from the models and discusses further avenues of research.

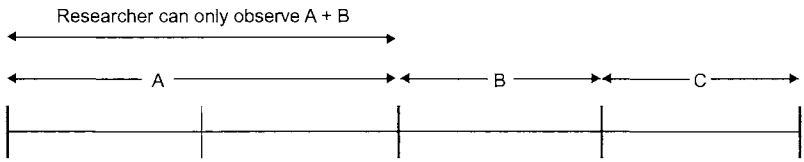
TIMELINESS

The Measure of Timeliness

The term 'audit lag' is defined as the period, in months, between the end of the financial year and the date when the auditor signed the audit certificate. The date normally appears below or beside the auditor's signature, though it was sometimes difficult to locate signed copies. This period represents the length of time taken for the annual accounts to be prepared by the council, and then audited and certified by the auditor.

The authors prefer to use the term 'audit lag' because 'audit delay' seems to automatically imply a lack of punctuality. Accounts must be prepared and audited after the end of the financial year; audit lag is a more neutral term than audit delay. For example, the Royal Bank of Scotland would reasonably be offended if it were reported that its audit delay was 'three months', because obviously bank staff need time to prepare the accounts and the auditor needs time to audit them before signing the audit certificate. In the empirical work, the authors avoid the term 'reporting lag' because it is impossible to know when a local authority published its accounts in a particular year. Councils do not make formal announcements of publication.

Figure 1
The Audit and Reporting Lags of Slowtown Council



1 April 1993	31 August 1993	30 December 1993	26 July 1994	14 September 1994
First day after financial year end	Deadline to submit Abstract of Account to the auditor and Controller of Audit	Auditor receives accounts	Account certified	Account Published

Notes
* Phase A is handled by the Council
* Phase B is handled by the Auditor, but the time taken depends not only on Auditor competence but also on the quality of the Council's work at Phase A and issues giving rise to possible Auditor qualifications.
* Date on which the accounts are sent to the auditor is not in public domain
* Management letters are not in the public domain, but material from them sometimes leaks into the public domain.
* Phase C is handled by the Council

Figure 1 illustrates schematically the components of the reporting lag for the hypothetical Slowtown Council, assuming all dates are known. It shows the process of final accounts preparation from the first day after the financial year end until they finally reach the public domain. The components of the reporting lag consist of phases A, B and C. Phase A runs from 1 April until 30 December 1993. 1 April 1993 is the first day after the end of the 1992- 93 financial year, ie the first day of the 1993-94 financial year. The local authority is required to submit the abstract of accounts for the 1992-93 financial year to the Controller of Audit (a public official) and to the appointed auditor by 31 August 1993. This deadline is marked by the vertical dotted line.

In this example of Slowtown Council, the auditor received the accounts on 30 December 1993, four months late. The annual accounts were audited from that day and were finally certified on 26 July 1994. This phase, between 30 December 1993 and 26 July 1994, is marked as B. The date on which the auditor signed the accounts allows the calculation of audit lags. The certification date is the only date in Figure 1 that can be reliably and accurately observed. For example, the precise date of submitting the accounts to the auditor is not known, so the time taken to audit the accounts is also not known. Moreover, the time needed to audit the accounts will depend on the competence and experience of the auditor, and upon the quality of the accounts prepared by the council. If there are many errors in these draft accounts, the auditor will take longer before certifying them, not least because issues will need to be discussed at higher management levels.

On the basis of the available data, it is not possible to allocate responsibility for delays between councils and auditors, though the dispersion of audit lags strongly suggests that primary responsibility rests with individual councils.

Phase C, namely the period between the accounts being certified by the auditors and the time they reach the public domain, is not known due to the lack of a formal announcement of publication. In Figure 1, it is represented as the period between 26 July 1994 and 14 September 1994. This phase is entirely the responsibility of the local authority. Even if better information were available, there is the issue of what constitutes publication. After the full council approves the annual report and accounts, printed copies are physically made available to the public at council offices; there is no official announcement of publication. In this Slowtown example, the annual report and accounts were published on 14 September 1994. It is impractical to trace the exact date of publication for all local authorities in Scotland.

Mathematically, the reporting lag (A+B+C) must be equal to, or greater than, the audit lag (A+B). To summarise, Phase A is entirely dealt with by the council. Phase B is conducted by the auditor but the work involved depends in part on the quality of work in Phase A. Finally, Phase C once again is the responsibility of the local authority. The only practicable method of calculating lags for empirical work is to look at the date shown on the audit certificate and then calculate the audit lag. The shorter the audit lag, the sooner the annual report and audited financial statements are likely to have reached the public domain.

Descriptive Statistics on Timeliness

Timeliness was not a characteristic of the financial reporting of Scottish local authorities over the study period of 1989-90 to 1995-96. The first year of the study period is arbitrary; there

are practical limits as to how far back in time it is possible to collect annual accounts. The last year of 1995-96 represents the final year of existence of the local authorities established in 1975, there being a fundamental reorganisation (except for the three island councils) on 1 April 1996. Undoubtedly, the 86% year-on-year increase in the mean audit lag for 1995-96 was substantially attributable to the impact of this reorganisation; closing the 1995-96 accounts of the abolished councils had become the responsibility of designated successor councils.

Table 1
Descriptive Statistics on Audit Lags, 1989-90 to 1995-96

Audit lags	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Minimum	3.08	4.2	4.4	3.05	3.94	4.3	6.82
Maximum	31.87	27.9	21.77	23.8	18.79	15.38	31.84
Mean	10.9	11.07	10.43	9.75	9.84	9.22	17.18
Standard Deviation	5.7	4.71	4.13	3.39	3.61	2.3	5.5
Coefficient of variation	0.52	0.43	0.4	0.35	0.37	0.25	0.32

Table 1 presents descriptive statistics for the study period. The most striking point is the range of audit lags: the lowest minimum (3.05 months in 1992-93) was only 9.56 % of the highest maximum (31.87 months in 1989-90). The persistence of wide ranges, together with individual authority data showing persistence in both timeliness and lack of timeliness, rules out task difficulty as a major explanation of differential audit lag. Figure 2 plots for each of the seven years the percentage of accounts remaining to be certified at specified months after the end of the financial year. Months are plotted along the top of the graph, so that year labels can be attached to the individual lines. There is considerable bunching of the first six years, but with 1995-96 displaced to the right. The intercepts with the horizontal axis show improvements over time if the criterion is the last to be certified, with 1995-96 the obvious exception.

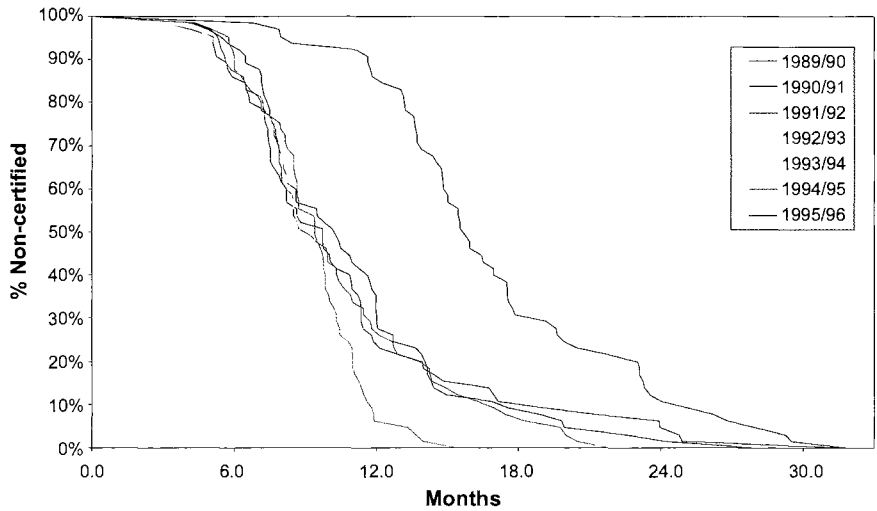
Table 2 presents the data in terms of the cumulative percentage of councils that have had their accounts certified within three-month bands, after an initial six-month band. The summary data present the distribution of means including, and excluding, 1995-96 (the year most affected by reorganisation). Over the period 1989-90 to 1995-96, only 9.5% of accounts had been certified within six months; 69.5% within 12 months; and 2.9% remained uncertified after 24 months.

Taken together, the evidence presented in Table 1 and Table 2, supplemented by the graphical representation in Figure 2, shows that there was a serious lack of timeliness in Scottish local authority financial reporting in the 1990s. Moreover, examination of the reporting records of individual councils revealed marked and sustained variations in performance, thereby enabling regression techniques to be adopted in order to investigate the causes of untimeliness.

Table 2
Cumulative Audit Lags for Scottish Local Authorities,1989-90 to 1995-96

	Cumulative Audit Lags (months)							
	0-6	**0-9**	**0-12**	**0-15**	**0-18**	**0-21**	**0-24**	**Total**
1989-90	9 13.80%	31 47.70%	49 75.40%	55 84.60%	58 89.20%	59 90.80%	62 95.40%	65 100.00%
1990-91	4 6.20%	28 43.10%	46 70.80%	57 87.70%	59 90.80%	62 95.40%	63 96.60%	65 100.00%
1991-92	8 12.30%	32 49.20%	47 72.30%	56 86.20%	60 92.30%	64 98.50%	65 100.00%	65 100.00%
1992-93	6 9.20%	32 49.20%	52 80%	61 93.80%	64 98.50%	64 98.50%	65 100.00%	65 100.00%
1993-94	8 12.30%	36 55.40%	52 80%	58 89.20%	63 96.90%	65 100.00%	65 100.00%	65 100.00%
1994-95	8 12.30%	29 44.60%	61 93.80%	64 98.50%	65 100.00%	65 100.00%	65 100.00%	65 100.00%
1995-96	0 0.00%	4 6.20%	9 13.80%	26 40.00%	45 69.20%	50 76.90%	57 87.70%	65 100.00%
Distribution of means (including 95-96)	2 3.10%	14 21.50%	45 69.20%	58 89.20%	64 98.50%	65 100.00%	65 100.00%	65 100.00%
Distribution of means (excluding 95-96)	3 4.60%	26 40.00%	52 80%	60 92.30%	64 98.50%	65 100.00%	65 100.00%	65 100.00%
	Cumulative Accounts Audited by Period (months)							
Accounts audited by end of period	43 9.50%	192 42.20%	316 69.50%	377 82.90%	414 91%	429 94.30%	442 97.10%	455 100%

Figure 2
Audit Lags, 1989/90 to 1995/96



PREVIOUS EMPIRICAL RESEARCH

No regression-based study of the timeliness of UK local authority financial reports has been located. Previous UK empirical work has concentrated upon compliance with extant accounting standards and regulations. However, there is empirical work on audit lags in the private sector and in US municipalities. The following discussion first considers empirical methodology and then reviews which variables have been shown to be statistically significant in regressions on audit lags.

Dyer and McHugh (1975) reported a questionnaire-based survey of the factors behind the audit lags of quoted Australian companies in the period 1965-71, providing descriptive statistics but not estimating a regression model. Dwyer and Wilson (1989) reported a study of US municipalities in 1982, estimating OLS models. Ng and Tai (1994) reported a study of Hong Kong quoted companies in 1990 and 1991, estimating OLS models. Johnson (1996; 1998) estimated OLS models for audit lags in 289 US local governments. He also used the predictive values of audit fees, from an OLS model of audit fees, as an instrumental variable in Two-Stage Least Squares (2SLS) models of audit lags. Jaggi and Tsui (1999) used OLS on pooled data for 1991-93 for Hong Kong quoted companies. McLelland and Giroux (2000) ran OLS regressions on audit lag in large US municipalities in 1996. None of these studies estimated Fixed Effects models.

The studies listed above have been conducted on different populations and a discussion of which variables were shown to be statistically significant has to proceed with caution, not least because of the differences in contexts and time periods. In Ng and Tai's (1994) Hong Kong study, separate OLS regressions were run for 1990 and 1991. The significant variables in 1990 were the log of the turnover (expected negative sign, at 1%); year end (positive sign, 5%); and the number of principal subsidiaries expected positive sign, at 1%). For 1991, extraordinary items (expected positive sign, at 5%) replaced year end in otherwise similar results.

In Johnson's (1996) paper, the OLS regression found the following variables to be significant: constant (positive sign, at 1%); the local government being awarded a Government Finance Officers' Association Certificate for good financial reporting (expected negative sign, at 1%); September 30 financial year end (expected negative sign, at 1%); the involvement of more than one auditor (expected positive sign, at 1%); the State auditor influences the independent audit (expected positive sign, at 1%); the audit fee is computed on a cost-plus basis (expected positive sign, at 10%); and 'local government is a city' (expected negative sign, at 5%). In Johnson's (1998) 2SLS regressions, the variables statistically significant for audit lag were the following: September 30 financial year end (expected negative sign, at 10%); and the involvement of more than one auditor (expected positive sign, at 5%).

In the McLelland and Giroux (2000) study of US municipalities, the following variables are statistically significant in the OLS regressions on audit lag: comprehensive annual financial report (negative sign, at 1%); disclosure of additional audit reports (expected negative sign, at 5%); IT investment (expected negative sign, at 1%); audit opinion (expected positive sign, at 10%); logarithm of population (expected positive sign, at 1%); independent auditor (expected negative sign, at 1%); the involvement of more than one auditor (expected positive sign, at 1%); State regulations (expected positive sign, at 10%); and Federal regulatory requirements (expected positive sign, at 10%).

EMPIRICAL METHODOLOGY

Specification of variables

The choice of variables was influenced by previous regression studies and by the accounting literature, conditioned by knowledge of the Scottish local authority system. There are four groupings of variables. The first grouping relates to the structural and demographic characteristics of local authorities, factors outside local control. Census 1991 population is used as the measure of local authority size, with the expectation that larger authorities will be able to afford better-qualified finance departments. The expected sign is therefore negative. The District dummy distinguishes district councils (the lower tier in a two-tier system on the Scottish mainland) from the regional councils (the upper tier) and the all-purpose island councils. The rationale is that regional and island councils would be able to attract better quality staff and councillors; the expected sign on the District dummy is therefore positive.

The final set of variables within this grouping are four dummy variables taken from the Office of National Statistics (ONS) classification of local authorities in Great Britain, a system based on cluster analysis (Wallace and Denham, 1996). There are marked differences among Scottish local authority areas and it was expected that, for example, councils in prosperous areas would perform better than councils in declining areas. These ONS variables should make it possible to separate the effects of political control (which may change through time) and socio-demographic characteristics (which change slowly). In the regressions, ONSR (Rural) is the omitted dummy variable. A positive sign is expected on ONSI (Industry); negative signs are expected on ONSM (Maturer) and ONSP (Prospering); and there is no expectation on ONSU (Urban).

The second grouping relates to political control and to political competition. Throughout the study period, the Scottish Office was under the control of a Conservative Secretary of State for Scotland (a post in the UK Cabinet), at a time when Conservative representation from Scotland in the Westminster Parliament had fallen sharply. In this polarised environment, there was much conflict between the Scottish Office and local authorities. Party control is hypothesised to affect audit lag. A positive sign is expected for Labour councils, either because of complacency (in some councils, Labour dominates completely) or general antagonism to the Scottish Office. A negative sign is expected for Conservative councils, owing to a sense of loyalty to the Conservative Secretary of State. Because there are few such cases, the councils controlled by the third and fourth parties (Scottish National Party and Liberal Democrats) were combined together. In both cases, there is an expectation of a 'flagship' effect (ie negative sign), as these parties seek to demonstrate their competence to govern. A negative sign is also expected for councils for which there is no overall control (NOC), which can itself be viewed as an indicator of political competition. There is also a dummy variable representing a more direct attempt to measure political competition, namely whether the political control status of the council changed during the study period. Again, the expectation is that political competition will reduce audit lag. These political variables are not measured as well as the authors would have hoped. Surprisingly, there is no systematic database of which party controls Scottish councils in particular years, meaning that reliance has to be placed on periodic election results, with changes in control between elections being unrecorded.

The third grouping relates to accounting and audit. Examination of the data indicated that there were a large number of audit qualifications (AQ) and comments short of audit qualifications (CSAQ), and that the incidence of these varied markedly across councils. The expectation is that audit lags will be longer when there are audit qualifications or comments short of audit qualifications. The auditors of Scottish local authorities are appointed by a public body known as the Accounts Commission for Scotland, with the work being split between its own staff and private auditors. The expectation is that audit lag will be longer when the Accounts Commission is the auditor (ACAUD); the expected sign is positive. At least three different interpretations could be placed on such a finding: the Accounts Commission is more thorough than private auditors; it keeps the most troublesome cases inhouse; or it is less efficient than private auditors. A change of auditor (CHAUD) is expected to increase audit lag, owing to a 'new broom' effect in the first year. Partly for data reasons, CHAUD denotes a change of audit firm, not the change of audit partner within the same firm, or changes of Accounts Commission auditor. The final variable in this grouping is whether the Director of Finance (more strictly, the person signing the annual accounts) is a chartered accountant (CA). The expectation is that chartered accountants, trained outside the public sector, would be more insistent on timeliness because of their private sector experience. Accountants trained within the public sector may have become accustomed to untimeliness and to the lack of consequences attached to it.

The fourth grouping consists of five year dummies. In the study, 1989-90 was dropped so that the CHAUD variable could be used. The base for the year dummies is 1990-91. The year dummies relate to 1991-92 (DUMMY92) to 1995-96 (DUMMY96). Audit lags are expected to reduce after 1990-91 because the Accounts Commission had exerted pressure on councils to reduce audit lags. The year dummies up to and including DUMMY95 are expected to be negative. In contrast, accounts for 1995-96 were prepared by the successor authorities, themselves preoccupied with establishing their own financial systems, and an examination of the data made it clear that audit lags increased dramatically for that year. DUMMY96 is therefore expected to be positive.

In some of the regression models, there is an extra variable (LAG1) which is the audit lag in the preceding year. Examination of the data suggested that there is a 'habit' effect. Local authorities which are slow in year t are also slow in year t+1, either because delays are not thought important or because delay breeds delay on logistical grounds. The analysis in Table 2 indicates that a considerable percentage of councils have not had the accounts of year t certified at the beginning of year t+2 (ie audit lag is longer than 12 months).

Table 3
Justification of Variables in Audit Lag Regressions, 1989/90 to 1995/96

Variable	Expected Sign	Rationale	Confidence In Sign
Population	negative	larger authorities will have better staffed finance departments	low
District dummy District =1 Regional, Island =0	positive	regional & island authorities have been said to attract better quality staff and councillors	low
ONSRural dummy Rural =1 Others=0	positive	rural authorities are somewhat isolated from the mainstream	low
ONSProspering dummy Prosperous=1 Others=0	negative	authorities in prospering areas will be better managed generally, reflecting a high level of self-confidence	low
ONSMaturer dummy Maturer =1 Others =0	negative	authorities in maturer areas will be better managed generally, reflecting a high level of self-confidence	low
ONSIndustry dummy Industry =1 Others = 0	positive	authorities in declining areas will be less well managed generally, partly because they have overwhelming problems	low
LAB control Labour = 1 Others = 0	positive	complacency effect	moderate
CON control Conservative control = 1 Others = 0	negative	loyalty effect	moderate
LIBDEM control Liberal Democrat control =1 Others = 0	No expectation		
SNP Control Scottish National Party control = 1 Others = 0	negative	flagship effect	moderate
Independent Control =1 Others = 0	No expectation		
AQORCSAQ Audit Qualification or Comments Short of Audit Qualification = 1 Others = 0	positive	Review process is likely to be more time-consuming (Not considered yet is whether these refer to Financial Reporting or to Breach of Statutory Duty)	high

AQ Audit Qualification = 1 Others = 0	positive	Review process is likely to be more time-consuming (Not considered yet is whether these refer to Financial Reporting or to Breach of Statutory Duty)	high
CSAQ Comments on Short of Audit Qualification =1 Others = 0	positive	Review process is likely to be more time-consuming (Not considered yet is whether these refer to Financial Reporting or to Breach of Statutory Duty)	high
ACAUD Year dummy Accounts Commission = 1 Private auditors = 0	positive	either: Accounts Commission keeps the most troublesome cases in-house, or it is less efficient than private auditing firms	moderate
CHAUD Change Auditor = 1 Others = 0	positive	'New broom' effect	high
DUMMY92, DUMMY93, DUMMY94, DUMMY95, DUMMY96 DUMMY92=1 if accounts for the year of 1992 and other years =0, Likewise if accounts for the year of 1993, then DUMMY93 = 1, other years = 0.	Negative for all years except for 1996.	Audit lags are expected to reduce after 1991; and 1996 is the year of reorganisation, so the accounts are expected to be delayed	high

Table 3 summarises the variables that will be used in the regressions. The researchers' prior expectations of expected signs are stated, as are the justification and level of confidence they held in the expected sign. For completeness, the omitted base dummy variables on ONS authority classification, political control and year are included in the table.

Table 4
Model Summary

Model	Regression	Dependent Variable	Comment
1A	OLS	Audit Lags	This is the full OLS model
1B	OLS	Audit Lags	Same as 1A but with lagged dependent variable
2A	Fixed Effects	Audit Lags	The time-invariant regressors have to be dropped, and the number of variables has been greatly reduced
2B	Fixed Effects	Audit Lags	Same as 2A but with lagged dependent variable
3A	Restricted OLS	Audit Lags	This OLS model is run for comparative purposes, using the same variables as model 2A
3B	Restricted OLS	Audit Lags	This OLS model is run for comparative purposes, using the same variables as model 2B
4A	Logit	Non-compliance with deadline (binary variable)	This looks at the problem from a different perspective and checks for lack of compliance with the auditing deadline
4B	Logit	Non-compliance with deadline (binary variable)	Same as 4A but with lagged dependent variable

Regression models

An overview of the empirical methodology is provided in Table 4. There are four pairs of models, each labelled A (when there is no lagged dependent variable) and B (when there is a lagged dependent variable). The first three pairs have audit lag as the dependent variable, whereas the fourth pair represents a redefinition of the problem, namely that of noncompliance with the central government deadline for certification. In all eight models, 1989- 90 has been dropped so that the Change of Auditor (CHAUD) variable can be used.

The three pairs of regressions on audit lags are complementary. The first pair (1A and 1B) is the 'Full OLS' models, pooled regressions on all the variables. These models impose the same constant on all councils.

The second pair (2A and 2B) is the Fixed Effects models. The rationale for adopting Fixed Effects as a regression methodology is that observation of the data suggests that there are certain attributes of individual local authorities, perhaps managerial efficiency or commitment to timeliness in financial reporting, which are not captured by the independent variables used in the models. The Fixed Effects model drops the assumption of a common constant, and instead estimates a constant for each local authority. The disadvantage of adopting Fixed Effects is that all time-invariant independent variables have to be dropped, thereby losing certain variables shown to be significant in the OLS models.

The third pair of models ('Restricted OLS') is presented so that a proper comparison can be made between the Fixed Effects results (models 2A and 2B) and the OLS results (models 3A and 3B) on the same restricted set of variables.

The fourth pair (4A and 4B) is Logit regressions on whether the official deadline for certification is met. If councils did not see intrinsic value in timeliness, the issue could be reformulated in terms of whether or not there is compliance with the externally imposed deadline. It would not be judged worthwhile devoting extra resources to completing earlier than the deadline, and, once the deadline has been breached, a long breach might not be regarded as much worse than a short one. In the study years, the official deadline for certification was 31 August, except for 1995-96 when there was a temporary relaxation to 31 October, as a result of the local government reorganisation on 1 April 1996.

Table 5
Results of Audit Lag Regressions

	Model 1A	Model 1B	Model 2A	Model 2B	Model 3A	Model 3B
Variable						
Constant	11.4414** (13.926) -(13.926)	5.0650** 5.942) -(5.942)			10.0810** -(16.805)	4.2676** (17.076) (7.235)
Pop91	0.0012 -(1.173)	0.0016 -(1.698)				
Dist	-1.2853 -(1.962)	-0.5496 -(0.955)				
ONSI	-0.9142 -(0.958)	-0.0192 -(0.021)				
ONSM	1.7691 -(1.461)	0.9873 (0.762)				
ONSP	-1.284 -(1.973)	-0.552 -(0.919)				
ONSU	0.2297 -(0.258)	0.5828 -(0.698)				
LAB	-0.7225 -(0.736)	-0.5435 -(0.606)	0.4549 (0.271)	-0.2477 (-.148)	-0.9831 (-1.916)	0.0024 (0.006)
CON	0.0128 -(0.015)	0.101 -(0.143)	3.0168 (1.559)	1.8454 -(0.973)	-1.2972 (-1.848)	-0.2507 (-0.416)
LIBorSNP	-2.5426 -(3.052)	-1.6901 -(2.364)	-3.5562 (-2.698)	-2.5538 (-2.085)	-4.12 (-5.932)	-2.0893 (-3.414)
NOC	0.8479 -(1.026)	0.262 -(0.335)	1.3562 -(0.890)	0.6628 -(0.442)	-0.5902 (-1.069)	0.1454 -(0.306)
Polcomp	-1.4435 -(2.775)	-0.4994 -(1.045)				
AQ	2.3075 -(4.560)	0.8584 -(1.744)	1.5425 (2.890)	0.9715 (1.787)	2.811 -(5.645)	0.9784 -(1.990)
CSAQ	0.1919 -(0.350)	0.2576 (0.5320	0.2049 (0.390)	0.2992 (0.603)	0.5079 (0.897)	0.4684 (0.940)

ACAUD	0.9518	0.4564	0.9283	0.6186	0.8786	0.5171
	(-2.356)	(-1.36)	(-2.272)	(-1.571)	(-2.173)	(-1.565)
CHAUD	1.3918	1.8493	1.6441	1.8245	1.2858	1.725
	(-1.6630	(-2.988)	(-2.363)	(-2.901)	(-1.512)	(-2.835)
CA	-0.1911	-0.5186	-1.0476	-1.1058	0.118	-0.732
	(-0.3060)	(-1.034)	(-1.185)	(-1.311)	(-0.202)	(-0.584)
Lag1		0.5229		0.3305		0.5446
		(-10.453)		(-4.875)		(-11.248)
DUMMY92	-0.1214	-0.265	-0.1303	-0.2061	-0.0817	-0.2764
	(-0.195)	(-0.549)	(-0.276)	(-0.472)	(-0.128)	(-0.572)
DUMMY93	-2.0304	-2.0917	-2.2013	-2.169	-1.8213	-1.9493
	(-2.121)	(-3.122)	(-3.011)	(-3.333)	(-1.877)	(-2.946)
DUMMY94	-0.6923	-0.1953	-0.7553	-0.4286	-0.567	-0.1546
	(-1.15)	(-0.431)	(-1.575)	(-0.977)	(-0.916)	(-0.339)
DUMMY95	-1.4505	-1.042	-1.5266	-1.2455	-1.3264	-1.03
	(-2.463)	(-2.271)	(-3.033)	(-2.69)	(-2.255)	(-2.295)
DUMMY96	6.5355	7.2309	6.4157	6.869	6.5796	7.1988
	(-7.73)	(-9.57)	(-8.455)	(-9.621)	(-7.698)	-9.411
Observations	390	390	390	390	390	390
Breausch-Pagan Statistic	104.0157	142.9822	Not repoted	Not repoted	82.8367	142.2511
Corrected for heteroskedasticity	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.43567	0.58898	0.55084	0.58881	0.40515	0.57871
F-Statistic	15.3	26.34	7.12	8.05	19.92	36.62
Fixed Effects	No	No	Yes	Yes	No	No

REGRESSION RESULTS

Table 5 reports the results from the first three pairs of regressions, namely the Full OLS models (1A and 1B), the Fixed Effects models (2A and 2B), and the Restricted OLS models (3A and 3B) run solely for comparative purposes. In all six models, the t ratios have been corrected for heteroskedasticity by using White's standard errors.

Full OLS models

Model 1A is the Full OLS model, without a lagged dependent variable. The following variables are statistically significant: constant (1%, expected positive sign), ONSP (5%, expected negative sign), LIBorSNP (1%, expected negative sign); Polcomp (1%, expected negative sign); AQ (1%, expected positive sign); ACAUD (5%, expected positive sign); DUMMY93 (5%, expected negative sign); DUMMY95 (5%, expected negative sign); and DUMMY96 (1%, expected positive sign). Apart from ONSP and LIBorSNP, the ONS and party-political variables perform poorly. The District variable just misses 5%, though with an unexpected negative sign. The Adjusted R^2 is 0.44. The F-test shows that Model 1A is significant at the 1% level.

Model 1B introduces audit lag in the previous year as a dependent variable. Unreported regressions used lags of more than one year, but these variables were never significant when the one-year lag was also included. The rationale for introducing the lagged dependent variable is that persistence in local authority performance can be observed in the raw data. We would expect that introducing the lagged dependent variable would detract from the significance of other variables. For example, it was hypothesised in Table 3 that a complacency effect on the part of Labour-controlled councils would increase audit lag. If this had been sustained by Model 1A (in fact, the sign is wrong and also insignificant), this would have led Labour councils to have, ceteris paribus, longer audit lags.

In Model 1B, LIBorSNP (down from 1% to 5%), DUMMY93 (up from 5% to 1%) and DUMMY95 (5%) keep their expected negative signs. Polcomp now has a much lower negative coefficient and loses its significance entirely. DUMMY96 keeps its expected positive significance (1%) but AQ (down from 1%) and ACAUD (down from 5%) lose theirs. The most important change is that the positive coefficient on the constant drops sharply (though remaining significant at 1%), with the lagged dependent variable (Lag1) being significant at 1% with a coefficient of 0.5229. Another change is the CHAUD variable, which moves from being not significant at 5% to being significant at 1%, having the expected positive sign. The Adjusted R2 has risen to 0.59.

Reviewing Models 1A and 1B, it can be seen that the demographic and political variables (with the exception of LIBorSNP, Polcomp and ONSP in Model 1A) have performed disappointingly. Certain year dummies are important. AQ and ACAUD are significant when there is no lagged dependent variable, and CHAUD when there is. LAG1 dominates Model 1B: 52% of the variation in the dependent variable is attributable to it, in a regression which explains 59% of the variation.

Fixed effects models

The third and fourth columns of Table 5 report the Fixed Effects results, Model 2A without the lagged dependent variable and Model 2B with it. In Fixed Effects regressions, the time-invariant variables must be dropped for technical reasons. The constant is dropped, with individual Fixed Effects being estimated for each council.

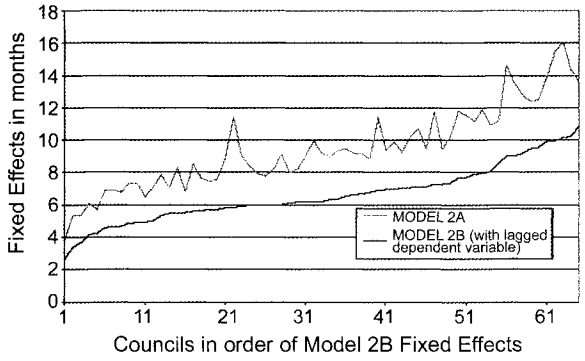
Model 2A has an Adjusted R2 of 0.55; the F-statistic shows that the model is overall significant at 1%. The following variables are statistically significant: LIBorSNP (1%, expected negative sign); AQ (1%, expected positive sign); ACAUD (5%, expected positive sign); CHAUD (5%, expected positive sign); DUMMY93 and DUMMY95 (1%, expected negative sign); and DUMMY96 (1%, expected positive sign). With the ONSP and Polcomp variables dropped because they are time-invariant, the other variables significant in Model 1A are also significant in Model 2A, at the same level of significance or higher. The CHAUD variable, which was not significant in Model 1A, becomes significant at 5%.

Introducing the lagged dependent variable in Model 2B improves the Adjusted R2 from 0.55 to 0.59. The F-statistic demonstrates the overall significance of the model at 1%. LAG1 has a coefficient of 0.3305, significant at 1%. Two variables which were statistically significant in Model 2A lose that significance: AQ (down from 1%) and ACAUD (down from 5%). In contrast, CHAUD moves from significance at 5% to 1%. LIBorSNP suffers a reduction in the significance level from 1% to 5%. Changing the basis of comparison to Model 1B, the coefficient on LAG1 has fallen from 0.5229 to 0.3305, though still significant at 1%. LAG1 does not dominate Model 2B in the way that it dominates Model 1B.

Figure 3 shows the Fixed Effects of individual councils in a graphical format. Councils are ranked in order of increasing Fixed Effects in Model 2B, the model with the highest explanatory power. These individual Fixed Effects range from 2.66 months to 10.87 months, producing a smooth line on the graph. The jagged line is the plot of the Fixed Effects for each council, as estimated in Model 2A. Councils which represent peaks on the Model 2A line are those for which the introduction of Lag1 in Model 2B has led to a marked reduction in their Fixed

Effects. In other words, the strong habit effect of untimeliness in such councils is captured by the lagged dependent variable, thereby lowering the Fixed Effects coefficients.

Figure 3
Fixed Effect for Individual Councils, 1990-91 to 1995-96



It would be appealing if the Fixed Effects of each council, generated by Models 2A and 2B, could be interpreted as a kind of performance indicator for that council. A small Fixed Effect might then be considered as evidence of a good financial culture with regard to timeliness, and a large Fixed Effect as evidence of the converse. That would have been a reasonable interpretation if the Fixed Effects had been estimated on the full set of variables used in the OLS models (1A and 1B).

However, Fixed Effects regressions must necessarily drop time-invariant variables. For example, in Model 1A, the ONSP variable was significant at 5% and the District variable only just missed significance at 5%. Both had substantial negative coefficients: -1.2853 and -1.2840, respectively. This suggests that, if these variables had not been time-invariant and could have been included within the Fixed Effects regressions, the Fixed Effect of a council exhibiting both characteristics would have been larger. Notwithstanding this qualification, the dispersion of Fixed Effects indicates marked differences between councils, well beyond the ramifications of this issue. In Model 2A, the range of individual Fixed Effects is from 3.83 months to 16.07 months. The qualification is less important in the case of Model 2B, whose OLS counterpart (Model 1B) did not show the time-invariant variables as significant.

Restricted OLS models

It has already been explained that, in order to run the Fixed Effects regressions, it was necessary to remove time-invariant variables. For purposes of comparison, the OLS regressions have been re-run with the restricted set of variables used in the Fixed Effects regressions. Comparing Model 3A (OLS on restricted set of variables, with no lagged dependent variable) with Model 2A yields the following observations. The Adjusted R2 falls from 0.55 to 0.41. In terms of which variables are statistically significant, CHAUD and DUMMY93 lose their significance entirely, whilst DUMMY95 reduces its significance level from 1% to 5%.

Comparing Model 3B (OLS on restricted set of variables, with lagged dependent variable) with Model 2B shows that there is a much larger coefficient on LAG1 (0.5446 as opposed to 0.3305, both significant at 1%). LIBorSNP increases its significance level (5% to 1%); AQ becomes significant at 5%; and DUMMY95 reduces its significance from 1% to 5%.

Logit models

Table 6 reports the Logit models 4A and 4B. This constitutes an alternative approach to the issue of audit lag, regarding it as essentially a matter of non-compliance by individual councils with externally imposed deadlines. Timeliness is not valued for its own sake, but solely as a means of compliance. In parallel to the OLS and Fixed Effects regressions, Model 4A does not have a lagged dependent variable, whereas Model 4B does.

Table 6
Logit Regressions on Non-Compliance with Audit Deadlines.

Model 4B	Variable	Model 4A
Constant	0.549	-5.0318
	(-1.018)	(-5.227)
Pop91	0.0004	0.0006
	(-0.571)	(-0.685)
Dist	-0.4348	0.0124
	(-1.009)	(-0.024)
ONSI	-1.3899	-1.0319
	(-2.134)	(-1.321)
ONSM	-0.1685	-1.0082
	(-0.159)	(-0.809)
ONSP	-1.1983	-0.7442
	(-1.827)	(-0.992)
ONSU	-0.7392	-0.5753
	(-1.174)	(-0.784)
LAB	0.9119	1.0353
	(-1.323)	(-1.256)
CON	2.2554	1.9589
	(-2.399)	(-1.913)
LIBorSNP	-1.1032	-0.8995
	(-1.5)	(-1.032)
NOC	0.9241	0.291
	(-1.432)	(-0.381)
Polcomp	-0.5413	0.1353
	(-1.211)	(-0.244)
AQ	1.0895	0.146
	(-2.998)	(-0.326)
CSAQ	0.2614	0.3108
	(-0.652)	(-0.673)
ACAUD	0.6161	0.2344
	(-2.291)	(-0.725)
CHAUD	-0.2773	0.0816
	(-0.613)	(-0.14)
CA	0.2816	0.0348
	(-0.736)	(-0.08)
Lag1		0.584
DUMMY92	-0.061	-0.5639
	(-0.152)	(-1.113)
DUMMY93	0.3422	0.009
	(-0.687)	(-0.014)
DUMMY94	0.1698	0.2196
	(-0.405)	(-0.433)
DUMMY95	0.5974	0.7916
	(-1.371)	(-1.517)
DUMMY96	2.3873	2.8341
	(-3.7)	(-3.827)
Observations	390	390
McFadden R2	0.1761	-0.3844
Chi-squared	82.6984	180.456

The following variables are statistically significant in Model 4A: ONSI (unexpected negative sign, significant at 5%); CON (unexpected positive sign, significant at 5%); ACAUD (expected positive sign, significant at 5%); AQ (expected positive sign, significant at 1%); and DUMMY96 (expected positive sign, significant at 1%). The McFadden R2 (Maddala, 1983, p. 40), which replaces the conventional Adjusted R2, is 0.1761. The Chisquared statistic for the Likelihood Ratio Test is 82.6984, indicating that the Logit regression is significant at 1%.

The introduction of Lag1 in Model 4B significantly alters the results. Lag1 has the expected positive sign, and is significant at 1%. The constant has a negative sign, significant at 1%. DUMMY96 has the expected positive sign, significant at 1%. However, AQ is not significant when Lag1 has been introduced. The McFadden R2 is 0.3844, much higher than in Model 4A, and the Chi-squared for the Likelihood Ratio Test is 180.4560, significant at 1%.

Table 7
Predictive Performance of the Logit Models on Non-Compliance with Deadlines

MODEL 4A (without lagged dependent variable)

	Predicted		
Actual	**0**	**1**	**Total**
0	40	73	113
1	22	255	277
Total	62	328	390

MODEL 4B (with lagged dependent variable)

	Predicted		
Actual	**0**	**1**	**Total**
0	78	35	113
1	27	250	277
Total	105	285	390

Table 7 reports the predictive performance of Models 4A and 4B. It should, however, be remembered that the Logit regressions are maximising the likelihood of observing the pattern of non-compliance, which is not the same as maximising predictive performance (Greene, 1997, p. 894). Over the study period, there were 390 observations, of which 277 (71%) were cases of non-compliance. Model 4A correctly identified 255 (92%) noncompliants, but only 40 (35%) compliants. It mis-classified 73 compliants as non- compliants, and 22 non-compliants as compliant. Model 4B correctly identified 250 (90%) non-compliants, and 78 (69%) compliants. It mis-classified 27 non-compliants as compliant. In terms of not classifying compliants as non-compliant, Model 4B predicts much better than Model 4A.

Evaluation of regression results

The regression results provide a consistent picture, whether using OLS or Fixed Effects methodology on audit lag, or using Logit on non-compliance. This discussion concentrates on those variables for which the results are notable.

The results for the accounting and audit variables are important. AQ is significant at 1% in all four models without lagged dependent variables, notwithstanding the variation in methodology. AQ is also significant in Model 3B and would have been significant in models 1B and 2B if the significance level had been 10%. In contrast, CSAQ is not significant in any regression. ACAUD is significant in all four models without lagged dependent variables. In the three audit lag models with lagged dependent variables, CHAUD is significant, having only been significant in Model 2A of the three models without lagged dependent variables. The CA variable is not significant in any model.

Certain of the year dummies are consistently important. DUMMY93 is significant in all the audit lag models except for Model 3A (where it narrowly misses significance at 5%) and DUMMY95 is significant in all the audit lag models. However, neither is significant in the Logit models. DUMMY96 is significant at 1% in all eight models. These results are indicative of improvements over the base year of 1990-91, and then show the catastrophic audit lags of 1995-96 (the year most affected by reorganisation).

The introduction of a lagged dependent variable attracts a large coefficient, always significant at 1%. When interpreting the results, it is useful to look at models both with and without the lagged dependent variable. Having the lag within the model improves statistical performance, as measured by the Adjusted R^2, though it may detract from an understanding of those variables ultimately responsible for audit lags.

There is a marked variation in the estimated Fixed Effects for individual councils, supporting the view that patterns of good or bad performance in terms of audit lag are deeply embedded. In the models where they can be used, the structural and demographic variables perform rather poorly, except for ONSP and also District, with an unexpected negative sign. There is evidence that political competition shortens audit lags. However, the results on the political control variables are mixed. It should also be noted that care is required in interpreting the negative coefficient, significant in all six audit lag models but not in the Logit models, on the LIBorSNP variable. There are few such observations and the researchers have established that Angus District Council, consistently one of the best performers, was also one of the best performers before the study period and before it became SNP-controlled.

CONCLUSIONS

Three points will conclude this paper. First, the empirical results for Scottish local authorities (where untimeliness was a chronic problem in the 1990s) are both sensible (the statistically significant variables make sense) and robust. Considering the variations in approach across models 1A to 4B, the message about audit variables and unmeasurable characteristics being important, and socio-demographic and political characteristics less important than expected, is striking. This suggests that it was not environmental factors which were the main drivers of variations in untimeliness, and that these are internal to the accounting and auditing system,

where the remedies therefore lie. For example, questions need to be asked about the effectiveness of the Accounts Commission over this period. There is evidence that performance in England improved sharply in the 1990s (Audit Commission, 1998), during a period when Scotland regressed, partly but not solely because of the 1996 reorganisation.

Second, the paper has innovated methodologically, in terms of using Fixed Effects and of viewing audit lags both as a matter of timeliness and of non-compliance with accounting regulation exercised either by, or on behalf of, central government. Ironically, poor performance in terms of audit lags on the part of Scottish local authorities over the study period led to a wide dispersion of audit lags, thereby allowing the systematic application of such techniques. There is obvious potential for accounting regulators to use this methodology to identify which characteristics are associated with untimeliness, and then to concentrate regulatory effort on those councils predicted to be non-compliant. In the United Kingdom, without the disciplines exerted by ratings in US municipal bond markets (Rose, 1998), there must be other pressures in support of timeliness.

Third, the researchers plan to take forward this work in two distinct ways. There will be a replication of the analysis for the post-reorganisation Scottish local authorities, though that has to wait for sufficient years of data to become available. It is already known that the dreadful performance of 1995-96 was repeated in 1996-97 and 1997-98, following which audit lags have fallen considerably. Additionally, the data which lie behind the AQ and CSAQ variables in this paper will be further analysed to better understand the causal factors, including the way in which SAS 600 (Auditing Practices Board, 1993) altered the balance between them.

REFERENCES

Audit Commission (1998). Annual Report: Local Government Audits - England 1997. London: Audit Commission.

Auditing Practices Board (1993). SAS 600: Auditors' Reports on Financial Statements. London:Auditing Practices Board.

Baltagi, B.H. (1995). Econometric Analysis of Panel Data.

Bowerman, M. and Gray, I. (1999). Local Government Management Letters. ACCA Occasional esearch Paper No. 27. London: Certified Accountants Educational Trust.

Butterworth, P., Gray, R.H. and Haslam, J. (1989). 'The local authority annual report in the UK: an exploratory study of accounting communication and democracy'. Financial Accountability Management, 5: 73-87.

Chandler, R. and Cook, P. (1986). 'Compliance with disclosure Standards in published reports and ccounts of local authorities'. Financial Accountability & Management, 2: 75-88.

Collins, W., Keenan, D. and Lapsley, I. (1991). Local Authority Financial Reporting: Communication, Sophistry or Obfuscation? Edinburgh: Institute of Chartered Accountants f Scotland and Chartered Institute of Public Finance and Accountancy.

Drebin, A.R., Chan, J.L. and Ferguson, L.C. (1981). Objectives of Accounting and Financial eporting for Governmental Units: A Research Study. Volume 1. Chicago: National Council on Governmental Accounting.

Dwyer, P.D. and Wilson, E.R. (1989). 'An empirical investigation of factors affecting the timeliness of reporting by municipalities'. Journal of Accounting and Public Policy, 8: 29-55.

Dyer, J.C. and McHugh, A.J. (1975). 'The timeliness of the Australian annual report'. Journal of Accounting Research, 13: 204-219.

Greene, W.H. (1997). Econometric Analysis. Third edition. London: Prentice Hall.

Himsworth, C.M.G. (1995). Local Government Law in Scotland. Edinburgh: T & T Clark.

Hsiao, C. (1986). Analysis of Panel Data. Cambridge: Cambridge University Press.

Jaggi, B. and Tsui, J. (1999). 'The determinants of audit report lag: further evidence from Hong Kong'. Accounting and Business Research, 30 (1): 17-28.

Johnson, L.E. (1996). 'Factors affecting municipal audit delay'. Accounting Enquiries, 6: 121-48.

Johnson, L.E. (1998). 'Further evidence on the determinants of local government audit delay'. Journal of Public Budgeting, Accounting & Financial Management, 10: 375-97.

Jones, R. (1992). 'The development of conceptual frameworks of accounting for the public sector'. Financial Accountability & Management, 8: 249-264.

Jones, R. and Pendlebury, M. (1982). 'Uniformity v. flexibility in the published accounts of local authorities'. Accounting and Business Research, 12: 129-35.

Jones, R. and Pendlebury, M. (1991). 'The published accounts of local authorities, revisited'. Financial Accountability & Management, 7: 15-33.

Kilgour, L. and Lapsley, I. (1988). Financial Reporting by Local Authorities in Scotland. Edinburgh: Institute of Chartered Accountants in Scotland.

Lapsley, I. (1992). 'User needs and financial reporting: a comparative study of local authorities and the National Health Service'. Financial Accountability & Management, 8: 281-96.

Maddala, G.S. (1983). Limited-Dependent and Qualitative Variables in Econometrics. Cambridge: Cambridge University Press.

McLelland, A.J. and Giroux, G. (2000). 'An empirical analysis of auditor report timing by large municipalities'. Journal of Accounting and Public Policy, 19 (3): 263.

Midwinter, A. (1995). Local Government in Scotland: Reform or Decline? London: Macmillan.
Ng, P.P.H. and Tai, B.Y.K. (1994). 'An empirical examination of the determinants of audit delay in Hong Kong'. British Accounting Review, 26: 43-59.

Rose, P. (1998). 'Financial Reporting', in Thompson, F. and Green, M. T. (eds.), Handbook of Public Finance. New York: Marcel Dekker, pp. 523-55.

Wallace, M. and Denham, C. (1996). The ONS Classification of Local and Health Authorities of Great Britain.