THE CHANGE IN THE ROLE OF MANAGEMENT ACCOUNTING IN A PUBLIC SECTOR ORGANIZATION: AN INSTITUTIONAL INTERPRETATION

Sujatha Perera
Division of Economic and Financial Studies
Macquarie University
Australia

Abstract

Public sector organizations in Australia have been undergoing major changes and reforms since the 1980s. The existing literature on organizational change in the public sector suggests that such reforms have important implications for management accounting practices in public sector organizations. Informed by two bodies of literature, namely organizational and accounting change literature and institutional literature, this paper examines: (i) the factors that generated or stimulated change in the role of management accounting in a government trading enterprise over the period from the mid 1980s to the mid 1990s; and (ii) the nature and form of changes that occurred in the role of management accounting of the case study organization during the period under investigation. The study gathered data from the case organization through both interviews and document analysis. The results suggest that while accounting and accountants seemed to have gained a prominent place at the macro-level of the organization, the use of management accounting practices at the micro-level is less evident, with only some of those practices becoming embedded within the organization.

Introduction

Public sector organizations in Australia have undergone major changes and reforms since the 1980s with respect to goals, orientation, structure and processes (Parker and Guthrie, 1993). The existing literature on organizational change in the public sector suggests that these changes and reforms have important implications for management accounting practices in public sector organizations (Hopwood, 1987; Guthrie, 1992; Parker and Guthrie, 1993). This paper examines the ways in which management accounting practices in a government trading enterprise changed over the period from the mid 1980s to the mid 1990s in response to public sector reforms. More specifically, informed by the literatures on organizational and accounting change, and institutional theory, the paper examines: (i) the factors that stimulated change in the role of management accountants and in two management accounting practices of a government trading enterprise over the period from the mid 1980s to the mid 1990s; and (ii) the nature and form of changes that occurred during that period.

The study was motivated by three limitations of the existing literature on management accounting controls in public sector organizations, particularly in the Australian context. First, although a small number of studies have examined management accounting controls in the health sector in Australia (e.g., Abernethy, 1994; Abernethy and Stoelwinder, 1988; 1990; 1995; Abernethy and Chua, 1996), there is a dearth of empirical research that examines such practices in other public sector organizations. Second, the existing management accounting controls literature provides only limited insights to develop our understanding of 'why' and 'how' management accounting practices change under different organizational contexts (Abernethy and Chua, 1996, p. 571). Third, the focus of the studies that have examined the influence of environment on accounting systems has been, to a large extent, on the technical environment. Only limited attention has been paid to the impact of the institutional environment on accounting practices. The main difference between the technical and the institutional environment is that the technical environment is concerned with efficient organizational performance while the institutional environment is concerned with legitimacy and support from society. According to those who emphasise the importance of the institutional environment, an organization's survival depends as much on conforming to social norms of acceptable behaviour as it does on achieving high levels of production efficiency (Covaleski, Dirsmith and Samuel, 1996, p. 11). This paper extends the existing literature by adding to the limited number of studies (e.g., Covaleski, Dirsmith and Michelman, 1993; Carpenter and Dirsmith, 1993; Abernethy and Chua, 1996) that have examined the impact of the institutional environment on accounting systems.

The remainder of this paper is organised as follows: Section two describes the interpretational framework used in the study, while section three outlines the method used to collect the data. Sections four discusses the environment of the organization while section five examines how the changes in that environment flowed into and generated changes within the organization. Section six reflects on the changes in MAPs in terms of the institutional framework developed in the study and the contemporary literature on accounting and organizational change. The final section outlines the contributions and limitations of the study.

The Interpretational Framework

The interpretational framework used in this study was developed from institutional theories in sociology and organizational theory (e.g., DiMaggio and Powell, 1983; Scott, 1991; Jepperson, 1991; Zucker, 1988a, 1988b; Meyer and Rowan, 1977).

These theories suggest that institutional arrangements (rules, procedures) are often introduced in order to maintain appearances which in turn help confer legitimacy upon the organization, rather than to enable efficient organizational decision making or better outcomes (Meyer and Rowan, 1977). Accounting represents one form of institutionalised practice within organizations (Carruthers, 1995; Scapens, 1994; Burns and Scapens, 1996). Accounting practices may be regarded as institutionalised practices because, they embody "programmed actions" (Berger and Luckmann, 1967, p. 75), generate "common responses to situations" (Mead, 1972, p. 263), and are drawn upon by members of an organization regularly and commonly (Burns and Scapens, 1996, p. 3). Accounting practices are seen to help an organization gain support from society, and hence legitimacy (Scapens, 1994). Covaleski et al., (1996, p. 11), for instance, note that accounting may represent "a ceremonial means for symbolically demonstrating an organization's commitment to a rational cause of action".

Figure 1: Institutional Framework

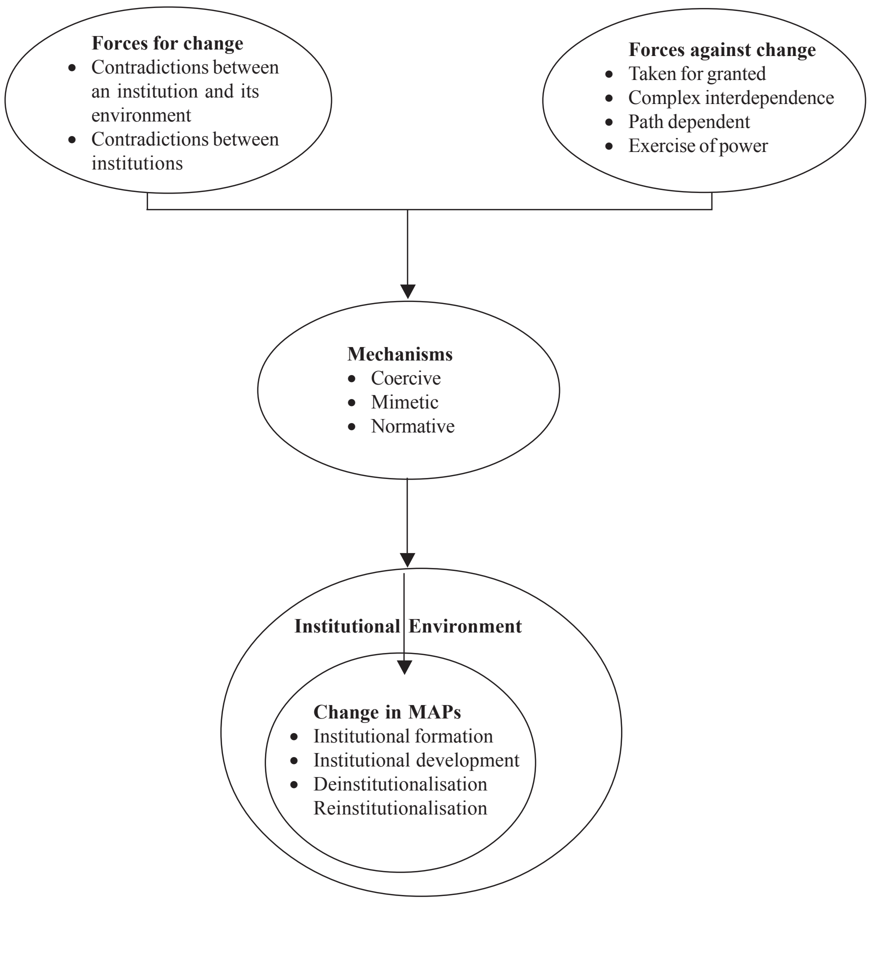

Figure 1 depicts the institutional framework used in this study. The framework views MAPs such as budgeting, capital budgeting and performance measurements as institutionalised practices located within organizations. Such practices are influenced by the organization's institutional environment. The institutional environment is viewed as comprising the economic, political and social circumstances that an organization must be cognisant of, and adaptive to, if it is to receive support and legitimacy from the environment.[1]

The existence of, and change in, institutionalised practices such as MAPs, may be explained in terms of three causal mechanisms (DiMaggio and Powell, 1983): (i) coercive isomorphism[2] (e.g., formal and informal pressure exerted by individuals and organizations); (ii) mimetic isomorphism (e.g., modeling on other organizations to reduce uncertainty); and (iii) normative isomorphism (e.g., pressure to conform to set norms and rules developed by professional and occupational groups). In terms of MAPs such causal mechanisms help maintain a congruence between the institutional environment and MAPs.

While institutionalised practices such as accounting may represent actions of some prevalence and permanence, they are neither equivalent to stability nor survival (Hamilton, 1932; Jepperson, 1991). They may remain unchallenged only as long as they are congruent with the environment. A contradiction between the institution and its environment may result in one or more of the causal mechanisms outlined above being activated to re-establish congruence (Jepperson, 1991).

Institutional change, if and when it occurs, may take different forms. These include (i) institutional formation (i.e., moving from unstable, non-productive behaviour patterns to establish a pattern which brings order and stability); (ii) institutional development (i.e., existing institutional arrangements are continued and reinforced with new patterns and procedures); (iii) deinstitutionalization (i.e., exiting existing arrangements); and (iv) reinstitutionalization (i.e., becoming re-organized around different principles and rules) (Jepperson, 1991).

Institutional theorists suggest that there are pressures for both change and resistance to change (Powell, 1991). Jepperson (1991, p. 151) for example notes that a given institution may be less vulnerable to social intervention if it has been in place for a long time, and is centrally located in a network of institutions. Powell (1991, p. 191) outlines four reasons for resistance to change and hence for institutional reproduction: (i) the exercise of power (e.g., interventions by people with power may play a critical role in institutional formation and maintenance); (ii) complex interdependencies (e.g., if a particular practice is linked with a network of practices, a change in one may require changes to others, which could be costly and hence avoided); (iii) taken for granted assumptions (e.g., established routines may reproduce themselves without active intervention); and (iv) path dependent development processes (e.g., the preclusion of future options by initial choices that an organization has made). Hence, despite pressure for change, responses to such pressure vary, with the willingness and ability of organizations to conform being dependent on a number of factors including the perceived benefits associated with conformity (Oliver, 1991).

A limited number of studies in management accounting have used institutional theory. Some studies have viewed accounting as an internally generated institutional form, and examined changes to such institutionalised practices (e.g., Burns & Scapens, 1996; Lapsley, 1995), while others have examined the effects of the institutional environment on accounting practices (Abernethy & Chua, 1996; Covaleski et al., 1993; Mezias, 1990). There are also studies that suggest that accounting practices are shaped by institutional expectations and practices (Hopwood, 1983; Berry, Capps, Cooper, Ferguson, Hopper and Lowe, 1985).

Method

Using field study methods, data for the study were collected from a major government trading enterprise (GTE) in New South Wales (NSW), Australia, that underwent significant structural changes over the period from the mid 1980s to the mid 1990s. The case organization, whose main activity is retail and distribution of electricity, is referred to in this study as "the energy company". The energy company, while owned by the government, is self funding with revenue coming from user based charges for its services. It serves a community of around 3 million people, and in 1996 had an annual revenue of almost $2 billion, and assets of $3.6 billion (Energy Australia [EA] Annual Report, 1996, p. 11).

Multiple sources of data were used in the study. These included semi-structured interviews, media coverage, annual reports of the energy company and publicly available documents relating to the energy company and the NSW public sector. A review of the annual reports of the organization from 1970 to 1996 was carried out for three reasons. These were: (i) to provide background information on the organization; (ii) to provide information to corroborate evidence from other sources such as interviews; and (iii) to identify the main period of study (the event period). The review of the annual reports suggested that the main changes in the organization related to its goals, structure and culture, and that the changes occurred primarily in the period from the mid 1980s to the mid 1990s, with little change occurring prior to this time. Hence the mid 1980s to the mid 1990s was identified as the event period of the study and the earlier period as the antecedent period.

Semi-structured interviews were conducted based on a questionnaire which had a series of questions designed to address the following issues: (i) how did the use of MAPs change over the period from the mid 1980s to the mid 1990s; (ii) what was the stimulus for the change; and (iii) how did the change take place? Interviewees were selected from four functional areas (i.e., accounting, engineering, administration and management) to provide a variety of pespectives (McKinnon, 1988, p. 50). Twenty-five people from the energy company participated in the study: seven accountants, six engineers, four administrators, and eight managers. In addition, in order to get an outsider's view about the issues of interest in the study, two external parties who had close connections with the energy company and a good understanding of the public sector in NSW, were also interviewed. The interviews lasted between 45 minutes and 80 minutes, and were tape recorded in most cases.

The Sydney Morning Herald, which is one of the most widely circulated daily newspapers in NSW was reviewed from 1980 to 1996 to learn about the community's interests in and concerns about the status and activities of the organization. Such reports were also useful for reinforcing and validating important pieces of information found from other sources.

Institutional Environment in the Mid 1980s and Mid 1990s

In this study, the institutional environment is viewed as the broad political, economic and social circumstances within which public sector organizations in Australia operate. Such circumstances have the potential to influence public sector organizations both directly and indirectly, and hence may be reflected in goals, structure culture and MAPs of those organizations.

The Institutional Environment

The performance of government entities, both at the Federal and State level, was an issue widely discussed and debated in the political and public arenas in the 1980s (Guthrie et al., 1990; Guthrie, 1994; Pratt, 1982, 1983; Stone, 1988).[3] Frequent discussions took place at the time between the NSW Labor government and Treasury about the performance of GTEs, and about how that performance could be enhanced (Painter, 1995, p. 92). In addition, the, then, Liberal opposition repeatedly highlighted and criticised the poor performance of public sector organizations and the need for reform (Laffin and Painter, 1995, p. 1; Painter, 1995, p. 91).[4] These criticisms and the associated calls for reform by both political parties at the time attracted considerable media attention, and hence were widely disseminated throughout the community (see, for example, Sydney Morning Herald (SMH), 2 August, 1988, p. 12 (editorial)). According to Painter (1995, p. 92), "In

1988 the need for reform was not a matter of political controversy, nor was it being imposed on an unprepared or hostile public service."

A number of significant reforms to the NSW public sector were implemented by the Liberal government that came into power in 1988 under Premier Greiner. A major aim of the reforms was the development of a more business-like, performance-based culture within GTEs (Laffin and Painter, 1995, p. 3). These reforms were notably influenced by the recommendations in the report of the Commission of Audit released in 1988 (hereafter Curran Report). The Commission was established by the NSW government in 1988 to review the state's finances and balance sheet commitments.[5] With its central message that "New South Wales has been living beyond its means" (Curran, 1988, p. v), the report highlighted the large amount of state debt (estimated at $46 billion) and the inefficient functioning of a number of government enterprises. The adoption of a more commercial and market-based approach was proposed by the Curran Report as a key means of enhancing the efficiency of government enterprises, and corporatisation of such enterprises was strongly advocated. Subsequently, and beginning in 1988, some twenty studies were conducted to examine the possibility of commercialising, corporatising or privatising each of the major GTEs in NSW, and a new legislative framework was also established in the State Owned Corporations Act 1989 (Painter, 1995, pp. 93-94). This act was introduced in order to subject "SOC [State Owned Corporations] to laws similar to those pertaining to private sector companies whilst being removed from the influence of government political objectives" (Allan, 1991, p. 19).

The influence of the institutional environment on the energy company is reflected in the different forms of government intervention that took place from the mid 1980s to the mid 1990s. These interventions channeled the expectations of the institutional environment directly and deeply into the organization. The interventions included: the introduction of performance agreements and the appointment of the Curran Inquiry; various financial directives; the appointment of members of the Board of Directors and Chief Executive Officers (CEO); and restructuring and deregulation of the electricity industry. Each is discussed in turn.

Introduction of Performance Agreements, and the Curran Inquiry

In 1989, the NSW government introduced annual performance agreements for GTEs with the stated purpose of encouraging improved performance and more commercial behaviour (Treasury Talk, 1992, p. 5). The performance indicators in the agreements largely emphasised financial performance. Their introduction was met by arguments from the energy company that the government-required productivity improvements would reduce the quality and level of reliability of its services. This stance on the part of the company caused significant concern to the NSW government which, in response, launched an inquiry into the energy company on 31 July 1989 under the chairmanship of the same Charles Curran who had previously chaired the Commission of Audit into the public sector generally in NSW. The Inquiry was aimed at: (i) examining and reporting on financial, technical, operational, property and management aspects of the (company); and (ii) determining the scope for, and means of, achieving performance improvements without necessarily reducing the level of service to customers (NSW Government, 1989, p. i). The overall conclusion of the Curran Inquiry was that the organization lacked an effective system to hold it accountable for the resources under its control and for the services it was required to perform (NSW Government, 1989, p. iii). It recommended that the structure and culture of the organization, its management programs and work practices, and its processes and procedures should be re-appraised as they were "out of step with many areas of general business practice" (NSW Government, 1989, p. iv). The Inquiry noted that the "(company's) culture and the organization have evolved largely in a closed environment, with limited opportunity to take advantage of and be nourished by external developments and experiences" (NSW Government, 1989, p. iv). As well as proposing major structural change through corporatisation, the Curran Inquiry also recommended a number of specific management reforms and productivity improvement measures.

Financial Directives

From around 1987, the NSW government imposed a number of financial directives on its GTEs. These directives generated substantial income for the government and also allowed it to redistribute resources among the GTEs and other government entities. The energy company in particular attracted the government's attention as a potential income source, with several interviewees in the study making this point. 'Administrator 1', for example, commented,[6]

> The government always saw the organization as a "cash cow", you know monopoly guaranteed income and we had ample reserves and we were quite flush, so the government obviously looked at us as a target to generate more income for the government.

The directives imposed on the energy company in the late 1980s included; (i) payment to the government of $82 million in loans and grants to meet the cost of electricity maintenance in NSW, and to equalise electricity prices across the state (SMH, 20 May 1987, p. 2); (ii) the payment of a regular dividend to the government from 1988, and the payment of a one-off dividend of $550 million in 1989; and (iii) the purchase of equipment from another GTE at a government-imposed cost of $410 million (SMH, 26 October 1989, p. 1). As a result of these financial directives, during the years from 1987 to 1990 the company's debt increased dramatically and its return on assets and equity decreased.[7] The energy company's disapproval of the government's financial directives was made known, not only in the comments of spokespeople to the press, but also in its annual reports.

Appointment of Board Members and CEOs

Until the late 1980s, the Boards of GTEs were to a large extent comprised of directors who did not have a commercial background (Curran, 1988, p. 34; NSW Government, 1989, p. 31). However, particularly since 1988, as a means of encouraging a commercial outlook, the government appointed board members with commercial backgrounds. Similarly, the CEOs appointed to GTEs from the time Greiner became Premier in 1988 were appointed on their potential ability to build the organization as a commercial entity (Laffin, 1995, p. 85).

Restructuring and De-regulation

In 1995, the NSW government restructured the electricity industry state-wide, reducing the number of electricity suppliers in the state from twenty-five to six. As part of the restructuring, the energy company was amalgamated with another company operating in a major city some 160 kilometres away. The interviewees generally described this amalgamation in negative terms and as creating confusion, uncertainty, friction and harm to the company. In addition, in 1995 the NSW government deregulated the electricity market, opening the retail market to competition. A number of interviewees noted the potential competition from the energy industry in Victoria (privatised in 1994), particularly when the Federal government establishes the National Grid.

Organizational Responses to the Institutional Environment

The interventions discussed above, which emanated from the institutional environment served as stimuli for a number of changes within the case organization including changes in its goals, structure, culture and MAPs. The changes that occurred in each of these organizational elements are discussed in turn in the following sub-sections. While discussed separately, it should be noted that the changes to the goals, structure, culture and MAPs did not occur separately or independently. Rather the changes were interrelated with changes in one element (e.g., greater emphasis on goals of financial accountability) being associated with changes in another element (e.g., a greater emphais on performance indicators). Similarly, the greater emphasis placed on accounting and accountability was seen to have influenced the value system and culture of the organization.

Goals

Prior to 1985, the goals and objectives of the energy company were not stated explicitly in the annual reports. The interviewees were, however, clearly of the opinion that financial and cost considerations were subservient to technical and engineering ones in the operations of the company up to the mid 1980s. 'Accountant 3' commented, for example,

> (Prior to) the mid 1980s, the main organizational goals were engineering driven, all about providing a good system, efficient system, effective system, reducing line losses, good engineering solutions. There would have been very little in the way of customer focus, very little focus on the way of financial returns if any at all.

By contrast, the subsequent decade saw much greater attention being given to the specification, communication and measurement of goals and objectives of the energy company. That decade also saw changes in the emphasis on the company's goals and objectives towards financial, resource management, and commercial goals. In the late 1980s the company emphasised the earning of "a commercial return on all investments consistent with Government dividend policy" (SCC Annual Report, 1989/90, p. 3). The intent of this wording essentially remained until 1996, when it changed to "Maximise profitability and value to our shareholders" (EA Annual Report, 1996, p. 36).

The change in wording and intent of the finance aim in 1990, and which remained for the next several years, coincided with a movement in prominence of this aim within the annual reports. For the years 1985 through 1990, the finance aim had normally been listed towards the end of the six or seven aims at the beginning of the annual report. However, in 1991, together with a change from the label finance to financial management in describing the aim, the financial aim was elevated to be the first stated, and reported on, company objective. It remained listed first until 1994, when it was placed second after customer satisfaction.

It should be noted that the elevation of the finance aim to be the first emphasised and reported on in the annual reports from 1991 to 1994, and the wording change from one focusing on cost and resource management to one focusing on earning a commercial return on investments, occurred shortly after the government interventions of the late 1980s. This is supportive of the influence link between the institutional environment and the organizational elements. Further support for the increased emphasis on financial objectives and goals was conveyed clearly in the interviews conducted for this research.

Culture

Prior to the mid 1980s the organization culture was characterised by a high value placed on the technical excellence of the service the company provided. Members saw their organization as one that valued the provision of a technically excellent service to the community, and the welfare, nurturing and protection of its employees. These values were consistent with the company's role as an instrument in fulfilling the government's obligations to the community to provide an affordable electricity supply for everyone (SCC Annual Report, 1974, p. 7).

In describing their perceptions of the more recent climate within the organization, the interviewees consistently and clearly identified a more business and commercially oriented culture of competitiveness, financial performance and customer focus. Comments such as the following were representative of the interview responses.

> In the past you might have gone and bought the best quality cable. But now the push is to buy the best cost effective cable. We have become less technical and more commercial oriented (Accountant 2).

The language of business culture, including concepts and words that were little used prior to the mid 1980s such as value adding, productivity, total quality management, financial ratios, targets, performance agreements and contestability, could be commonly heard in the interview responses and read in the annual reports in the last ten years. Also, compared with the fairly brief reports on finance issues in the 1980s (e.g., the 1985 and 1988/89 SCC Annual Reports each used 15 pages to discuss finance matters), in the 1990s, an increased amount of information on finance issues came to be reported in the annual reports (e.g., the 1994 and 1995 Annual Reports had separate Finance Reports with 44 pages and 80 pages respectively).

The movement away from an engineering focus toward a more business oriented one is also observable in the skills and qualifications of individuals occupying senior positions in the company structure. The 1990s saw an increase in the number of executives holding managerial, commercial and financial qualifications. Of the seven General Managers heading the company's divisions in 1996, six held one or more business related qualifications (EA Annual Report, 1996, p. 51). Additionally, the first Chief Executive to hold a university business related degree (as well as an engineering qualification) was appointed in 1992 (SE Annual Report, 1992/93, p. 52), and the Chief Executive appointed in 1996 held both undergraduate and postgraduate commerce degrees, but had no engineering qualification (EA Annual Report, 1996, p. 51). The interviews supported the evidence and inferences available in the annual reports, with a number of interviewees confirming the increasing emphasis among engineering qualified people in the 1990s to gain financial management and business training and qualifications.

> Lots of people are seeking financial management experience. People are forced to go on courses (accounting courses). Engineers have their finance cap on a lot of the time (Engineer 2).

The other major change in the cultural values of the organization pre- and post mid 1980s, as it was identified by the interview respondents, lay in the perceived relationship between the organization and its employees, with that change being traced by the interviewees to the pressures on the organization for financial performance.

> In the past people came to work thinking their job was secure, don't have to work too hard, don't have to worry. But now the culture has changed for the fact we're in a competitive market. If you're not going to work hard, you're not going to have a job. People are starting to see that. The culture of the place has certainly changed (Accountant 2).

> Downsizing has reduced employee morale and loyalty. The organization now has a commercial outlook and focus on succeeding in the market (Manager 2).

Structure

The 1983 annual report formally identified the structural differentiation of the company into three major functional groupings of engineering, administration, and commercial, and into six geographical areas. This structure remained until 1990, although the organizational language changed in 1986 to replace the term "major groupings" with the term "divisions".

In 1990 the company's operations were reorganised from the three functional groupings established in 1983 into five functional divisions (Engineering, Commercial, Electricity Supply, Human Resources and Marketing), with the head of each division reporting to the General Manager (Annual Report, 1989/90, p. 2). The regional groupings remained, but the titles of those who headed the regions were changed from Executive Engineer to Regional Manager (SCC Annual Report, 1989/90, p. 21). These structural changes were described in the annual report as being made to incorporate "many of the recommendations of the Curran Inquiry, recommendations from external consultants engaged to examine the structure of the engineering branches and recommendations from internal organization development groups" (SCC Annual Report, 1989/90, p. 9). From 1990 to 1997 the organization structure of the company did not settle. Although the company retained a divisional structure throughout this period, the composition of that structure changed constantly. It seems that changes were made in almost every year as the company struggled to come to terms with its changing external environment.

Overall, the observations made about the structure that emerged over this period suggest that the changes in structure reflected to a reasonable degree the changes in the company's goals discussed in the previous section. Further, the structural changes may be observed to be associated with, and to reflect, a number of factors, including a move away from the structural pre-eminence of the engineering function and positions towards a greater emphasis on financial and business aspects, a move towards a flatter organizational hierarchy,[8] and the implementation of commercialisation and corporatisation.[9]

Management Accounting Practices

During the period from the mid 1980s to the mid 1990s, the institutional environment as well as the changes driven by the institutional environment in the goals, structure and culture of the organization, stimulated and generated a number of changes in MAPs of the energy company. Such influence was not uni-directional however. The organizational culture, for instance, was influenced by the new emphasis placed on accounting practices. Nevertheless, this study focuses primarily on how the role of management accountants and management accounting in general and the use of two management accounting practices, namely budgeting and performance measurements were influenced by the institutional environment and other organizational elements. These issues are examined in turn in the following sub-sections.

The Role of Accountants and Accounting

In the mid 1980s, management accounting information seems to have played a limited role primarily because of the limited pressure at the time to improve productivity and financial accountability. However, this situation changed, particularly since the late 1980s when immense pressure came to be placed on the company to improve its productivity. In the 1990s the organization has been increasingly "required to display how well it was performing" (Accountant 7). With the structural changes sub-unit (divisional) managers were also required to be accountable for the efficient performance and accountability of their respective sub-units. The increased emphasis on financial performance, and the increased use of accounting information for planning and control purposes at all levels within the organization gave accountants and accounting information a new importance in the 1990s.

In the mid 1990s there were more professionally qualified accountants in the organization than in the mid 1980s. They played a more involved role in decision making, particularly "at higher levels" (Accountant 1), and became more visible within the organization as a separate functional group (Accountant 2). Frequent negotiations between the organization and the government provided a forum and a stimulus for accountants to perform a more strategic role within the organization, with accountants being involved in decisions relating to restructuring, pricing, and performance agreements with the Minister for Energy.

In the new organizational environment of the 1990s, accounting concepts came to be used increasingly by both accountants and non-accountants to measure, monitor and justify decisions. With the change from a more technically focused organization to a more profit oriented one, "accountants have taken the prominent position held by engineers in the past" (Administrator 2). An engineer noted, "In the past (we have) never had a management accountant effectively on the senior management team" (Engineer 4). Furthermore, "Up until a couple of General Managers ago, the only people who became General Manager, always had to be an engineer, and now the financial side is taking a much stronger hold" (Administrator 4). 'Accountant 3' noted that "within each of the major business division, (now) the right hand person to the GM is the finance person". An engineer remarked "The bean counters are in control now" (Engineer 1). The way in which accountants came to be located in a position of eminence within the organization, on the one hand appears to have contributed to the change in the organizational culture and, on the other hand, has become a characteristic of the new culture within the organization.

In the early 1990s the management accounting function was decentralized to cater for the increased information requirements at the divisional level. The movement of accountants from the centralised corporate finance section into divisions appears to have facilitated the institutionalisation of accounting in the new form throughout the organization. Also, it helped to 'colonise' the use of accounting language. Terms such as 'the bottom line', 'efficiency', 'accountability', 'dividends', 'returns', became widely used throughout the organization.

There was a general consensus across the four groups interviewed in the study about the importance gained by accounting during the period under examination. Particularly, managers stressed the importance of using MAPs in performing their roles. Accountants also signified the increase in their responsibilities and explained how accounting information had come to play an important role in decision making. There was also a consensus among the engineers about the need for them to understand and use accounting concepts and language when performing their role. 'Engineer 3' estimated that up to 90% of the engineers now have some type of accounting qualification. Administrators, through their observations over the years, explained how accountants have become a much needed group within the organization, and how accounting has become a common business language requiring everyone within the organization to learn, understand and use it.

The Use of Budgeting

Even in the mid 1980s budgets were prepared meticulously and 'religiously', (Administrator 1). However, their use to plan and control organizational activities was relatively limited. 'Engineer 4' commented, "We had the corporate plans, but no one ever used them". Also,

> If you spoke to someone who was here in the mid 1980s you would probably find that we did spend more time on budgeting back then, but overall it was a free and easy time. (Engineer 4)

and,

> You did the budget, and nobody monitored it. (Manager 1).

In the 1990s variations from budgets had been subject to some degree of scrutiny. Nevertheless, providing explanations for any variations from budgets was not seen as a major issue. 'Engineer 2' noted,

> Your budget is not going to be massively over expended anyway, unless there is some other major material expense or maybe some other contracting expense. That happens from time to time, but not to a great extent.

The limited pressure on the organization to use its resources efficiently seem to be a main reason for the less effective role that budgets played as a control device in the mid 1980s. 'Administrator 2' commented that "It was like taking money from a big bin". 'Administrator 3' confirmed this by saying, "People's attitudes in this place were that the budget was a big bin. If you wanted some money, you dipped your hand in and took some out and that was it".

In the 1990s budget information came to be used increasingly and more widely, and more people, particularly people at lower levels, became involved in the budget setting process. According to 'Accountant 2', "In the past a more top down approach was used, but now (there is) a complete bottom up approach". In the mid 1990s a more conscious effort was made to use budgets to improve efficiency. For example, 'Accountant 2' stated, "People are probably looking more closely at their budgets now, because of the bigger budget cuts". Budgets were also seen to be useful in allocating and monitoring the use of funds in areas identified as important to the organization. Low budget allocations forced departments to identify and eliminate non-value adding activities and to improve the efficiency of their core activities. Previously, "(the organization) didn't give any consideration to the costs. Now they are asking what would the cost be for their budget. And be accountable for it" (Administrator 3). In addition, in the mid 1990s, budget performance became a factor in outsourcing decisions. Those units that were not operating efficiently within budgets became potential areas for outsourcing (Accountant 1). Interviewees also gave the impression that budgets were instrumental, particularly, in implementing downsizing decisions. Through reducing the budgets of those units that were identified as needing downsizing, the desired actions were forced. This was implied by 'Engineer 3' who stated "Budgets really drive what we do now. Every year cuts in the budget".

Budgets in the 1990s were also seen as a means to demonstrate the promotion of efficiency and accountability objectives. For example, submission of plans for technical and financial achievements in the subsequent period were seen by managers as a means of making visible their interest in assisting the organization in achieving its desired objectives (Accountant 5). However, as a result of budgets being perceived as a reflection of performance, at times budgets became the centre of conflict among organizational members.

> There's a lot of game playing going on about budgets. About playing off one division against the other. Things like that. People are more protective of their little patch. I guess in a period where you're going through a lot of change, specifically a lot of cost reduction, then that's going to happen. People are trying to say, 'that division over there is not efficient, they're the ones you've got to target, we're good'. A lot of that goes on. (Accountant 3)

In the 1990s budget information also came to be used to assess performance of managers and sub-units. In the mid 1980s "nobody got a loss of bonus or demotion" due to poor budget performance (Engineer 2). Promotions were often based on seniority, salary increments were automatic, and incentive payments were not common. The use of budgets for performance measurement in the 1990s may be linked to the pressure to improve productivity in general, and more specifically to the introduction of contract based appointments. Contract appointments at senior levels in the energy company were introduced in the 1990s. Performance was assessed on a number of criteria of which budget performance was one. Contract appointees believed that the unit performance, reflected through budget achievement, would be seen by the senior managers as a reflection of the manager's performance; and hence a factor considered in the renewal of their contracts.

However, the use of budgets for measurement purposes varied between different units and also at different levels. There were some units that were not subject to any evaluations mainly due to the instability that surrounded the operations of the unit. For instance, an engineer who was in charge of a unit (Engineer 1) commented,

> We're in survival mode now and until we can regroup, no one has sat me down in the last 18 months and gone through my key responsibility areas to see whether I'm failing or succeeding in my job. It was very difficult for anyone to do that because it was all so unstable.

Also, although there has been an increasing pressure to use accounting information, including budget information, the relevance and reliability of such information was often questioned. A number of line managers noted the problems that the company had been experiencing with its accounting information system, and the difficulty in getting the needed information. The interviewees also perceived budget information as irrelevant and inaccurate due to the constant changes taking place in the organization. Although the incremental approach used to prepare budgets was no longer seen as effective in this environment, even by 1997 there was little evidence to suggest an organization wide attempt to introduce zero based budgeting systems.

The Use of Performance Measures

The interviewee perceptions and the annual reports of the company suggest that the company used both financial and non-financial indicators in the mid 1980s. According to 'Accountant 1', "This industry always had quite a lot of performance indicators. Lots of non-financial ones." However, the interviews conveyed the impression that during the period from the mid 1980s to the mid 1990s, not only did an increased number of indicators (both financial and non-financial) come to be used in the energy company, but also their use became more visible. This corroborates what appears in annual reports of the company over this period. For instance, compared to the fifteen performance indicators used in 1985 the company used twenty eight performance indicators in 1994 (SE Annual Report 1994, pp. 66-67). These performance indicators were reported under three separate categories in the 1994 annual report: performance indicators resulting from the performance agreement with the Minister for Energy (4), financial performance indicators (3), and targets for customer services (21) (non-financial indicators relating to eight broad categories[10]). Performance indicators agreed between the company and the Minister for Energy were used from 1989 onwards. The performance agreements gave visibility to the indicators, and also encouraged employee commitment to meeting the indicators. For instance, 'Accountant 7' stated,

> Because those indicators were based on performance agreements we monitored them on a monthly basis fairly closely because if there is going to be a problem, we need to know about it fairly quickly.

Up until 1990s, the energy company used performance indicators, primarily to measure organizational level performance. In the 1990s, performance indicators came to be used to measure individual level performance, particularly of the contract based appointees. Such appointments were made mainly at senior levels. Decisions such as contract renewal, and incentive payments were seen by the contract appointees to be dependent on their performance measured by specific indicators. The use of performance indicators at the individual level gave a new visibility to performance measurement as a control mechanism.

The increased use of financial indicators (focusing on revenues, profitability, return on equity etc.) demonstrated the organization's commitment to government reforms which emphasised efficiency and productivity, while the increased use of non-financial indicators linked to customer service demonstrated the commitment to providing and maintaining a quality service to the community. In addition, the introduction of performance measurement at individual level demonstrated the company's attempt to introduce mechanisms that are seen to be effectively used by private sector profit oriented organizations.

An Institutional Interpretation

Antecedent Period

Until the mid 1980s there was very little pressure from the institutional environment to promote notions of productivity and accountability or to encourage the energy company to operate like a private sector, profit orientated organization. The company appears to have maintained conformity with the contemporaneous societal expectations of serving the society, with little consideration of the costs involved. The organizational activities were structured to support the achievement of this goal and the dominant culture within the organization was centered on engineering concerns. Such conformity has been shown by institutional theorists such as Meyer and Rowan (1977) as a way to gain support and legitimacy from society.

The perceived use of MAPs in the mid 1980s was relatively limited, and reflected the lack of promotion of effective use of such practices by the institutional environment. For example, the goal of the company to excel in technical efficiency and provide a quality service to its customers, was consistent with the company's limited use of practices which are generally adopted to improve financial efficiency. Also, the structural characteristics of the organization in the mid 1980s did not require the use of accounting practices such as, performance measurements (i.e., to measure performance of managers and/or sub-units), mainly due to the non-existence of sub-units based on accounting classifications such as profit centres and cost centres. Moreover, the company's values, beliefs and norms suggested a low emphasis on productivity and efficiency notions, and hence little promotion of practices and mechanisms that were associated with such notions. Rather, during this period control procedures were mainly directed towards achieving and enhancing the company's technical performance, and engineers, rather than accountants, played a dominant role in organizational decision-making.

The management controls literature, which suggests that operational controls play a more significant role than accounting controls in organizations that aim to achieve technical performance/service quality, supports what was observed in the energy company (e.g., Berry et al., 1985; Ogden, 1995; Abernethy and Chua, 1996). This literature also suggests that when technical efficiency is the main focus of an organization, professional groups such as engineers are likely to play a dominant role in the organizational functioning, and accounting and accountants are likely to become incidental and marginalised (Dent, 1991; Burns and Scapens, 1996; Berry et al., 1985). This again supports the observed role played by engineers (i.e., a dominant role) and accounting and accountants (i.e., a marginal role) in the energy company in the mid 1980s.

The controls that the energy company adopted in the mid 1980s to a large extent constituted standardised methods and procedures. While considerable time was spent following standard procedures in preparing budgets, the use of budgets for control purposes was relatively low, and they largely played a symbolic role. Consistent with the arguments extended by institutional theorists such as Meyer and Rowan (1977), Scott (1987) and DiMaggio and Powell (1991), the energy company's continued adherence to standard procedures (which were the procedures used in most public sector entities at the time), may be seen as consistent with maintaining the support of the institutional environment. Such support is seen as important in government and professional sectors, "where the taken for granted organization form is bureaucracy, and survival is mainly a matter of legitimacy and only secondarily of actual performance" (Gupta et al., 1994, p. 269; Meyer and Rowan, 1977, p. 352). The adherence to standard procedures also reflects the company's attempt to adopt practices normally adopted by other public sector organizations (i.e., normative isomorphism in terms of an institutional theory perspective). Accounting practices, such as budgeting, that resulted from such normative isomorphism, encouraged public sector organizations, such as the energy company, to be more alike without necessarily making them efficient (DiMaggio and Powell, 1983, p. 147; Covaleski and Dirsmith, 1988a, p. 21).

Hence, the form of accounting practices that existed at the time continued to be reproduced because of the congruence between the nature of the contribution such practices made to the company at that time and the contribution expected by the institutional environment (Meyer and Rowan, 1977; Zucker, 1987). Institutional theorists such as Jepperson (1991) suggest that a change in those practices could only be stimulated by the emergence of a contradiction between the expectations of the institutional environment and the nature and form of MAPs. The lack of such a contradiction led to the reproduction of the existing practices until the late 1980s, when the conditions in the institutional environment began to change.

The Pressure to Change

Since the late 1980s the institutional environment began to place a high value on the efficiency, accountability and financial performance of public sector entities, placing pressure on such organizations to make the necessary adjustments to conform to these new expectations. Pressure from institutional forces are particularly powerful in government settings (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Scott, 1992; Gupta et al., 1994), and hence had the potential to have a significant impact on the energy company. The findings and recommendations of the 1988 Curran Commission and the 1989 Curran Inquiry were to a large extent used by the government in justifying and reinforcing the new emphasis, and forcing the company to take change initiatives.

As a result of the changes in the expectations of the institutional environment a contradiction emerged between the institutional environment and the institutionalised practices in the energy company in the late 1980s. Frequent disagreements between the government and the energy company reflected this contradiction. One such instance occurred in 1987 when the government drew attention to the company's inefficient use of resources (i.e., accumulating large amount of reserves) (SMH, 20 May, 1987, p. 2). The company's belief was that such reserves were important to meet future capital expenditure needs, and pointed out that at no time had the Auditor General, who audited the company's accounts annually, suggested that the company's financial management had been anything other than sound and prudent (SMH, 22 May, 1987, p. 5). Also in 1987, the government demanded that the company pay it $82 million. Both the government and the company sought professional assistance (Peat Marwick and Coopers and Lybrand accounting firms respectively) to prove their points (SMH, 29 July, 1987, p. 12). The company often threatened the government by saying it would sack employees if the government went against the company's wishes (e.g., see SMH, May 22, 1987, p. 5). At one point, the government also threatened to use its legislative power to stop the energy company from sacking any staff (SMH, 23 May, 1987, p. 2). The contradiction between the environment and the company was also evident from certain direct and forceful measures the government took in the late 1980s to convince and force the company to operate as a commercial entity. Examples include the appointment of the Curran Inquiry and the introduction of performance agreements.

The energy company, in general, played a more defensive role at the beginning (i.e., in the late 1980s). On the one hand, it made an attempt to justify its current performance and operations by saying that any measure taken to change the status quo would affect the quality of its services, and would require the sacking of employees. On the other hand, it tried to show that the government was after its money, rather than being genuinely concerned with the organization's efficiency.

The literature suggests that such resistance to pressure to change may, in general, be reflective of a number of fears and concerns including a perceived threat to existing power bases (Armstrong, 1987), a perceived dispossession of area of expertise (Armstrong 1985), fear of not being able to develop the new skills and behaviour that will be required (Chatterton et al., 1995), concerns about the increased visibility of certain activities (Scapens & Roberts, 1993), seeing change as a means for the government to cut costs (Humphrey, 1994), and seeing change as part of a socio-political movement to promote private, profit seeking structures rather than as a technical means of improving services of the organization (Lawrence et al., 1994, p. 91). In addition, Jepperson, (1991) suggests that pressure to change may be resisted when people are reluctant to move away from taken for granted assumptions and also due to difficulties caused by factors such as complex interdependencies and path dependent developments.

A number of these factors seem to have been associated with the resistance to change in the energy company, and also to have made changes to the existing practices difficult. For instance, replacing the previous technical emphasis by a financial emphasis had implications for the dominant place previously held by engineers and for the traditional focus on technical performance. Moreover, the need to gain financial and business skills was not seen positively by some organizational members.[11] When MAPs came to be used in the new form, inefficiencies of certain departments became visible causing concern for some managers. Furthermore, there was a general impression among the organizational members (expressed by a number of interviewees) that the government was pushing the company too hard to improve its productivity at the expense of its service quality and employee moral.

In the 1990s this contradiction started to ease when the energy company developed a somewhat positive attitude toward reform. As argued by institutional theorists such as Meyer and Rowan (1977), DiMaggio and Powell (1983), Scott (1993), and Gupta et al. (1994), the strong pressure from the institutional environment is likely to have contributed to this change of attitude. The company seemed to have recognised that failure to respond to the expectations of the institutional environment may result in its losing its legitimacy and support from society.[12] In addition, as Fogerty (1996) suggested, by changing its attitudes towards reform, the energy company may have intended to avoid endangering its continued right to act.

Consequently, a number of changes occurred in the energy company from the late 1980s onwards. For example, in 1991 the company was re-structured around business units and began to operate as a commercial entity with goals of increasing productivity and accountability. There was also a shift in the values, beliefs and norms of the organization to accommodate societal expectations. For instance, the previous preoccupation with engineering was largely replaced by accounting and financial concerns. Apart from the actions that had to be taken in response to the coercive pressure by the government (e.g., commercialization), the energy company also took actions seen as consistent with societal expectations through mimetic behaviour. For instance, the company began to adopt certain practices that had been operating in the private sector for some time (e.g., outsourcing, contract based appointments, and performance based incentives).

The Change in Management Accounting Practices

The shift in the expectations of the institutional environment to promote productivity and accountability in the public sector in general flowed through to the company (generating change in goals, structure and culture) and, gave rise to a number of changes in the use of MAPs during the period from the mid 1980s to the mid 1990s. The controls literature suggests that, when productivity and accountability are emphasised in organizational objectives, accountants as well as accounting controls tend to gain a new importance in such organizations (Hopwood, 1985; Dent, 1991; Abernethy and Chua, 1996; Ogden, 1995). On the one hand, accounting becomes a facilitating mechanism in promoting such goals (e.g., to rationalise actions [Scapens & Roberts, 1993; Nahapiet, 1988; Hopper, Cooper, Lowe, Capps, and Mouritsen, 1986; Berry et al., 1985] and in changing the culture [Dent, 1991]), and on the other hand the increased use of accounting information further reinforces the adoption of such concepts (Burchell, Clubb, Hopwood, Hughes and Nahapiet, 1980; Abernethy and Lillis, 1995).

In the energy company, accounting was seen by the change agents, not only as a means to demonstrate their commitment to the emphasised values and goals in the new environment, but also as a mechanism that was useful in articulating changed organizational priorities and promoting the related vocabulary. More professionally qualified accountants were recruited giving “accounting” and “accountants” a new recognition within the company. Accountants not only held important positions (e.g., division heads), but often were seen as the right hand person to the General Manager. Also, the accounting function was decentralised in the early 1990s and accounting language was seen as the dominant medium of communicating organizational performance.

In addition, employees, both accountants and non-accountants, were coerced to understand the accounting language, and to use it widely. The organization coerced non-accountants to attend financial training programs by paying their course fees and giving time off for such purposes.[13] Also, the value system that had been evolving within the company during that period emphasised the importance of gaining an understanding of the financial aspects of organizational functioning and placed pressure on organizational members to obtain the needed knowledge and training to gain such understanding. At the same time, the increasing use of financial language and techniques within the company made organizational members who were not conversant with such uses, and facing some degree of uncertainty, mimic those who, by gaining the needed skills, had adapted to the demands of the new organizational environment.

The "institutional development", with accounting now occupying a much broader and more complex role within the company, had helped, at least to some extent, to ease the contradiction that had begun to emerge in the late 1980s, between the expectations of the institutional environment, and the role played by accountants and accounting within the company at that time. For example, the comment by 'Administrator 4' that the "financial side is taking a stronger hold" in the 1990s is indicative of the emerging congruence between the institutional environment and accounting as an institutionalised practice.

Since the late 1980s, certain changes also took place at a micro-level. This was evidenced in the two MAPs that were examined in the study. Budget information came to be used explicitly and implicitly, for multiple purposes, and performance measurement gained a new importance as a control mechanism, not only at the organizational level but also at the individual level.

While coercive isomorphism, particularly the direct and indirect government pressure, characterised the changes to MAPs in the company, mimetic isomorphism was also evident. Since the late 1980s, GTEs such as the energy company were expected in general to operate as private sector organizations to generate dividends for their shareholders. Managers of such organizations were also expected to adopt the practices believed to be used in the private sector. The CEO who was in office between 1991 and 1995 initiated a number of practices which were already adopted in the private sector, for example, Total Quality Management and performance measurement at the individual level.

The transition to the use of the MAPs in the new form, however, was not accomplished fully or without problems, and certain changes did not reach their full potential during the period under investigation. For example, while some changes moderately extended existing practices (e.g., the increased use of budgets to make decisions), there were other changes that seemed incomplete (e.g., performance indicators used to evaluate the performance of senior managers only). Also, certain practices did not receive the proper recognition, at least from some organizational members, (eg., less reliance on budget information due to its perceived unreliability and irrelevance), and only limited attention was paid to address certain problems (e.g., only one sub-unit made an attempt to introduce a zero-based budgeting system). Drawing on institutional theory, the study identified a number of factors that made the institutionalisation of accounting in the new form problematic: (i) taken for granted assumptions; (ii) complex interdependencies and path dependent development; (iii) exercise of power; (iv) different priorities of change agents; and (v) continuous change. These are discussed in turn.

i. Taken for Granted Assumptions

In the mid 1980s employees had deeply rooted beliefs and assumptions about the energy company and were comfortable with the traditional mission of the company and the way it functioned. Changing existing accounting routines becomes difficult if they are ingrained in the thoughts and behaviours of organizational members and are taken for granted in organizational functioning (Oliver, 1991; Jepperson, 1991). In the energy company, the introduction of performance indicators led to tension among organizational members whose belief was that the technical performance of the company should not be compromised by its financial performance. While some, who disagreed with the changes taking place, simply left the organization, others resisted the developments, and when they failed to halt such developments, adopted and followed the new practices and processes, often with less commitment.

ii. Complex Interdependencies and Path Dependent Development

The perceived inadequacy of the accounting information system was noted by a number of interviewees as a factor that constrained the effective use of accounting information. Although the line managers were expected to use accounting information to a greater extent in the 1990s, they suggested that the required information was either not available or not reliable. Moreover, the choices made by the company prior to the mid 1980s, when it operated with a different set of objectives and in a different institutional environment, excluded to a large extent the arrangements suitable for a company operating in a more competitive environment with accountability and productivity objectives. For instance, at the time that the company began its commercialisation process (i.e., in the late 1980s), employees in general, were less conversant with accounting language. Also, the systems (e.g., accounting information systems) needed by sub-units to operate as profit or cost centres, were often not in place. The impression gained from the discussions with the interviewees was that a large number of the company's employees were little prepared for such a change. They also had difficulty in digesting, not only the new concepts such as financial accountability and efficiency, but also the actions and practices associated with those notions within their operational environment.[14]

iii. Exercise of Power

The nature and the form of the changes to the MAPs in the energy company during the period under investigation were influenced by different interest groups to varying degrees. While some changes resulted from indirect influence of such groups (e.g., due to the pressure placed by the government in general on GTEs to improve productivity and accountability), some were the result of forceful intervention (e.g., the implementation of performance agreements by the government). The implementation of performance agreements in 1989 demonstrates how the government used its power overtly to enforce its desire to make GTEs more conscious of their financial performance. Although performance agreements were meant to be the result of agreements between the company and the Minister for Energy, the resistance from the company indicates that they were largely imposed on the company.

iv. Priorities of CEOs

A common criticism by the interviewees of the company in the 1990s was the uncertainty created by the seemingly continuous changing of CEOs who had different strategies and emphases.[15] The CEO who was removed from his position in 1995 had a significant impact on the change in the role of MAPs in general. The new CEO had different priorities and was pressured to address certain issues that were considered critical at the time. He was pre-occupied with problems associated with restructuring the organization after the amalgamation with another energy supplier in 1995. Due to the pressure to reduce the size of the company, the new CEO seemed to regard restructuring as the main strategy to improve productivity. Consequently, the previous prominence given to the use of MAPs as a means to demonstrate the company's commitment to socially acceptable values such as accountability and productivity, were shifted to provide room to accommodate another accepted measure, namely improving efficiency and productivity through downsizing and restructuring.

iv. Constant Change

In the energy company, the period since the late 1980s was characterized by continuing change of varying types, including changes in the organizational emphasis (e.g., a move towards financial emphasis), operations (e.g., focus on core activities and outsourcing supporting services), structure (e.g., introduction of business units), practices (e.g., increased use of certain MAPs) and procedures (e.g., recruitment procedures for senior personnel). Both the magnitude of changes and the inconclusive nature of certain changes (evidenced by frequent change of the CEOs, frequent restructuring and reduction of employee numbers) led to high uncertainty and unsettled feelings within the company. Often there was little time to absorb changes before another series of changes were introduced.

Such uncertainty had implications for the institutionalisation of MAPs in its new form. Although the increased use of the two practices was seen to complement the new goals of the organization, none of the perceived changes in the use of these practices seem to have reached its full potential or became fully embedded as effective practices. Rather it seems that due to the nature of the organizational environment, there was little motivation for organizational members to adopt or to adapt to the changed practices effectively.

In summary, although there were notable changes in the role of MAPs in the mid 1990s compared with mid 1980s, those changes materialised neither smoothly nor in a linear manner. Difficulties were encountered in gaining commitment and support from organizational members for such change (for instance, due to taken for granted assumptions and exercise of power), and also in implementing those changes (for instance, caused by complex interdependence and path dependent development). In addition, the magnitude of change and the on-going nature of the change made it difficult to institutionalise the new and the desired practices in a more effective way.

Contribution and Limitations of the Study

By providing empirical evidence of the way in which a GTE responded to public sector reform in NSW, this study contributes to the public sector management accounting controls literature. It also adds to the existing literature by focusing on MAPs in a non-health sector public utility company. Additionally, the field study method used in this research adds to the increasing body of literature that examines accounting controls within their organizational context. Moreover, by using an institutional perspective to interpret the change in accounting practices in the case organization, the study makes a theoretical contribution to the management accounting controls literature.

The study has a number of limitations. The study is based on publicly available information and the perceptions of the surviving employees of the energy company. No in-depth analysis of internal reports or records was conducted. Additionally, although only those who had been with the organization for more than ten years were selected as interviewees and interviewees represented people from different functional areas, there is still potential for bias in the data collected from the interviews. It is possible that the members who survived throughout the restructuring and reform have a perspective different from that of those who left the organization. However, the discussions conducted with the interviewees showed that, the surviving members of the company had a range of different feelings about what happened and how it happened. Another potential limitation arises from the possibility of the interviewees loosing the memory of the incidents that had taken place over the ten year period, and also the possibility of their interpretations being coloured by the more recent occurrences and their preferred courses of actions. It was expected that data triangulation would help to overcome these problems at least to some extent.

By restricting the study to a limited period, the study has been able to examine only a phase of a continuing process. Hence, the analysis should be interpreted with this in mind. This study is also limited because it does not examine the change process. Also, the focus of the study is uni-directional as it examines only the way in which the environment stimulated change in MAPs, rather than examining the interactive nature of such influence. Moreover, the institutional framework adopted in the study is not likely to embody, at least some concepts discussed in institutional theories in disciplines other than sociology and organizational theory.

Notes

1 Scott and Meyer (1983, p. 140) describe the institutional environment as "characterized by the elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy from the environment".

2 DiMaggio and Powell (1983, p. 150) use the term "isomorphism" to refer to organizational compliance to institutional pressures.

3 Stone (1988, p. 5) notes that the "public notoriety" gained by statutory authorities during this period was "quite out of keeping with their hitherto bland image".

4 References to the Liberal political party in this paper should be taken to mean the Liberal-National Coalition political party. This is abbreviated to Liberal for ease of exposition.

5 Laffin and Painter (1995, p. 10) describe the Curran Report as a "major symbolic touchstone for the reform process".

6 In order to preserve anonymity the interviewees are referred to as Accountant 1, Accountant 2, Engineer 1, Administrator 1, Manager 1 etc.

7 For example, the company's debt increased from $168 million in 1988/89 to $768 million in 1989/90, as the company borrowed to meet the cash flow requirements of the financial directives. The Curran Inquiry had recommended that the company should borrow $650 million, and this was expected to cost the company $60-70 million a year to service the debt (SMH, 27 October 1989, p. 3).

8 The flatter organization structure was accompanied by downsizing, with a reduction of the number of employees from 7,286 in 1986 (SCC Annual Report, 1986, p. 62) to 3,509 in 1995 (SE Annual Report, 1995, p. 51). In addition, departments identified as under-performing or as performing non-core activities became subject to closure and/or having the services or activities they provided outsourced.

9 The financial reforms initiated by the NSW government in the late 1980s emphasised commercialisation (user-pays or fee for service) and corporatisation (a separate legal entity) of GTEs (Painter, 1995, pp. 92-93; Allan, 1994, p. 8). As a result, the energy company began to commercialise its service branches in 1989 and by 1992, the commercialisation of all internal

business units was reported as "almost complete" (SCC Annual report, 1990/91, p. 4; SE Annual Report, 1991/92, p. 6).

10 These indicators were: general responsiveness, advisory services, street lightning, electricity account enquiries, new customers, supply enquiries, interruptions to supply, and emergency service.

11 A number of interviewees noted that those who served the company for a long period of time, in particular, were not prepared to invest any time or effort to gain such skills, and instead chose to leave the company.

12 The fact that a number of other public sector organizations were also becoming subject to such pressure may also have had an impact on the way the energy company succumbed to the pressure.

13 The energy company was well represented in the Financial Management Improvement Program which aimed at providing accounting and management skills to public sector employees.

14 One may interpret this situation as a result of a clash between the new and the old cultures that placed differing emphasis on financial performance. The degree of such clashes, however, is linked to how much the organization (i.e., people, systems and procedures) was prepared for a culture change. Hence, the problems associated with path dependent development and clashes of cultures may be seen as related. The existing controls literature suggest that when the prevailing culture supports a particular type of control in preference to another, attempts to introduce alternative control practices are likely to meet with resistance and could provide grounds for dysfunctional behaviour (e.g., Flamholtz, 1983; Knights & Wilmott, 1993). Such resistance and dysfunctional behaviour could also be associated with and explained in terms of problems due to path dependent development.

15 From 1990 to 1997 there were four CEOs in office.

References

Abernethy, M. A. and Stoelwinder, J. U. (1988). Nurse Managers and Budgeting: Professional Bureaucratic Conflict. *The International Journal of Health Planning and Management,* Vol.1, No.1, 3-18.

Abernethy, M. A. and Stoelwinder, J. U. (1990). The Relationship between Organization Structure and Management Control in Hospitals: An Elaboration and Test of Mintzberg's Professional Bureaucracy Model. *Accounting, Auditing and Accountability Journal,* Vol. 3, No. 3, 18-33.

Abernethy, M. A. and Stoelwinder, J. U. (1995). The Role of Professional Control in the Management of Complex Organizations, *Accounting. Organizations and Society*, Vol. 20, No.1, 1-17.

Abernethy, M. A. (1994). The Role of Accounting in the Management of Strategic Change. A paper presented at the University of New South Wales Research Seminar Series, Sydney, Australia, 3 June 1994.

Abernethy, M. A. and Chua, W. F. (1996). A Field Study of Control System "Redesign": The Impact of Institutional Processes on Strategic Choice. *Contemporary Accounting Research,* Vol. 13, No. 2, Fall, 569-606.

Abernethy, M. A. and Lillis, A. M. (1995). The Impact of Manufacturing Flexibility on Management Control System Design. *Accounting, Organizations and Society*, Vol. 20, No. 4, 241-258.

Allan, P. (1991). The Financial Management Improvement Program of the NSW Treasury. *Australian Journal of Public Administration,* Vol. 50, No. 2, 107-116.

Armstrong, P. (1985). Changing Management Control Strategies: The Role of Competition between Accountancy and other Organizational Professions, *Accounting. Organizations and Society*, Vol. 10, No. 2, 129-148.

Berger, P. and Luckman, T. (1967). *The Social Construction of Reality* (New York: Doubleday).

Berry, A. J., Capps, T., Cooper, D., Ferguson, P., Hopper, T. and Lowe, E. A., (1985). Management Control in the Area of the NCB: Rationales of Accounting Practices in a Public Enterprise. *Accounting, Organizations and Society*, Vol. 13, No. 5, 3-28.

Burchell, S., Clubb, C., Hopwood, A. G., Hughes, T. and Nahapiet, J. (1980). The Roles of Accounting in Organizations and Society, *Accounting. Organizations and Society*, Vol. 5, No. 1, 5-28.

Burns, J. E. (1996). *The Routinization and Institutionalisation of Accounting Routines*, Doctoral Thesis, University of Manchester, UK.

Burns, J. and Scapens, R. W. (1996). The Institutionalisation of Accounting Routines: Ferac International, Wards Trust Research Seminar Series, Annual Collection of Working Papers, Vol. 1, Department of Accounting and Finance, University of Glasgow, Glasgow.

Carpenter, B. and Dirsmith, M. (1993). Sampling and the Abstraction of Knowledge in the Auditing Profession: An Extended Institutional Theory Perspective. *Accounting, Organizations and Society*, Vol. 18, No. 1, 41-63.

Carruthers, B. G. (1995). Accounting, Ambiguity, and the New Institutionalism. *Accounting, Organizations and Society,* Vol. 20, No. 4, 313-328.

Chatterton, M., Humphrey, C. and Watson, A. (1995). Arming the Police with Management Accounting Systems. *Management Accountancy*, April 1995.

Covaleski, M. A. and Dirsmith, M. W. (1988a). The Use of Budgetary Symbols in the Political Arena: An Historically Informed Field Study. *Accounting, Organizations and Society*, Vol. 13, No. 1, 1-24.

Covaleski, M. A. and Dirsmith, M. W. (1988b). An Institutional Perspective of the Rise, Social Transformation and Fall of a University Budget Category. *Administrative Science Quarterly,* Vol. 33, No. 4, 562-588.

Covaleski, M. A., Dirsmith, M. W. and Michelman, J. E. (1993). An Institutional Theory Perspective on the DRG Framework, Case-mix Accounting Systems and Health Care Organizations. *Accounting, Organizations and Society*, Vol. 18, No. 1, 65-80.

Covaleski, M. A., Dirsmith, M. W. and Samuel, S. (1996). Managerial Accounting Research: The Contributions of Organizational and Sociological Theories. *Journal of Management Accounting Research,* Vol. 8, 1-35.

Curran, C. (1988). *Focus on Reform: Report on the State's Finances by the New South Wales Commission of Audit,* NSW Government Printery, Sydney, Australia.

Dent, J. E. (1991). Accounting and Organizational Cultures: A Field Study of the Emergency of a New Organizational Reality, *Accounting, Organizations and Society*. Vol. 16, No. 8, 705-732.

DiMaggio, P. J. and Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Field. *American Sociological Review,* Vol. 48, 147-160.

DiMaggio, P. J. and Powell, W. W. (1991). Introduction, in Powell, W. W. and DiMaggio, P. J. (eds). *The New Institutionalism in Organizational Analysis*, (Chicago: University of Chicago Press), 1-38.

Energy Australia (1996). Annual Report, year ended 31 December 1996.

Flamholtz, E. G. (1983). Accounting, Budgeting and Control Systems in their Organizational Context: Theoretical and Empirical Perspectives. *Accounting, Organizations and Society*, Vol. 8, No. 2/3, 153-169.

Fogerty, T. J. (1996). The Imagery and Reality of Peer Review in the U.S.: Insights from Institutional Theory, *Accounting, Organizations and Society*. Vol. 21, No. 2/3, 243-267.

Gupta, P. P., Dirsmith, M. W. and Fogarty, T. J. (1994). Coordination and Control in a Government Agency: Contingency and Institutional Perspectives on GAO Audits, *Administrative Science Quarterly*. Vol. 39, No. 2, 264-284.

Guhrie, J, Parker, L. D. and Shand, D. (1990). The Public Sector, *Contemporary Readings in Accounting and Auditing, (*Sydney: Harcourt Brace Jovanovich).

Guthrie, J. (1992). *Australian Public Sector Technologies: Transformations and Managerialism*. Working Paper, School of Accounting, University of New South Wales, Sydney, Australia.

Guthrie, J. (1994). Understanding Australian Federal Public Sector Accounting Developments in their Context, May 1994, Ph.d Thesis, University of New South Wales, Sydney, Australia.

Hamilton, W. H. (1932). Institution, in Seligman, E. R. A. and Johnson, A. (eds). *Encyclopaedia of the Social Sciences*, Vol. 8, 84-89.

Hopper, T., Cooper, D., Lowe, T. Capps, T., and Mouritsen, J. (1986). Management Control and Worker Resistance in the National Coal Board: Financial Controls in the Labour Process, in Knights, D. and Wilmott, H. (eds). *Managing the Labour Process* (Cambridge: University Press), 109-142.

Hopwood, A. G. (1983). On Trying to Study Accounting in the Contexts in which it Operates. *Accounting, Organizations and Society*, Vol. 8, No. 2/3, 287-305.

Hopwood, A. G. (1985). Accounting and the Domain of the Public: Some Observations on Current Developments. The Price Waterhouse Public Lecture on Accounting, University of Leeds, UK.

Hopwood, A. G. (1987). The Archeology of Accounting Systems. *Accounting, Organizations and Society*, Vol. 12, No. 3, 207-234.

Humphrey, C. (1994). Reflecting on Attempts to Develop a Financial Management Information System for the Probation Service in England and Wales: Some Observations on the Relationship between the Claims of Accounting and its Practices, *Accounting, Organizations and Society*. Vol. 19, No. 2, 147-178.

Jepperson, R. (1991). Institutions, Institutional Effects and Institutionalism, in Powell, W. W. and DiMaggio, P. J. (eds). *The New Institutionalism in Organizational Action,* (Chicago: University of Chicago Press), 143-163.

Knights, D. and Willmott, H. (1993). It's a Very Foreign Discipline': the Genesis of Expense Control in a Mutual Life Insurance Company. *British Journal of Management*, Vol. 4, 1-18.

Laffin, M. and Painter, M. (1995). *Reform and Reversal: Lessons from the Coalition Government in New South Wales 1988 - 1995*, (Macmillan Education Australia Pty Ltd).

Laffin, M. (1995). The Public Service in Laffin, M. and Painter, M. (eds). *Reform and Reversal: Lessons from the Coalition Government in New South Wales 1988 -1995* (Macmillan Education Australia Pty Ltd), 73-90.

Lapsley, I. (1995). Reforming Clinical Budgets: The Unfolding Story. A paper presented at UNSW Seminar Series, Sydney, Australia on 24 March.

Lawrence, S., Alam, M. and Lowe, T. (1994). The Great Experiment: Financial Management reforms in the NZ Health Sector. *Accounting, Auditing and Accountability Journal*, Vol. 7, No. 3, 68-95.

McKinnon, J. (1988). Reliability and Validity in Field Research: Some Strategies and Tactics, *Accounting, Auditing and Accountability Journal.* Vol. 1, No.1, 34-55.

Mead, G. H. (1972). *Mind, Self, and Society* (Chicago: University of Chicago Press).

Meyer, J. W. and Rowan, B. (1977). Institutionalized Organizations: Formal Structures as Myth and Ceremony. *American Journal of Sociology*, Vol. 83, No. 2, 340-63.

Mezias, S. J. (1990). An Institutional Model of Organizational Practice: Financial Reporting at the Fortune 2000. A*dministrative Science Quarterly,* Vol. 35, No. 3, 431-457.

Nahapiet, J. (1988). Rhetoric and Reality of an Accounting Change, *Accounting, Organizations and Society*. Vol. 13, No. 4, 333-358.

NSW Government (1989). *Future Direction: Inquiry into Sydney County Council,* Report to Hon. Neil Pickard M.P., Minister for Minerals and Energy, October, 1989.

Ogden, S. G. (1995). Transforming Frameworks of Accountability: The Case of Water Privatization. *Accounting, Organizations and Society*, Vol. 20, No. 2/3, 193-218.

Oliver, C. (1991). Strategic Responses to Institutional Processes. *Academy of Management Review*, Vol. 16, No. 1, 145-179.

Painter, M. (1995). Microeconomic Reform and the Public Sector in Laffin, M. and Painter, M. (eds). *Reform and Reversal: Lessons from the Coalition Government in New South Wales 1988 -1995* (Macmillan Education Australia Pty Ltd).

Parker, L. D. and Guthrie, J. (1993). The Australian Public Sector in the 1990s: New Accountability Regimes in Motion. *Journal of International Accounting, Auditing & Taxation,* Vol. 2, No. 1, 59-81.

Pratt, G. (1982). Administrative Cronicle: New South Wales. *Australian Journal of Public Administration*, Vol. 41, No. 3, 259-269.

Pratt, G. (1983). Administrative Cronicle: New South Wales. *Australian Journal of Public Administration*, Vol. 42, No. 2, 216-233.

Powell, W. W. (1991). Expanding the Scope of Institutional Analysis, in Powell, W. W. and DiMaggio, P. J., (eds). *The New Institutionalism in Organizational Analysis* (Chicago: University of Chicago Press), 183-203.

Scapens, R.W. and Roberts, J. (1993). Accounting and Control: A Case Study of Resistance to Accounting Change. *Management Accounting Research*, Vol. 4, 1-32.

Scapens, R. W. (1994). Never Mind the Gap: Towards an Institutional Perspective on Management Accounting Practice. *Management Accounting Research,* Vol. 5, 301-321.

Scott, W. R. and Meyer, J. W. (1983). The Organization of Social Sectors, in Meyer, J. W. and Scott, W. R. (eds). *Organizational Environments, Ritual and Rationality* (Beverly Hills, CA: Sage), 129-153

Scott, W. R. (1987). The Adolescence of Institutional Theory. *Administrative Science Quarterly*, Vol. 32, No. 4, 493-511.

Scott, W. R. (1991). Unpacking Institutional Arguments, in Powell, W. W. and DiMaggio, P. J. (eds). *The New Institutionalism in Organizational Analysis* (Chicago: University of Chicago Press), 164-182.

Scott, W. R. (1992). *Organizations: Rational, Natural, and Open Systems,* 3rd ed. (Englewood Cliffs, NJ: Prentice-Hall).

Scott, W. R. (1993). The Organization of Medical Care Services: Towards an Integrated Theoretical Model. *Medical Care Review*, Vol. 50, No. 3, 271-303.

Stone, B. (1988). Statutory Authorities as Agents and Objects of Public Policy, in Galligan, B. (ed). *Comparative State Politics* (Melbourne: Longman Cheshire Pty Ltd), 79-98.

Sydney County Council (1974). Annual Report, year ended 31 December 1974.

Sydney County Council (1985). Annual Report, year ended 31 December 1985.

Sydney County Council (1986). Annual Report, year ended 31 December 1986.

Sydney County Council (1988/89). Annual Report, year ended 30 June 1989.

Sydney County Council (1989/90). Annual Report, year ended 30 June 1990.

Sydney County Council (1990/91). Annual Report, year ended 30 June 1991.

Sydney Electricity (1991/92). Annual Report, year ended 30 June 1992.

Sydney Electricity (1992/93). Annual Report, year ended 30 June 1993.

Sydney Electricity (1994). Annual Report, year ended 31 December 1994.

Sydney Electricity (1995). Annual Report, year ended 31 December 1995.

Sydney Morning Herald (1987). Cox a Hard Man to Handle, SCC says, 20 May, 2.

Sydney Morning Herald (1987). SSC Reserves Cut may Cost 300 Jobs, 22 May, 5.

Sydney Morning Herald (1987). Cox Orders SCC to Meet him, 23 May, 2.

Sydney Morning Herald (1988). Govt Assets to go in Massive Sell-off, 29 July, 7.

Sydney Morning Herald (1988). Greiner Gets a New Weapon, 2 August, 12.

Sydney Morning Herald (1989). Big Shake-up for County Council, 26 October, 1.

Sydney Morning Herald (1989). Millions in Power Rebates Planned, 27 October, 3.

Treasury Talk (1992b). Financial Distribution Policy of GTEs, Newsletter of the NSW Treasury. Vol. 2, No. 2, August, 4-5.

Zucker, L. G. (1987). Institutional Theories of Organizations. *Annual Review of Sociology,* Vol. 13, 443-464.

Zucker, L. G. (1988a). Institutional Theories of Organizations: Conceptual Development and Research Agenda", in Zucker, L. G. (ed). *Institutional Patterns and Organizations: Culture and Environment* (Cambridge, MA: Ballinger), xiii-xix.

Zucker, L. G. (1988b). Where Do Institutional Patterns Come From? in Zucker L. G. (ed). *Institutional Patterns and Organizations: Culture and Environment,* (Cambridge, MA: Ballinger), 23-52.