
**Chapter 3: Departmental Secretaries and the
Adoption of Accrual Reporting**

3.1 Introduction

The previous chapter concluded that the framework developed to explain and predict accounting policy choice in the private sector is more applicable to the accounting policy choices reflected in Commonwealth departmental financial statements, than is the public sector framework, developed in the United States of America (USA) to explain the accounting policy choice of municipal governments.

This chapter therefore applies the structure outlined in Section 2.2 to the incentives of departmental Secretaries to undertake the additional costs, and risks, associated with the early adoption of accrual reporting.

Section 3.2 describes the environment within which the move to accrual reporting was made, and the objectives espoused for this change to the reporting framework. This discussion provides the background necessary to establish a link between the early adoption of accrual reporting and the utility of a departmental Secretary.

Section 3.3 analyses the likely impact of each of the four factors identified in Section 2.2 as likely to influence accounting policy choice, being:

1. physical costs,
2. agency costs,
3. political costs and political visibility, and
4. cultural and social influences,

on the timing of the decision by departmental Secretaries to adopt accrual reporting.

Of these four factors, physical costs and political visibility were identified as likely to have had the most influence on the decision. Research propositions were developed, based on these factors, which are investigated further in Chapter 4.

3.2 Accrual Reporting - Panacea to all Ills

Within the public sector, demands for increased efficiency and effectiveness have become catch cries (Cousins 1988, p.91; Guthrie 1993, p. 15; Hopwood 1984, 172). Though often used loosely, the terms 'efficiency' and 'effectiveness' are clearly linked to assessments of performance, where performance is defined as:

...the proficiency of a reporting entity in acquiring resources economically and using those resources efficiently and effectively in achieving specified objectives...

(Australian Accounting Research Foundation (AARF) 1990b, para. 5)

The move to accrual reporting by government departments was placed clearly within this arena. It was identified as an integral part of the Financial Management Improvement Program of reforms, the prime objectives of which were to provide greater efficiency and effectiveness in the delivery of government programs (Department of Finance (DoF) 1994a, p. 19; Guthrie 1993, p. 18; Joint Committee of Public Accounts (JCPA) 1995; p. 2, Management Advisory Board and its Management Improvement Advisory Committee (MAB-MIAC) 1992).

The following list identifies a selection of instances in which accrual reporting was specifically identified as enabling assessments of 'efficiency and effectiveness' in Budget funded agencies, including departments:

- Publications and conferences of the Australian Society of Certified Practising Accountants (ASCPA) (ASCPA 1993, p. 9, Carpenter, G.J. 1986, p. 3; Mackintosh 1992, p. 38; Williams 1994, p. 3),
- The report of the Working Party on Accrual Reporting (1992, p. 2), which comprised representatives of DoF, State and Territory Treasuries and Ministries of Finance, the Australian Bureau of Statistics and the Australian Accounting Research Foundation (AARF).
- A publication issued by the Organisation for Economic Cooperation and Development (1993, p. 6);
- A publication issued by the International Federation of Accountants (1991, p. 19)
- DoF publications, (DoF 1993a, Chapter 2, DoF 1994a, p. 19, DoF 1994b, p. 3, DoF 1994c, pp. 2-3)
- Speeches delivered by senior members of the DoF to a variety of professional bodies (Barrett 1992, p. 9; Barrett 1993, p. 6; Barrett 1994, pp. 40-42, Carter 1993; D'Angelo, 1992, p. 5; McPhee 1994, p. 2, Sedgwick 1994, p. 12; Wallace, D. 1994, p. 1)
- The efficiency audit conducted by the Australian National Audit Office (ANAO) into the implementation of accrual reporting in Commonwealth government departments (1994, p. 2).

In addition, the link between accrual reporting and increased accountability was raised in all the above publications and forums, and particularly emphasised by the DoF (Barrett

1991, Guthrie 1993) and by the accounting profession and standard-setting bodies (Sutcliffe, Micallef & Parker, 1991).

The link with accountability was further reflected in Parliament when the first set of accrual reporting financial statement guidelines were tabled. At that time Senator Short stated:

The coalition welcomes these guidelines because they will assist greatly in improving accountability of the public sector. They will increase accountability and the transparency and comparability of information.

(Senate Hansard, 1 March 1994, p 1204)

Accountability was also the focus of newspaper reports on the introduction of accrual reporting to the public sector (Albon 1995; Burgess 1994).

From the above it is clear that the early adoption of accrual reporting could be expected to be interpreted as a signal of superior financial management, and a commendable commitment to the government reforms.

This is not a radical suggestion. Prior studies have suggested that accounting information in the public sector is '*...intertwined with political ideology and social preference...legitimising actions (to) support a political structure operating within the immediate interests of powerful groups*' (Covaleski & Dirsmith 1991, p. 151).

In particular, Baber and Sen (1984, p. 94) found that adoption of standard reporting practices may be a political tool, demonstrating a commitment to efficient management.

This conclusion was supported by Hopwood (1984, p. 182-183) who further suggested that to be effective, this signal need not even accurately reflect the underlying facts, claiming:

...if the investment in accounting provides sufficient evidence of the organisation's commitment to the course of rational economic and technical action, the discretions so gained might be used to uncouple organisational actions from the accounts which are made of them. Accounting might, in such circumstances, provide the freedom for the organisation to be unaccountable.

The next section addresses how the provision of such a signal could benefit a departmental Secretary.

3.3 The Utility of Departmental Secretaries and the Move to Accrual Reporting

In its simplest terms, application of the concept of utility maximisation implies that:

departmental Secretaries will report on an accrual basis when the benefits of making such a move outweigh the costs.

As discussed in Section 2.2, the utility maximisation theory developed to explain and predict accounting policy choices of the managers of private sector firms identifies four main categories of influence on the accounting policy choice of managers, being:

1. physical costs,
2. agency costs,
3. political costs and political visibility, and
4. cultural and social influences.

In particular, it is suggested that the deliberate management of the last three factors is a potential source of benefit sufficient to outweigh the physical cost of changing an accounting system or adopting a new accounting policy. This may be the case even if there is no direct, or even indirect, economic benefit (Neu 1992).

The following sections address the potential application of these influences on the decision by departmental Secretaries to adopt accrual reporting.

3.3.1 The Physical Cost of Adopting Accrual Reporting

As noted in Section 2.2.1, whether or not the physical costs associated with a change in accounting policy are likely to have an impact on the decision being made, will depend on the particular circumstances.

In the situation currently under review, it is likely that the early adoption of accrual reporting prior to the mandated period would have significantly increased the costs of financial statement preparation. There are a number of factors which point to this conclusion.

Firstly, it is notable that the number of departments which indicated that they would adopt accrual reporting prior to 1995 was more than double the number that actually did so²⁰. It is reasonable to assume that those departments which failed to meet their initial commitment withdrew because the costs, financial and otherwise, outweighed the perceived benefits.

In addition, incorporated into the cost assessment would have been consideration of a potentially high risk of failure, as the reporting framework was still in a state of flux, the first financial statement guidelines for accrual reporting by Commonwealth departments

²⁰ The fact that not all departments which initially indicated that they would report on an accrual basis actually did so can be gleaned from the fact that the reported numbers of departments which were to adopt accrual reporting in 1993-94 dropped from thirty four (DoF 1994a, p. 20) to twenty (Wallace, D. 1994, p. 2), with only sixteen actually doing so.

only being issued one month before the end of the period to be reported upon (DoF 1993b).

Prior to making this change, departments were required to account on a cash basis to each appropriation line item in the annual Budget. There was no classification required by type of expense, eg interest expense, salary and employee entitlement expenses, and no differentiation between whether assets or liabilities were controlled by the department or simply administered by the department on behalf of the Commonwealth.

In contrast, these types of classification were required under the accrual financial statement guidelines. This factor alone is likely to be significant. An audit conducted by the ANAO during 1992 concluded that forty two percent of departmental assets were not reported in departmental financial statements because they were not recorded in departmental asset systems (ANAO 1992, p. 14).

In addition, even after the first ten departments had reported on an accrual basis, a subsequent efficiency audit, found that in June 1993, over sixty percent of agencies did not have financial systems, trained staff or procedure manuals in place to provide the supplementary balance sheet information required to prepare the information required even for modified cash financial statements (ANAO 1994, p. 81).

The above circumstances indicate that the move to accrual reporting is an example of a situation in which the physical costs of adopting a particular accounting policy are likely to be significant.

Therefore, it is proposed that:

Proposition 1: the physical cost of adopting accrual reporting influenced the timing of the decision made by the departmental Secretary to adopt accrual reporting.

3.3.2 The Relevance of Agency Costs

As noted previously, a particular obstacle that must be overcome when attempting to apply economic rationalist arguments to the public sector is to identify a link between the external financial reports and the utility of the various parties.

A direct link between financial statement numbers and manager remuneration, such as in calculations of additional compensation for managers, compliance with debt contracts, and payment of taxation, does not apply to the financial statements of Commonwealth departments.

Departmental Secretaries are employed under the conditions legislated in the *Public Service Act 1922*. Their remuneration is determined by the Remuneration Tribunal, by way of section 301 of the *Public Service Act 1922* and section 73 of the *Remunerations Tribunal Act 1973*, and does not currently include an allowance for an *ex post* evaluation of the financial management of the department.

In addition, under section 70B of the *Audit Act 1901*, no person or entity is allowed to enter into loan arrangements on behalf of the Commonwealth, of which departments are an integral part, unless specific powers are granted under an act.

This evaluation suggests that the arguments relating to agency costs have no direct application when addressing the incentives of departmental Secretaries to adopt accrual reporting earlier than required.

Therefore, there is no proposition stated in this paper identifying a link between agency costs and the early adoption of accrual reporting.

3.3.3 Political Costs and the Impact of Political Visibility on Departmental Secretaries

This section addresses the potential influence of political costs and political visibility on departmental Secretaries to adopt accrual reporting.

As previously defined, political costs are:

...wealth re-distributions away from the firm to the government and other sectors of the economy...

(Panchapakasen & McKinnon 1992, p. 72);

and 'political visibility' is defined as:

the relative share of scrutiny by politicians, organised groups such as trade unions, and the general public.

Political costs reduce the resources available within an organisation to meet preferred objectives and political visibility increases the potential for imposition of additional political costs.

Departments are subject to a wide variety of externally imposed costs, over which they have little or no control, which clearly fall into the category of political costs. For example, administrative law reforms have resulted in '*...tribunals empowered to seek from public servants explanations and reasons for their decisions, courts capable of overturning ministerial decisions, and legislation that gives the public the right of access to official files...*' (Nelson 1989, p. 180).

In addition, in 1990 there were sixteen general purpose Parliamentary committees, Joint Committees of Public Accounts and Public Works, as well as Senate and House of Representative Standing Committees on Finance and Public Administration (House of

Representatives Standing Committee on Finance and Public Administration (HRSCFPA) 1990, p. 93).

In many cases the associated direct costs can be significant. For example, it has been estimated that '*...fourteen percent of the costs of administering the superannuation and defence force retirement and death benefit legislation can now be attributed directly or indirectly to external review.*' (Enfield 1989, pp.168-169).

Though the channelling of resources into non-productive areas will not have an effect on a Secretary's personal remuneration, it will reduce the ability to direct resources towards other preferred goals, and thus may have a negative impact on external assessment of the departmental Secretary's effectiveness.

In the same manner that it is suggested that managers of firms wish to avoid excessive levels of scrutiny to avoid costs associated with preparation of responses, representation at any hearings, and costs of developing information systems to capture any additional information necessary for compliance with increased regulation, so, too, do departmental Secretaries wish to avoid additional demands in this area. This is illustrated by the statements of departmental witnesses to the Senate Standing Committee on Finance and Public Administration (SSCFPA) review into the quality and timeliness of annual reports, who claimed that government reporting requirements were much more onerous than those applying to large private sector companies. They were strongly opposed to any increases in responsibility in this area and actively sought a decrease (SSCFPA 1989, p. 7).

In addition, it should be noted that departmental Secretaries do not have tenure of appointment, and can be seen as subject to the whims of the government. Departmental

Secretaries are generally chosen by the responsible Minister, though both the Cabinet and the Chair of the Public Service Board do have some influence over this choice (Curnow 1989, p. 19). The maximum term of appointment is five years (*Public Service Act 1922*, section 37) though there is no limitation to subsequent appointments.

At the same time, under section 76E of the *Public Service Act 1922*, the appointment of a departmental Secretary can be terminated by the Governor General in accordance with advice by the Prime Minister. Though such terminations may not have an immediate effect on the remuneration of the (then ex) departmental Secretary due to arrangements for continuance of pay, the power and influence of an unattached Secretary will have been considerably reduced.

Indeed, Lucy (1993, p. 255) notes that it is not unusual for a departmental Secretary to be replaced with another who is more closely aligned with the government and/or the Minister.

Since a departmental Secretary is seen as responsible for the administration of a department, to the Parliament directly as well as to the responsible Minister (HRSCFPA 1990, p. 91), poor performance on behalf of a department will reflect negatively on the departmental Secretary.

Therefore, a departmental Secretary will wish to maintain as positive an aspect on the department's activities as possible. Negative perspectives, which could lead to possible dismissal or reduced chance of re-appointment, would be avoided.

Therefore, in the same way that it is suggested that firms commit resources to either establish a favourable image or moderate an already unfavourable one (Belkaoui &

Karpik 1989, p. 40; Deegan & Carroll 1993, pp. 221-222; Fry & Hock 1976; Panchapakesan & McKinnon 1992, pp.74 -75) so, too, will departmental Secretaries commit resources to achieve a favourable image.

Section 3.2 of this chapter outlined how the adoption of accrual reporting had been identified as an integral part of the Commonwealth government's most radical reform program in recent years, the Financial Management Improvement Program, as well as linked to efficient and effective management and increased accountability.

Therefore, the early adoption of accrual accounting, by demonstrating adherence to and support of these principles, constituted an appropriate tool to reduce the likelihood of the imposition of additional political costs, such as government discretionary reviews, including performance audits conducted by the ANAO and Parliamentary committee investigations.

Deegan and Carroll (1993, pp. 221-222) propose that a non-politically visible²¹ organisation would gain less from demonstrating a higher level of corporate responsibility, relative to a highly politically visible organisation, because they face a lower risk of increased political costs.

This conclusion may not be as directly applicable in the public sector as, in a truly political environment, 'political visibility' is not necessarily to be avoided. If appointments to the position of departmental Secretary are made on the basis of political

²¹ Deegan & Carroll (1993) actually refer to 'politically sensitive' firms, rather than use the term 'politically visible'. However, the concepts have the same meaning.

considerations, not solely on qualifications (Lucy 1993, pp. 255-256) then it is unlikely that someone who has not been 'visible' will be appointed to such a position.

Therefore, though it is argued that the early adoption of accrual reporting may reduce the negative impact of political visibility, it may also constitute an appropriate tool to raise the profile of an otherwise non-descript department.

Therefore, this leads to the non-directional proposition that:

Proposition 2: the political visibility of the department influenced the timing of the decision made by the departmental Secretary to adopt accrual reporting

3.3.4 Social Influences on Departmental Secretaries

In the discussion in Chapter 2 it was noted that social influences should also be considered as a factor influencing accounting policy choice.

In the situation under investigation the social influences on departmental Secretaries to adopt accrual reporting were to demonstrate a commitment to sound financial management practices, accountability, and the Financial Management Improvement Program. These influences are all towards adopting accrual reporting.

To determine whether social influences were stronger for some departmental Secretaries than for others, then one avenue to explore is the influence of senior management with professional accounting qualifications. This is consistent with the argument presented by Neu (1992).

The employee classification in the Australian Public Service most closely equivalent to that addressed by Neu is the Senior Executive Service. This classification comprises the

upper five percent of the Australian Public Service, and is responsible for contributing to the administration of the department and providing policy advice to the government (Lucy 1993, p. 256).

Though conducting a survey of departments now to determine the levels of qualified SES staff would not produce contemporaneous data, the efficiency audit conducted by the ANAO into accrual reporting by departments (ANAO 1994) does provide some indications of where this line of investigation would lead.

The survey conducted by the ANAO indicated that in 1993 only seven departments had Senior Executive Service Officers who were either formally qualified or experienced in an accrual accounting environment. A further forty departments indicated that they neither had nor intended to recruit senior management with such backgrounds. (ANAO 1994, p. 86).

Though the detailed data collected during the ANAO audit is confidential, some basic analysis indicates that pursuing this avenue of investigation is unlikely to be rewarding.

Firstly, though ten departments did adopt accrual reporting in 1992-93, which could possibly have included those seven that had SES with professional accounting qualifications and/or experience, since a further sixteen departments adopted accrual reporting in 1993-94 any such influence would have been found to be notably less significant at that time.

Further, the ANAO survey indicates that professionally qualified staff were evenly spread across small, medium and large agencies (ANAO 1994, p. 132), whilst the agencies

which adopted accrual reporting in 1992-93 included eight small agencies, one large and one medium²², which is not evenly spread.

This finding indicates that an analysis based on professional influences from inside the department is also unlikely to find a significant relationship between professional qualifications of senior management and the decision to adopt accrual reporting in 1992-93.

Therefore, though social influences would generally have encouraged departmental Secretaries to adopt accrual reporting, it is not likely that this factor was a predominant influence in the early adoption of accrual reporting.

3.4 Summary

This chapter applied the private sector framework to explain and predict accounting policy choices of the managers of private sector firms to the accounting policy choice of departmental Secretaries to adopt accrual reporting.

Of the four key factors identified in the private sector framework, being:

1. physical costs,
2. agency costs,
3. political costs and political visibility, and

²² ANAO 1994, pp. 65-66, lists agencies classified by size, determined by the number of accounting staff. Of the agencies which adopted accrual reporting in 1992-93, Parliamentary Reporting Staff, National Capital Planning Authority, ANAO, Australian Science and Technology Council, Commonwealth Ombudsman, Merit Protection and Review Agency, the Department of Tourism and the Industry Commission were classified as small, whilst DoF was classified as medium and Attorney-General's classified as large.

4. cultural and social influences,

only agency costs were identified as not being relevant at this point in time.

The fourth factor, cultural and social influences, was identified as being relevant, but was excluded from further analysis as initial indicators were that these influences may have contributed to the decision but were unlikely to have been decisive.

Physical costs were identified as likely to be significant and, therefore, are addressed empirically in the next chapter.

Political visibility was also identified as likely to represent a key factor. It has been shown that the environment within which the move to accrual reporting was introduced was likely to lead to the interpretation of the early adoption of accrual reporting as an indication of sound financial management and a commitment to the government reforms.

This signal has the potential to reduce the imposition of political costs on departments through reducing the potential for imposition of additional discretionary government accountability mechanisms.

At the same time, it has the potential to raise the profile of a department which may otherwise have not been notable in either a positive or a negative sense.

Therefore, the influence of political visibility on the decision to adopt accrual reporting is also investigated in the Chapter 4.

**Chapter 4: Research Questions, Identification of
Proxies and Specification of Variables**

4.1 Introduction

This chapter specifies the research questions developed from the two research propositions developed in Chapter 3. In addition, suitable proxies for the concepts 'ability to pay' and 'political visibility', which are used in these research questions are described. The bases for calculation of the variables to measure these proxies are also presented.

Research Proposition 1, addressing the influence of the physical cost associated with the adoption of accrual reporting, is developed in Section 4.2 into:

Research Question 1:

Did those department which adopted accrual reporting early have a higher 'ability to pay' than the other departments?

The posing of this question is based on prior research by Banker, Bunch and Strauss (1989) and Ingram (1984). As outlined in Section 4.2, 'ability to pay' is defined as:

the fiscal ability of a department to pay for costs resulting from a change in accounting policy.

Such costs may include necessary modifications to the existing accounting system, training or retraining of staff and/or the hire of consultants.

This research question provides an indirect method to test for the influence that the physical cost of a change in accounting policy may have had. Section 4.2 also details the basis that the variable to measure this 'ability to pay' is measured.

Section 4.4 presents the second research question to be addressed:

Research Question 2:

Did the political visibility of those departments which adopted accrual reporting early differ from the political visibility of the other departments?

To develop empirical methods to answer this question it is necessary to identify appropriate proxies for 'political visibility' and to create variables to measure these proxies.

Section 4.4.1 provides justification for the use of the size of the department, as measured in terms of revenue, as a proxy for political visibility. Section 4.4.3 provides justification for the use of employee numbers as another suitable proxy for political visibility. Both these proxies have been used in prior research.

In addition to these traditional proxies, a further five proxies are proposed, which take advantage of the accountability mechanisms which apply to Commonwealth departments.

These proxies are:

1. complaints to the Commonwealth Ombudsman (Section 4.5.1),
2. requests under the *Freedom of Information Act 1982* (Section 4.5.3),
3. audits performed by the ANAO (Section 4.5.5),
4. scrutiny by Parliamentary Committees (Section 4.5.6), and
5. a composite proxy combining the other proxies (Section 4.5.7).

Most proxies are measured by more than one variable. The details of the way in each variable was calculated, together with a discussion of the limitations associated with both

the proxies and the measurement of the related variables, are contained within the sections providing justification for the use of each proxy.

These new proxies have the potential to add an additional dimension to future research in this area.

As noted in Section 4.6, the data was collected for three financial periods, 1991-92, 1992-93 and 1993-94, for a sample of forty six departments (Section 4.7).

Most of the variables used in this study are measured for each of these years. For ease of reference, these variables are generally referred to in the body of this dissertation in a generic form, using the suffix 'NN' to represent the financial period to which the variable relates. When referring to a specific variable for a particular financial period, the following coding rules are used:

'NN' = 91, refers to the financial period 1991-92,

'NN' = 92, refers to the financial period 1992-93, and

'NN' = 93, refers to the financial period 1993-94.

Summary statistics for all the variables are contained in Section 4.9, and detailed data is listed in Table 19 to Table 30, on pages 167 to 190.

Analysis of this data shows that none of the variables are normally distributed. This is not a problem because the justification for the proxies for political visibility imply that the related variables should be interpreted as being ordinal in nature. However, the variable representing the ability to pay for changes in accounting policies, is measured on a ratio

scale, and so is suitable for transformation to a normally distributed variable (see Section 4.9).

4.2 Testing for the Influence of Physical Costs (ABPYNN)

The first proposition, developed in Section 3.3.1, was:

Proposition 1: the physical cost of adopting accrual reporting influenced the timing of the decision made by the departmental Secretary to adopt accrual reporting.

It is difficult to provide a direct measure of the actual cost of reporting on an accrual basis to test this proposition. However, an indirect measure, indicating an ability to pay for the costs resulting from changes in accounting policies, can be developed, based on the studies by Banker, Bunch and Strauss (1989) and Ingram (1984).

In this dissertation, 'ability to pay'; is defined as:

the fiscal ability of a department to pay for the costs resulting from a change in accounting policy.

This definition is based on the suggestion by Banker, Bunch and Strauss (1989, p. 36), that a surrogate for '*..the fiscal ability of a school district to implement a financial system that would facilitate conformance to GAAP [Generally Accepted Accounting Principles]...*' is an appropriate way to test for the cost of complying with GAAP.

Therefore, Proposition 1 can be addressed with following research question:

Research Question 1:
Did those department which adopted accrual reporting early have a higher 'ability to pay' than the other departments?

As noted above, Banker, Bunch and Strauss (1989) investigated the compliance of school districts in the United States of America (USA) with GAAP. Within that study

they used a variable, calculated as total revenues divided by the number of students, to provide an indication of the fiscal ability of the school district to modify its accounting system.

Their variable was based on the work conducted by Ingram (1984), who investigated State government adoption of GAAP in the United States of America. Ingram used a measure of revenues per capita, excluding special purpose grants, as these could only be applied to restricted activities.

The closest equivalent to these two measures for Commonwealth government departments is the departmental 'gross appropriation for running costs' divided by the number of employees.

The 'gross appropriation for running costs' is the total amount of Commonwealth funds that a department is legally able to spend on staffing and administration purposes (DoF 1992a, p. 9).

This is equal to the sum of

1. the maximum amount that the government has agreed to provide directly to the department for staffing and administration purposes (the appropriation for 'running costs'), and
2. the maximum amount that the department is legally entitled to retain from its own revenue raising activities under section 35 of the *Audit Act 1901*.

Dividing the 'gross appropriation for running costs' by the 'total number of employees' will provide a measure of the relative ability of a department to spend on administrative

matters, into which category an accounting system upgrade or hire of consultants would fall.

Therefore, the variable *ABPYNN* was calculated as:

$$\frac{RCNN}{EMPNN}$$

The sources for the variables *RCNN* and *EMPNN* are detailed in Section 4.2.1 and Section 4.2.2, respectively.

4.2.1 Source - Gross Appropriation for Running Costs (RCNN)

As the proxy for 'ability to pay' is designed to measure the level of resources that a departmental Secretary can plan on utilising for operational purposes, the maximum amount that it was agreed will be provided for these purposes, rather than the actual amount provided during the financial year, is the most appropriate measure.

Certain departmental operations receive individual appropriations for administration purposes, therefore it was necessary in some instances to add such appropriations to the departmental appropriation to obtain the true total for the department.

To determine whether an amount should be included with the departmental running cost appropriation, the relevant departmental annual reports were reviewed to determine whether staff numbers for these activities were incorporated in the staffing report for the department. If they were, it appeared reasonable to conclude that the activity was integral to the department and under the control of the departmental Secretary. Table 3, below, provides the results of this analysis.

Department	Activity receiving own appropriation
Department of Foreign Affairs and Trade	Australian International Development Assistance Bureau
Department of Primary Industries and Energy	Australian Bureau of Agricultural and Resource Economics Australian Geological Survey Organisation
Department of Employment, Education and Training	National Board of Employment, Education and Training
Department of Veteran's Affairs	Repatriation Hospitals

Table 3 - List of Departmental Activities receiving an Individual Appropriation.

In addition, as not all departments had an agreement to retain specific receipts under section 35 of the *Audit Act 1901*, the variable *RCNN* was calculated as follows:

1. For those departments which were entitled to retain receipts under section 35 of the *Audit Act 1901*, *RCNN* is equal to the 'gross appropriation for running costs' in the table of annotated appropriations in Budget Paper No. 2 for the financial year in question. In those instances where the department was also listed in Table 3, the total for the department and the activity was used.
2. For the remaining departments, *RCNN* is equal to the 'appropriation for running costs' in the relevant Appropriation Bill in Budget Paper No. 2 for the financial year in question. In those instances where the department was also listed in Table 3, the total for the department and the activity was used.

4.2.2 Source - Employee Numbers (*EMPNN*)

The variable for employee numbers, *EMPNN*, was calculated as the actual number of employees at the end of each financial year, as reported in the annual report of each department.

4.3 Limitations

It should be noted that the ability to pay proxy is only a very broad indicator of the relative revenue that a departmental Secretary has available to spend on administrative

matters. There may be sound reasons why one department has greater revenue per employee than another department, without indicating that the level of revenue is excessive.

For example, the Department of Foreign Affairs and Trade has a large number of overseas posts. The costs of accommodation in these posts is likely to be significantly greater for this department than for other local based departments, therefore justifying a higher revenue per employee without indicating any particular excess available to spend on other matters.

A second example relates to the distinction between those departments considered 'policy departments' such as the DoF, the Department of Prime Minister and Cabinet and the Treasury, and departments which perform more administration type work, such as the Department of Social Security and the Department of Administrative Services. It is reasonable to expect that the former class of departments would have a higher level of senior staff and so would be expected to have a relatively higher level of revenue per employee to meet these salary costs.

In addition, departments receive appropriations for program costs, ie funds to meet specified government objectives. These program monies may be specific, such as the appropriation to the Department of Employment, Education and Training for 'superannuation payments for former Commissioners of the Commonwealth Tertiary Education Commission' (Commonwealth of Australia 1994, p. 124), or fairly general, such as the \$99 million appropriation in 1994-95 to the Department of Communication and the Arts for the 'Cultural Development Program' (Commonwealth of Australia 1994, p. 114).

Though these latter funds are for a restricted purpose, the purpose is sufficiently broadly defined to allow the departmental Secretary to cross-subsidise other departmental activities.

There is also the possibility that the proposed measure is 'self-fulfilling' in that departments may have negotiated additional funds to cover the cost of modifications to their accounting system. However this possibility is slim given the categorical statement by the Deputy Secretary of the DoF to the Joint Committee of Public Accounts (JCPA) on this specific issue:

CHAIR - But your departments have now got to do all this within their own resources, there is no additional funding for it [the implementation of full accrual reporting].

Mr Barrett - No, there were no additional resources provided for this implementation.

(JCPA 1995, p. 26)

Finally, the relative complexity of accounting systems is likely to vary between departments. Even though a particular departmental Secretary may have a little 'padding' in his revenue base, this may not be sufficient to cover the costs associated with major modifications to the information system.

As, over time, all departments adopt accrual reporting and their accounting systems evolve to a level which can provide more meaningful information than is currently available, more sophisticated measures of the relative costs and the relative ability to pay for costs associated with a change in accounting policies may be able to be developed.

In particular, the application of the principles of Statement of Accounting Concepts 4 (Australian Accounting Research Foundation (AARF) 1992b), which are embodied in the accounting standard on financial reporting by Government departments (AARF

1993), requiring the disclosure of revenue controlled by the department, should enable a more accurate measure of the revenue at the disposal of the departmental Secretary.

Despite these identified limitations, until more reliable alternative measures are readily available, the proposed measure, used in prior studies, does provide a starting point for the analysis.

4.4 Political Visibility

The second proposition, developed in Section 3.3.3, is:

Proposition 2: the political visibility of the department influenced the timing of the decision made by the departmental Secretary to adopt accrual reporting

where 'political visibility' is defined as:

the relative share of scrutiny by politicians, organised groups such as trade unions, and the general public.

This is directly restated as:

**Research Question 2:
Did the political visibility of those departments which adopted accrual reporting early differ from the political visibility of the other departments?**

To develop an approach to address this research question, it is first necessary to develop proxies for political visibility. This has long been a vexed issue for accounting researchers.

As discussed in Chapter 2, size has been a common choice to represent political visibility²³ (Belkaoui & Karpik 1989; Deegan & Carroll 1993; Deegan & Hallam 1991;

²³ see page 28 of this paper for further discussion of this issue.

Hagerman & Zmijewski 1979; Trotman & Bradley 1981; Taylor, Tress & Johnson 1987).

However, there has been increasing criticism directed at the validity of this measure (Ball & Foster 1982, pp. 182-183; Holthausen & Leftwich 1983, p. 88; Lim & McKinnon 1993, p. 200; Watts & Zimmerman 1990, p. 140).

In recent times, a number of alternative proxies have been proposed which, *prima facie*, appear to be more theoretically sound, including market share, industry, capital intensity, labour intensity, number of shareholders, level of press coverage, number of employees and level of social responsibility disclosure (see for example Deegan & Hallam 1991; Lim & McKinnon 1993; Panchapakesan & McKinnon 1992).

Many of these measures, such as market share and number of shareholders, are not relevant to Commonwealth government departments. Others simply cannot be calculated because full balance sheet information is not yet available²⁴

However, two of these standard proxies which can be utilised are size, as measured in dollar terms, and number of employees. Their application will be discussed in turn.

4.4.1 Size (RCNN)

Size is often proposed as a measure of political visibility on the basis that size can provide a trigger to direct attention towards an organisation, for example by the perception of an association between high profits and monopoly rents (Deegan & Hallam 1991, p. 8).

²⁴ Exemptions for the recognition of infrastructure and heritage assets will continue to apply until 30 June 1997 (DoF 1995a, clause 3(1)(c)(v))

In attempting to measure the size of an organisation, two alternative measures are commonly used:

1. total revenue, and
2. total assets.

The latter of these measures is not available for use because of the exemptions which still apply to the recognition of certain classes of assets, such as infrastructure and heritage assets (DoF 1995b, p.11). In addition, even after the first ten departments had reported on an accrual basis, an efficiency audit conducted by the ANAO found that in June 1993, over sixty percent of agencies did not have financial systems, trained staff or procedure manuals in place to provide balance sheet information (ANAO 1994, p. 81).

However, a measure of size based on total revenue can be obtained.

Though the relationship between size and political visibility is even less obvious in the public sector than the private sector, Lim and McKinnon's (1993, p. 211) research in this area did find a strong correlation between size and other more theoretically justifiable proxies for political visibility, particularly when size was measured in terms of revenue. They suggested that total revenue was more directly relevant in the public sector as a size proxy for political visibility because it provided an indication of the amount the public has paid during the period for an authority's services.

On a similar basis, it can be argued that the total funds agreed to be provided to a government department for operational activities, as discussed previously, provides an indication of the extent to which the government and external parties are prepared to pay for the activities of the organisation.

Finally, given the consistent findings of an association between size and other political cost and political visibility variables (Christie 1990), it would be remiss not to incorporate it in this study.

On the same basis that Lim and McKinnon (1993) used total revenue as an indication of the total amount paid for an authority's services, in this study size is measured as the 'gross appropriation for running costs' for the financial year in question.

This measure, which is represented by the variable *RCNN*, also forms the numerator of *ABPYNN*. The basis for calculation of *RCNN*, is detailed in Section 4.2.1, and therefore is not repeated here.

4.4.2 Limitations

The limitations associated with the use of size to represent political visibility are many and varied. Watts and Zimmerman (1986, pp. 234-240) outline both the reasons supporting the use of size as a proxy, and also identify a number of the shortcomings.

These shortcomings include :

1. the fact that firms in the same industry may be of a similar size and so firm size may in fact be measuring industry membership,
2. the fact that though large firms may be prime targets for imposition of political costs, they are also powerful political adversaries in the political process, and
3. the fact that firm size cannot capture the impact of other factors, such as price increases, unionisation, etc., which also impact on the political costs imposed on a firm.

Though the first of these factors is unlikely to be applicable to government departments, the latter two factors are. Quite clearly, the link between size and political visibility is tenuous.

Acknowledging this, Watts and Zimmerman encourage caution in the use of size as a proxy for political visibility, but point out that developing theories require the use of crude measures to allow richer theories to be produced. Again, the past empirical support for use of this proxy cannot be overlooked.

4.4.3 Employee Numbers (EMPNN)

Employee numbers have been proposed as a proxy for political visibility by Lim and McKinnon (1993, p. 201), Panchapakasen and McKinnon (1992, p. 74) and Whitted and Zimmer (1990, p. 35).

The use of this proxy is based on the argument that the greater the number of employees, the more visible a department will be to trade unions, the general public, and Parliament. Though it may be expected that size, as measured in dollar terms, and the number of employees would be correlated, the two proxies are attempting to measure different elements of political visibility.

Prior use of this proxy by Lim and McKinnon (1993) and Panchapakasen and McKinnon (1992) found a significant correlation between this variable and other proposed proxies for political visibility. The fact that the Lim and McKinnon study was conducted in relation to statutory authorities in Australia provides additional support for the use of this variable for Australian government departments.

Employee numbers are based on the actual number of employees at the end of each financial year, as reported in the annual report of each department. As this variable forms the denominator of the variable *ABPYNN*, the basis for calculation of is detailed in Section 4.2.2, and therefore is not repeated here.

4.4.4 Limitations

The limitations in the use of this proxy are that, like size, the link between political visibility and employee numbers is tenuous. However, as mentioned earlier, it has been used in prior studies and found to be correlated with other proxies for political visibility.

4.5 New Proxies for Political Visibility

In addition to the above two proxies that have been proposed and tested in prior studies, this paper proposes an additional five proxies which take advantage of the high levels of external accountability imposed on most Commonwealth government agencies.

The first four of these new proxies each represent a mechanism that has been put in place to highlight and rectify abuses, failings and/or unintended consequences of government activity. Reports on the results of any activities under these mechanisms are provided directly to Parliament, and can, and have, triggered off considerable discussion and debate both within Parliament and in other forums of public debate.

The fifth proxy is a composite measure which attempts to rectify the fact that the political visibility of a department is likely to be multi-dimensional, and that each of the proposed factors are likely to represent only one element of the overall environment.

The new proxies developed and used in this study are:

1. complaints to the Commonwealth Ombudsman,

2. requests under the *Freedom of Information Act 1982*,
3. audits performed by the ANAO,
4. scrutiny by Parliamentary Committees, and
5. a composite proxy combining the other proxies.

The justification for the use of these proxies follows.

4.5.1 Complaints to the Commonwealth Ombudsman (OMNN)

The jurisdiction of the Commonwealth Ombudsman is to investigate matters relating to defective administration by a Commonwealth department or authority. These investigations may be undertaken either in response to a complaint or instigated by the Ombudsman (Saunders 1989, p. 197).

Formal reports by the Ombudsman can direct increased attention at the operations of a the subject of the report, as was recently the case in relation to the Aboriginal and Torres Strait Islander Commission (Perkins 1995).

Therefore, the number of complaints received by the Commonwealth Ombudsman's office in relation to a particular department is a direct measure of the level of attention directed by external parties at that department.

This measure is particularly apt, because it provides an implicit focus on suggestions of poor or defective administration of a department, which suggestion the early adoption of accrual reporting could possibly be used to counteract.

A further advantage of this measure is that the numbers of requests in relation to each agency over which the Ombudsman has jurisdiction are reported centrally, for each financial year, in the annual report of the Commonwealth Ombudsman.

This report separately identifies the number of written and oral complaints separately. These figures were combined to provide a measure of the total level of Ombudsman activity directed at each department, represented by the variable *OMNN*.

4.5.2 Limitations

The proposed measure does not necessarily capture the full impact of the activities of the Ombudsman in directing attention at a department. For example, there is no additional weight given to adverse findings and no attempt to capture the multiplying effect of individual reports which may be raised in Parliament or the media, or which may lead to further investigations of departmental activities, for example by the Auditor-General.

However, the measure is readily available, and, as indicated in the data presented in Appendix 1, does vary significantly between the departments. Therefore, its use is justified.

4.5.3 Freedom of Information Applications (FOINN)

The *Freedom of Information Act 1982* provides rights of access by members of the public to ministerial, departmental and authority documents. Use of this facility has been steadily increasing since its implementation as ‘...*public interest groups, journalists, businesses, students - and opposition members of Parliament - are becoming increasingly aware of the potential of FOI as a source for understanding, and monitoring, government decision-making.*’ (Nelson 1989, pp. 189-190).

Given that 'political visibility' is defined as:

the relative share of scrutiny by politicians, organised groups such as trade unions, and the general public.

then the attention directed at a department through application of freedom of information provisions is tailor made as a proxy.

The number of requests made under the *Freedom of Information Act 1982* in relation to each agency covered by this Act are reported centrally for each financial year in the annual report of the Attorney-General on the operation of the *Freedom of Information Act 1982*.

Therefore, the variable to measure this proxy, *FOINN*, is equal to the total number of complaints reported in that annual report, for the financial year in question.

4.5.4 Limitations

As for the other proxies, the linkage between this measure and political visibility is subjective. However, it certainly does give a direct measure of the attention directed by external parties at the department.

There is one particular shortcoming which may affect this measure, and that is that departments only report those requests they receive that are formal requests under the Act. Requests that are made to the department purported to be under the Act, but which do not need to rely on the provisions of the Act to be complied with, are generally excluded from the central report.

This is well illustrated in the following extract from the 1991-92 Annual Report of the Department of Defence (1992, p. 159) which stated:

During the year, 88 valid requests for access to documents and four for amendment of personal records were received. In addition, 722 requests for access to documents, initially claiming to be made under the FOI Act, were processed outside the Act.

As indicated in the data in Table 22, on page 173, the figure that was included in the Attorney-General's report on the operations of the FOI Act was '88'. The impact of this factor is to reduce the number of queries which are reported in the central report. It is not possible to easily overcome this problem by alternatively reviewing the departmental annual reports for freedom of information statistics because it is entirely at the discretion of the departmental Secretary as to whether such statistics are reported in the annual report.

On the positive side, it is likely that such definitional restrictions effect the number of requests reported in the central report to a fairly similar degree. Since the data collected is treated as ordinal rather than ratio in nature, the downward bias of this measure is unlikely to be critical.

A further potential problem is that some departments are excluded from the operations of the *Freedom of Information Act 1982*, such as the Parliamentary Departments and the ANAO. Again, this factor is unlikely to significantly impact on the analysis presented in this dissertation, as the decision to exclude these agencies from the operation of the Act was made specifically to reduce the level of external scrutiny of operations. Therefore, a nil report for such departments is indicative of the actual situation.

4.5.5 Audits Performed by the Australian National Audit Office

The ANAO conducts the financial statement audits of all Commonwealth departments and statutory authorities, as well as the majority of the audits of companies controlled

directly by the Commonwealth or through parent statutory authorities or companies (ANAO 1991, p. 1).

In addition, the Auditor-General has a mandate to conduct performance and efficiency audits within departments at his, or her, own discretion. The audit reports are tabled in Parliament. As stated by the Auditor-General:

Many of the programs audited were topical and of concern to the Parliament, the Government and the public.

(ANAO 1991, p. 14)

As well as being discussed in their own right, audits conducted by the ANAO may become the subject of further Parliamentary investigation. For example, five performance audits reported by the ANAO were the subject of detailed investigation by the JCPA in 1990-91. A further seven reports were referred to in investigations conducted by other Parliamentary Committees (ANAO 1991, pp. 8 - 10).

Therefore, the activities of the Auditor-General provides a sound indicator of the level of scrutiny directed at the activities of a department.

Three alternative measures were collected in relation to the audits performed by the ANAO:

1. the result of financial statement audits,
2. the number of discretionary audits into the activities of each department, and
3. the number of recommendations made in discretionary audits relating to the activities of a department.

4.5.5.1 Financial Statement Audits (QUALNN)

The first measure is whether or not financial statement audits were qualified, as a qualified audit will generate more attention than an unqualified audit.

This information was collected from the annual reports of each agency. An alternative central source is the report provided to Parliament by the Auditor-General on all audits completed during the financial year.

The variable to represent the result of the financial statement audit, *QUALNN*, was assigned a value of '1' if the audit report provided a qualified opinion on the financial statements, and '0' otherwise.

4.5.5.2 Limitations

The main limitation in relation to this proxy is the subjective judgement that a qualified audit is likely to result in higher political visibility than an unqualified audit. There is no attempt to judge the 'seriousness' of the qualification.

In addition, though the measure is interpreted as being ordinal, the fact that the end result is dichotomous, reduces the usefulness of the resulting variable for statistical analysis purposes.

For these reasons, as discussed in Section 4.5.7, it is excluded from the composite measure of political visibility.

4.5.5.3 Non-Financial Statement Audits (AUDNN)

The second measure selected is the number of other audit reports published during the financial year which resulted from an investigation into the activities of the department.

This measure will provide a broad indication of the relative level of scrutiny directed by the Auditor General at each department.

This information was collected by reviewing every audit report published by the Auditor General during each of the three financial years. Where an audit report addressed the operations of a department, that department was allocated a score of '1'. Where the operations of more than one department were addressed in an audit report, each department was allocated a score of '1'.

The variable to represent this measure of ANAO audit scrutiny, *AUDNN*, was calculated, for each financial year, as the sum of the scores so allocated for the reports issued in that year.

4.5.5.4 Limitations

The limitations associated with this proxy are similar to those identified in relation to the use of the number of complaints made to the Ombudsman. There is no attempt to factor in the potential snowball effect of reports by the Auditor-General. As noted previously, these reports often lead to further investigation by Parliamentary Committees and may lead to considerable public debate.

The fact that the audit will be conducted some time prior to the report being released will affect the measure somewhat, but given the number of reports presented in each financial year, this affect is likely to be restricted only to the first few reports of each year.

In addition, as indicated in the data in Table 23, on page 175, the level of attention directed by the Auditor General at each department does not appear to be evenly allocated. The values of *AUDNN*, such as for DoF, do indicate that certain departments

do appear to be subjected to consistently higher numbers of non-financial statement audits than do other departments.

As the variable is treated as an ordinal rather than a scalar measure, *AUDNN* does provide an objective indication of the relative level of scrutiny directed by the Auditor General at each department.

4.5.5.5 Number of Recommendations contained in Non-Financial Statement Audit Reports (RECNN)

The third measure is the total number of recommendations made in non-financial statement audits relating to the activities of the department.

This proxy provides a slightly different aspect of scrutiny by the Auditor-General, placing a greater emphasis on the negative findings of such reports, as recommendations are generally made to overcome identified shortcomings.

The information to calculate this variable was again gathered from a review of each audit report published by the Auditor General during each of the three financial years. Where a particular recommendation addressed 'n' departments, each department was assigned '1/n' for that recommendation.

The variable representing this measure, *RECNN*, was calculated as the sum of the scores so allocated for the financial period in which the audit report was issued.

4.5.5.6 Limitations

This variable does attempt to redress one of the limitations identified in the prior alternative measure, by weighting the seriousness of the audit report by the number of recommendations made.

It is still, however, a fairly crude measure, and the limitations identified in relation to *AUDNN* generally apply. At the same time, the justification for its use, as a readily available measure of a theoretically reasonable proxy, also applies.

4.5.6 Scrutiny by Parliamentary Committees

Both Houses of Parliament have a number of individual and joint committees of inquiry into specific matters. The Senate, in particular, has rationalised this system to create a number of permanent committees to carry out investigation and analysis of government financial and legislative activities, as well as *ad hoc* investigations into specific matters (Jaensch 1992, p. 224).

In theory, the Parliamentary committee system is designed to:

...provide better, more objective scrutiny, to provide greater access for community groups, which will also benefit by the research information committees provide; and to provide supplementary administrative supervision.

(Turner 1989, 75).

The activities of these committees can serve to focus increased attention on the subject of the review, particularly where adverse findings result from an investigation. One recent example is the public debate surrounding the role of the Family Court which was triggered by comments by the Chair of the Joint Select Committee on Family Law Issues which was conducting an inquiry into this matter (Bachelard 1995).

The importance of this element of Parliamentary scrutiny is emphasised by the fact that the annual reporting requirements of departments require specific disclosure of Parliamentary committee inquiries which examined any aspect of the operation of the department, including action taken to address recommendations. (Department of Prime Minister and Cabinet 1991, requirements 68 and 69).

Two measures were developed as indicators of scrutiny by Parliamentary committees, being:

1. the number of Parliamentary committee reports published in relation to the activities of the department during the financial year, and
2. the level of disclosure in departmental annual reports relating to scrutiny by Parliamentary committees.

4.5.6.1 Parliamentary Committee Reports (PARLNN)

This measure provides an objective indicator of the relative level of attention directed by Parliamentary committees at the operations of a particular department.

To obtain the necessary data, all reports issued by Parliamentary committees during each financial year covered by this study were reviewed to determine whether the report addressed the operations of a department or departments.

The reports by Parliamentary committees were initially identified by reviewing all the papers tabled in Parliament for the years 1991 to 1994. The resulting listing of reports was compared to the list of 'committee inquiries, reports and other publications' included each year in the annual report of the House of Representatives, and to the *Business of the Senate* report published each calendar year by the Senate, to ensure completeness.

On review of the contents of the Parliamentary committee reports, it was noted that the reports by the Standing Committee on Public Works were factual summaries of applications for approval of major capital works. Only three departments have responsibility for major capital works projects in the Commonwealth, the Department of Defence, the Department of Administrative Services and the National Capital

Development Commission. The number of reports was considerably larger than that produced by any other committee, and the subject matter of these reports did not appear to provide an indication of political attention directed at the departments, but was more administrative in nature. To have included these figures in the proposed variable would have introduced a considerable bias towards those departments. For these reasons, the reports by the Standing Committee on Public Works were excluded from the measure.

The variable to represent the number of investigations by Parliamentary committees, *PARLNN*, was therefore calculated as the total number of reports, excluding those of the Standing Committee on Public Works, tabled in Parliament during the financial year in question, which addressed the activities of the department.

4.5.6.2 Limitations

This variable, *PARLNN*, is a crude indicator of the level of attention that is directed at departments by Parliamentary committees. There was only a minimal attempt, through the exclusion of reports of the Standing Committee on Public Works, to weight the various committees on the basis that some may be considered as having a higher profile than other committees. To extend this procedure further without a sound basis for the weighting may have introduced a considerable subjective bias to the measure.

This issue may perhaps be addressed in future research through application of a questionnaire to a range of potential audiences, such as members of Parliament, departmental Secretaries and other members of the public service, academics and members of the press. Such an approach would provide a reasonable basis for weighting the various reports of Parliamentary committees, and may also allow a focus on a limited number of committees, reducing the amount of work required to collect the data.

In addition, as the reports were included in the measure for the financial year in which it was tabled in Parliament, the fact that the inquiry activities of the committee may have been ongoing for some time prior to the date of tabling, means that the variable may understate the level of activity in the year in which the inquiry was conducted and overstate it in the year that the report was tabled.

The impact of this measurement bias is difficult to assess. However, in most instances it is likely to be the tabling of a report in Parliament which triggers the direction of attention by parties external to the process on the subject department. In addition, the other proposed measure of scrutiny by Parliamentary committees specifically addresses the departmental Secretary's own assessment of this mechanism. Therefore, the impact of the possible measurement bias should not be critical to the analysis.

4.5.6.3 Disclosure in Annual Reports of Scrutiny by Parliamentary Committees (PCPGNN)

This measure is based on the suggestion by Panchapakesan and McKinnon (1992, p. 75) that the relevant indicator of a firm's political visibility is as perceived by management because management take action based on their own perceptions²⁵. Panchapakesan and McKinnon's study used the quantity of social responsibility disclosure as an *'..encapsulation of management's perception of the aggregate political visibility of the firm.'*

As an indicator of management's perceptions, this measure may be slightly less useful in the public sector than in the private sector because a high level of social responsibility disclosure is prescribed for inclusion in the annual reports of departmental Secretaries.

²⁵ See, also, Abbott and Monsen 1979.

Information is required, for example, on energy usage, environmental matters, equal employment opportunities, industrial democracy and occupational health and safety (Department of Prime Minister and Cabinet 1991). Departmental Secretaries do not have the option of omitting such information.

However, the comprehensiveness of compliance can vary between departments. Therefore, the level of discussion in the annual report of investigations by Parliamentary Committees may be an indicator of how significant the departmental Secretary perceives this avenue of scrutiny to be.

The variable to represent the amount of disclosure in the departmental annual report of scrutiny by Parliamentary Committees, *PCPGNN*, was calculated as the total number of pages devoted to discussion of direct scrutiny by Parliamentary Committees, measured to the nearest tenth of the length of a page.

Disclosures relating to general contributions to ongoing inquiries not directly relating to the activities of the department were excluded from the measure on the basis that the variable was attempting to measure the relative importance placed on Parliamentary scrutiny, not general exposure to the Parliament.

4.5.6.4 Limitations

One of the particular limitations related to this measure of scrutiny by Parliamentary committees is the impact of non-disclosure bias. A departmental Secretary may be unwilling to revisit a particular contentious issue for fear of drawing further adverse attention or of re-igniting a situation which may have begun to settle.

However, at the same time, the annual report is a document over which the departmental Secretary has full control, within the bounds of minimum disclosure requirements set in the guidelines for the annual report and the financial statements. The annual report does constitute a key mechanism by which the departmental Secretary can present his own case and directly address any criticisms that have been directed at the operations of his department by Parliamentary committees.

Without directly circularising all departmental Secretaries, this variable does provide an indication of the weight that they place on Parliamentary committee activity which occurred throughout the year. As argued by Panchapakesan and McKinnon (1992) in relation to social responsibility disclosure, management will act in response to their own perceptions of their level of political visibility, not to others' perceptions.

Therefore, though the limitations are acknowledged, *PCPGNN* does represent a readily available, and easily and objectively calculated, indication of the weight placed by the departmental Secretary on Parliamentary committee activity.

4.5.7 Composite Proxy for Political Visibility (*PVANN, PVBNN, PVA, PVB*)

The factors which affect the political visibility of a department are diverse, as indicated in the variety of proxies proposed for political visibility, both in this dissertation and in prior research. Therefore, there is value in developing a proxy for political visibility which reflects a range of factors.

This paper proposes a composite proxy for political visibility, which is equal to the sum of the ranks of individual proxies for political visibility. Such a measurement method is

justified on the basis that, as discussed in Section 4.9, the proxies for political visibility should be interpreted as being measured on an ordinal scale.

By using the ranks of each individual variable, equal weight is placed on all proxies included in the composite measure, irrespective of how the individual proxies are measured. This proxy will therefore provide a measure of the relative political visibility of a department, whereby a high value would indicate that the department rated highly across all the measures of political visibility, and a low value would indicate that the department rated low against all the measures of political visibility.

To ensure that no single element was given excessive weight relative to the others, *QUALNN*, the dichotomous measure of whether or not the audit opinion on the financial statements was qualified, was excluded from the analysis because this variable provided only two possible rankings across all departments.

In addition, it was considered that the number of non-financial statement audits, *AUDNN*, and the number of recommendations in non-financial statement audits, *RECNN*, were attempting to directly measure the same event. Again, to include both variables in one measure of this proxy, would have placed excessive weight on this particular element. All other items were judged distinct enough to warrant separate inclusion in a measure of the composite proxy.

To calculate the variables to represent the composite proxy for political visibility, each of *RCNN*, *EMPNN*, *OMNN*, *FOINN*, *AUDNN*, *RECNN*, *PARLNN* and *PCPGNN* were ranked. The rank of '1' was assigned to the lowest ranking department and the rank of '46' to the highest. Where ties occurred between departments the rank assigned was the

average of the ranks that would have been assigned to those departments had no ties occurred.

Four alternative variables to measure the composite proxy were developed:

1. *PVANN*: calculated for each financial period as the sum of the ranks of *RCNN*, *EMPNN*, *OMNN*, *FOINN*, *AUDNN*, *PARLNN* and *PCPGNN*,
2. *PVBNN*: calculated for each financial period as the sum of the ranks of *RCNN*, *EMPNN*, *OMNN*, *FOINN*, *RECNN*, *PARLNN* and *PCPGNN*,
3. *PVA*: calculated as the average of *PVANN*, and
4. *PVB*: calculated as the average of *PVBNN*.

4.5.8 Limitations

This proxy does place an equal weighting on each of the proposed elements of political visibility. Such a weighting may not be justified as departmental Secretaries may place more weight on certain avenues of scrutiny than on others.

In addition, there is certainly no claim that all possible elements have been covered and therefore this proxy cannot be considered to be a fully comprehensive measure.

However, the composite proxy does give a high ranking to those departments which rate highest across all the proposed indicators of political visibility, and the lowest ranking to those departments which rate the lowest across all the proposed indicators. As an ordinal measure of the level of political visibility, this ranking system has considerable merit, providing the justification for the individual elements is valid.

4.6 Time period for testing

Data was collected for three financial periods:

1. 1991-1992, the financial reporting period prior to the announcement of the move to accrual reporting;
2. 1992-1993, the period in which the move to accrual reporting was announced, and for which ten departments reported on an accrual basis for the first time; and
3. 1993-94, the period in which accrual reporting was adopted by a further sixteen departments and the last period before accrual reporting was mandated.

Coverage over these three time periods provides an opportunity to examine the longitudinal influence of political visibility, which has the potential to provide an extra dimension to the analysis, as suggested by Lim and McKinnon (1993, p. 213).

To indicate the financial period to which a particular variable relates, the suffix 'NN' was as follows:

'NN' = 91, refers to the financial period 1991-92,

'NN' = 92, refers to the financial period 1992-93, and

'NN' = 93, refers to the financial period 1993-94.

4.7 Sample

The population for this study is all departments that were subject to the Minister for Finance's financial statement guidelines for departmental Secretaries. These entities are often described as 'Section 2AB departments' as the requirement to comply with the

financial statement guidelines for departmental Secretaries occurs through the application of section 2AB of the *Audit Act 1901*.

To ensure a full set of data for each department, the sample for data collection was all those departments in the population which:

1. were in existence at the end of each of the three financial periods; and
2. for which financial statements were readily available.

The annual Appropriation Bills in Budget Paper No. 2 for each financial year were used to identify those departments for which an appropriation had been provided to determine continuation of existence.

Of the forty eight departments which met the initial requirement of continued existence, the financial statements of two, the Australian Secret Intelligence Service and the Office of National Assessments, were not publicly available.

Therefore the final sample size was forty six departments, these remaining departments being listed in Table 18, on page 165.

4.8 Classifying Departments by the Timing of Adoption of Accrual Reporting.(*REPORT, REP92, REP93*)

The data was collected in a manner which allows an analysis of the relationship between the move by departments to accrual reporting and the independent variables in three main ways. For ease of reference, these classifications are to referred throughout the analysis as:

1. *grouping 1 (REPORT)*, departments classified into:
 - '1' those departments which first adopted accrual reporting in 1992-93,
 - '2' those departments which first adopted accrual reporting in 1993-94, and
 - '3' those departments which will first adopt accrual reporting in the 1994-95 financial year.

2. *grouping 2 (REP92)* departments classified into:
 - '1' those departments which first adopted accrual reporting for the first financial year in which it was allowed (1992-93), and
 - '0' all other departments.

3. *grouping 3 (REP93)*, departments classified into:
 - '1' those departments which adopted accrual reporting in either of the two financial periods before it was mandated (1992-93 and 1993-94), and
 - '0' all other departments.

These variables are, in effect, the dependent variables.

4.9 Summary of Variables

In interpreting the selected variables it should be noted that those variables which represent proxies for political visibility should be interpreted as being ordinal rather than scalar.

For example, though Department X may have twice as many employees as Department Y, this situation does not necessarily imply that Department X is twice as politically visible as Department Y. However, the theory presented to support the selection of the proxies for political visibility does suggest that this situation may be interpreted to imply that Department X is more politically visible than Department Y.

In contrast, the variable measuring the ability to pay for the costs resulting from changes in accounting policies, *ABPYNN*, may be interpreted as a ratio variable. For example, it

is reasonable to interpret the situation in which *ABPYNN* for Department X is double that of Department Y as implying that Department X has twice the ability to pay for the costs resulting from changes in accounting policies than Department Y.

Table 4 and Table 5, following, contain a summary of all the variables. Table 4 summarises the definition, calculation, source and basis of measurement scale for the dependent variables, and Table 5 contains the same information for the independent variables.

Dependent Variables				
Section Reference	Name	Calculation	Source	Scale
Section 4.8	REPORT	The first year in which the department adopted accrual reporting 1= 1992-93 2= 1993-94 3= 1994-95	Departmental annual reports (accrual reporting is mandatory for the 1994-95 financial year so departments which did not report on an accrual basis by 1993-94 must adopt accrual reporting for the first time in 1994-95)	nominal
Section 4.8	REP92	basis of reporting in 1992-93 financial year: 0= modified cash 1= accrual	Departmental annual reports	nominal
Section 4.8	REP93	basis of reporting in 1993-94 financial year: 0= modified cash 1= accrual	Departmental annual reports	nominal

Table 4 - Summary Description and Source of Dependent (Classifying) Variables

Independent Variables				
'NN'= 91 - data collected for financial year 1991-92				
'NN'= 92 - data collected for financial year 1992-93				
'NN'= 93 - data collected for financial year 1993-94				
Section Reference	Name	Calculation	Source	Scale
Section 4.2	<i>ABPYNN</i>	<i>RCNN / EMPNN</i>	as below	ratio
Section 4.4.1	<i>RCNN</i>	Gross appropriation for running costs	Budget Paper No 2 for the financial year	ordinal
Section 4.4.3	<i>EMPNN</i>	Number of actual employees at the end of the financial year	Departmental annual reports	ordinal
Section 4.5.1	<i>OMNN</i>	Total number of written and oral complaints made to the Ombudsman in relation to the department during the financial year	Annual report of the Commonwealth and Defence Force Ombudsman	ordinal
Section 4.5.3	<i>FOINN</i>	Number of requests made to the department under the Freedom of Information Act 1982	Annual report of the Attorney-General on the operation of the Freedom of Information Act 1982	ordinal
Section 4.5.5	<i>QUALNN</i>	Result of the financial statement audit for the financial year 0= unqualified audit report 1= qualified audit report	Departmental annual reports	ordinal
Section 4.5.5	<i>AUDNN</i>	Number of other audit reports published during the financial year which addressed the operations of the department	All reports published by the Auditor-General during the financial year	ordinal
Section 4.5.5	<i>RECNN</i>	Number of recommendations made in other audit reports specifically addressing the operations of the department	All reports published by the Auditor-General during the financial year	ordinal
Section 4.5.6	<i>PARLNN</i>	Number of reports by Parliamentary Committees released during the financial year addressing the operations of the department	Parliamentary Papers published during the financial year	ordinal
Section 4.5.6	<i>PCPGNN</i>	Number of pages in the departmental annual report, measured to the nearest tenth of the length of a page, discussing scrutiny of departmental activities by Parliamentary Committees	Departmental annual reports	ordinal
Section 4.5.7	<i>PVANN</i>	The sum of the ranks of <i>RCNN</i> , <i>EMPNN</i> , <i>OMNN</i> , <i>FOINN</i> , <i>AUDNN</i> , <i>PARLNN</i> , <i>PCPGNN</i>	Each department was ranked on each of the variables from 1 to 46 (1 being the lowest, and the average rank being applied to departments for which the variable was equal)	ordinal
Section 4.5.7	<i>PVBNN</i>	The sum of the ranks of <i>RCNN</i> , <i>EMPNN</i> , <i>OMNN</i> , <i>FOINN</i> , <i>RECNN</i> , <i>PARLNN</i> , <i>PCPGNN</i>	Each department was ranked on each of the variables from 1 to 46 (1 being the lowest, and the average rank being applied to departments for which the variable was equal)	ordinal
Section 4.5.7	<i>PVA</i>	Average of <i>PVANN</i>	as above	ordinal
Section 4.5.7	<i>PVB</i>	Average of <i>PVBNN</i>	as above	ordinal

Table 5 - Summary Description and Source of Independent Variables

4.10 Descriptive Statistics

The data collected for each department is provided in Table 19 to Table 24, on pages 167 to 177. Table 25 to Table 28, on pages 180 to 186, contain the rankings of each of the variables representing the individual proxies for political visibility. Table 29, on page 188 contains the data for the composite measures of political visibility for each of the three financial periods, *PVANN* and *PVBNN*. Table 30, on page 190, contains the data for the average composite measure of political visibility across the three financial periods, *PVA* and *PVB*.

The raw data was analysed using the statistical package *SPSS for Windows*, release 5.0. The descriptive statistics for the variable representing the proxy for ability to pay, *ABPYNN*, are contained in Table 6 on page 107. Table 7, on page 108, contains the descriptive statistics for the variables representing the individual proxies for political visibility. Table 8, on page 109, contains the descriptive statistics for the variables representing the composite proxy for political visibility.

The statistics reported in these tables include the mean, median, standard deviation, minimum value, maximum value, skewness, kurtosis and the Shapiro-Wilks statistic for each variable.

Review of these tables show that all variables are positively skewed. For example, though the variables representing the composite proxy for political visibility have a skewness of around 0.5, most of the remaining variables return a value greater than 1.0. For *EMPNN* and *RCNN*, skewness is greater than 5.0 and for a number of other variables in selected years, such as *OM91*, *OM92*, *FOI91*, *PCPG91* and *PCPG92*, skewness is greater than 4.0.

In addition, most variables are leptokurtic, some such as *RCNN* and *EMPNN* showing kurtosis greater than 33.0.

These indications of departures from the normal distribution are confirmed by the reported Shapiro-Wilks statistic. The Shapiro-Wilks test on each variable returned a statistic indicating non-normality which was significant for most variables at a greater than 99 percent level of confidence. The only variables to which this situation did not apply, *PVA91*, *PVA93* and *PVB91*, provided a Shapiro-Wilks test statistic which was significant at a greater than 95 percent level of confidence.

As this test statistic provides a powerful test for normality, which has been shown to be effective even in sample sizes less than twenty (Wetherill 1981, p. 15), there is little doubt that the raw data is not normally distributed.

This situation could potentially be rectified by attempting to normalise the data, through logarithmic or other transformations. However, since the proposed dependent variables, being the basis of reporting in a particular financial period, are measured on a nominal scale, and the independent variables representing political visibility are more readily interpretable as being measured on ordinal rather than interval or ratio scales, non-parametric statistical tests, which do not require the assumption of a normal distribution, are the most applicable for this situation.

The exception to this conclusion is the variable to measure the ability to pay the costs resulting from changes in accounting policies, *ABPYNN*. As previously discussed, this variable may be interpreted as being measured on a ratio scale and so may potentially be subjected to the more powerful parametric statistical tests provided the non-normality of the distribution can be overcome by transformation.

Variable	Mean	Median	Std Dev	Min	Max	Skewness	Kurtosis	Shapiro-Wilks (sig)
<i>Ability to Pay (Gross budgeted revenue for ordinary operations / number of employees)</i>								
ABPY91	64.72	60.55	17.47	39.66	113.47	9160	.5444	.9259 <.0100)
ABPY92	77.29	78.12	22.98	31.82	149.21	.7348	1.3664	.9526 (.0974)
ABPY93	86.01	83.22	26.32	32.61	168.46	1.1759	2.4715	.9120 (<.0100)

Table 6 - Summary Statistics for Ability to Pay Proxy.

Variable	Mean	Median	Std Dev	Min	Max	Skewness	Kurtosis	Shapiro-Wilks (sig)
<i>Gross budgeted revenue for ordinary operations</i>								
RC91	202942.3	26720.5	641544.3	406	4210457	5.7104	35.5332	.3397 (<.0100)
RC92	224877.4	33872.5	671642.6	489	4329380	5.3969	32.3669	.3641 (<.0100)
RC93	246709.0	37417.5	775602.0	515	5069946	5.6491	34.8670	.3408 (<.0100)
<i>Employee numbers at the end of the financial year</i>								
EMP91	4283.46	357	14561.9	7	95427	5.7521	35.8473	.3213 (<.0100)
EMP92	4228.22	363	14130.5	10	91858	5.6212	34.4775	.3295 (<.0100)
EMP93	3928.50	390	13104.4	10	85102	5.6083	34.3141	.3286 (<.0100)
<i>Total oral and written complaints to the Ombudsman during the financial year</i>								
OM91	221.54	3	690.78	0	3716	4.1731	17.9251	.3733 (<.0100)
OM92	207.70	3	673.38	0	3406	4.1103	16.7842	.3530 (<.0100)
OM93	216.37	4.5	708.66	0	3403	4.0317	15.9500	.3453 (<.0100)
<i>Number of requests made under the Freedom of Information Act 1982 during the financial year</i>								
FOI91	485.00	4	1853.27	0	9548	4.1158	16.6543	.2959 (<.0100)
FOI92	560.39	2	2090.18	0	10016	3.8363	13.8308	.2990 (<.0100)
FOI93	622.93	4.5	2307.97	0	10729	3.7961	13.3853	.2986 (<.0100)
<i>Result of financial statement audit (0=unqualified, 1=qualified)</i>								
QUAL91	.28	0	.46	0	1	.9985	-1.0507	.5546 (<.0100)
QUAL92	.26	0	.44	0	1	1.1262	-.7669	.5390 (<.0100)
QUAL93	.15	0	.36	0	1	2.0026	2.1000	.4274 (<.0100)
<i>Number of other audit reports published during the financial year addressing the operations of the department</i>								
AUD91	1.109	0	2.036	0	8	2.0608	3.5581	.6196 (<.0100)
AUD92	.630	0	1.254	0	6	2.5912	7.4726	.5864 (<.0100)
AUD93	.804	0	1.276	0	6	2.1297	5.4464	.6865 (<.0100)
<i>Number of recommendations made in other audit reports addressing the operations of the department</i>								
REC91	13.513	0	31.480	0	109	2.4372	4.5249	.4803 (<.0100)
REC92	7.725	0	19.556	0	111.8	3.9196	18.1449	.4724 (<.0100)
REC93	9.576	0	18.717	0	76.5	2.3356	5.1435	.5908 (<.0100)
<i>Number of Parliamentary Committee reports presented during the financial year addressing departmental operations</i>								
PARL91	1.26	1	1.91	0	10	2.6508	8.9976	.6755 (<.0100)
PARL92	1.07	.5	1.32	0	5	1.0784	.3739	.7847 (<.0100)
PARL93	.87	0	1.29	0	5	1.6076	1.9364	.7126 (<.0100)
<i>Number of pages in the departmental annual report discussing scrutiny by Parliamentary Committees</i>								
PCPG91	1.815	.3	4.283	0	26.5	4.6242	25.1894	.4713 (<.0100)
PCPG92	1.867	.5	3.590	0	22.3	4.3596	23.6436	.5351 (<.0100)
PCPG93	1.467	.3	2.304	0	12.0	2.6414	9.1237	.6865 (<.0100)

Table 7 - Summary Statistics for Individual Variables representing Proxies for Political Visibility.

Variable	Mean	Median	Std Dev	Min	Max	Skewness	Kurtosis	Shapiro-Wilks (sig)
<i>Composite proxy for Political Visibility based on the ranks of RCNN, EMPNN, OMNN, FOINN, AUDNN, PARLNN, PCPGNN</i>								
PVA91	164.5	145.25	70.904	60	307	.4502	-.8555	.9336 (.0183)
PVA92	164.5	141.25	75.117	56.5	309	.5278	-1.0486	.9022 (<.0100)
PVA93	164.5	145.75	72.842	55.5	301.5	.4431	-.9049	.9284 (.0118)
<i>Composite proxy for Political Visibility based on the ranks of RCNN, EMPNN, OMNN, FOINN, RECNN, PARLNN, PCPGNN.</i>								
PVB91	164.5	149.2	70.722	60	306	.4462	-.8455	.9343 (.0191)
PVB92	164.5	141.25	75.336	56.5	310	.5443	-1.0161	.9019 (<.0100)
PVB93	164.5	146.25	73.436	56	306	.4886	-.8524	.9269 (<.0100)
<i>Average of PVA91, PVA92 and PVA93.</i>								
PVA	164.5	152.17	71.954	58	305.3	.5195	-.9291	.9152 (<.0100)
<i>Average of PVB91, PVB92 and PVB93.</i>								
PVB	164.5	152.3	72.187	58.2	306.5	.5374	-.8911	.9153 (<.0100)

Table 8 - Summary Statistics for Variables representing the Composite Proxies for Political Visibility

4.11 Chapter Summary

This chapter outlined the specification of empirically testable research questions, based on the propositions developed in Chapter 3.

The first research question was developed to indirectly test the proposition that the physical cost of adopting accrual reporting influenced the timing of the decision made by departmental Secretaries. A proxy measuring the 'ability to pay' for such changes was developed to operationalise the research question.

The second research question, addressing the influence of political visibility on the decision to adopt accrual reporting early, required the development of proxies for political visibility. As well as using two proxies which had been utilised in prior studies, an additional five proxies were developed, taking advantage of the high level of accountability imposed on government departments. Most proxies were measured by more than one variable, and the limitations associated with both the proxies and the

variables selected to measure them, were discussed in detail throughout the body of this chapter.

Though the variable for 'ability to pay' can be interpreted as being measured on a ratio scale, the variables for political visibility should be interpreted as being ordinal. Therefore, the fact that none of the variables were normally distributed is not a particular problem.

Chapter 5, specifies the hypotheses and statistical methods employed to test the research questions presented in this chapter.