Public Sector Performance Auditing: Emergence, Purpose and Meaning

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Nirmala Nath, Karen Van Peursem and Alan Lowe

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PUBLIC SECTOR PERFORMANCE AUDITING: EMERGENCE, PURPOSE AND MEANING

by
Nirmala Nath*
Karen Van Peursem**
Alan Lowe**

*School of Accountancy
Massey University
**Department of Accounting
University of Waikato

Abstract

The purpose of this paper is to evaluate the extant Anglo-American literature on 'performance auditing for the public sector', in order to identify the socio-economic and political themes that influenced the emergence of public sector performance auditing. The paper also seeks to develop an understanding of the role and practice of performance auditing in the public sector. Common catalysts for change appear to rest in the influence of the local governmental senior auditor (e.g. Auditor General), the existence of public sector reform and changes in standardisation generally. The traditional role of the public sector auditor has undergone significant change over time. In particular, the scope of the public sector audit now exceeds the expectation that the auditor only check for regulatory and procedural compliance. It is now expected that the auditor enhance accountability in the management of public sector resources. The perceived objectives of performance auditing (economy, efficiency and effectiveness) emerge as a strong theme, one which seems to comply with these more modern expectations of performance.

Key words:
performance audit
public sector
literature
accountability
1.0 INTRODUCTION

Performance auditing has been described as an independent evaluation of the economy and efficiency of auditee operations, and the effectiveness of programs in the public sector (Guthrie & Parker, 1999; O'Leary, 1996; Leeuw, 1996; Thompson, 1996; Parker, 1990; English, 1990; McRoberts & Hudson, 1985). The primary objective of this paper is to review the extant Anglo-American literature on public sector performance auditing to identify the socio-political and economic themes which appear to have influenced the emergence of performance auditing in five Anglo-American countries. An analysis of the themes drawn from the literature review would provide an insightful understanding of the historical processes, which shaped the emergence of performance auditing in those countries, so as to acquire a deeper understanding of why performance auditing developed in the way it did. The paper also seeks to develop an understanding of the role and practice of performance auditing in the public sector context. The perceived objectives of performance auditing emerge as strong themes in the Anglo-American literature studied; these are therefore identified and their associated meanings evaluated, in the context of performance auditing.

The literature review on performance auditing was limited to the United States (U.S.), the United Kingdom (U.K.), Canada, Australia, and New Zealand. The choice was limited to these countries because, with the exception of the U.S., the other countries are based on the Westminster system of governance and have an Auditor-General (AG) who audits government expenditure and revenue. This aspect allows for reasonable comparability. In the U.S., the General Auditing Office (GAO) and the Comptroller-General (CG) audit the government expenditure and revenues. According to Parker (1990), the U.S. is considered to have the most developed practice of performance auditing in the public sector context, and therefore the U.S. has been added.
1.1 Public Sector and Public Sector Audit Institution

Shim and Seigal (1995) and Broadbent and Guthrie (1992) suggest that the public sector is usually considered to be that part of the economy, which is traditionally managed and controlled by the government on behalf of the citizenry. The government therefore makes decisions on the use of, and is responsible for, the consumption of public sector resources (Jones & Pendlebury, 1992).

The government, while managing and controlling public sector resources, is seen by the public as using the resources for the benefit of the public and creating value for the resources (Broadbent & Guthrie, 1992; English, 1990). According to Jones and Pendlebury (1992) and Musgrave and Musgrave (1984), the government controls public sector resources and uses them to fulfil certain economic roles in order to improve the welfare of the citizenry.

Hercok (1989) notes that the traditional role of the public sector is to improve the welfare of citizens by delivering goods and services that may not be provided by the private sector, at a price that makes them accessible to all. Common examples of such goods and services are education, health, defence, and transportation. This is essentially a public good concept and therefore such goods are recognized as public goods and have the characteristics of non-excludability and non-rivalness (Malkin & Wildvasky, 1991). Non-excludability indicates that no beneficiary can be excluded from using the good, and non-rivalness indicates that the cost of producing the good does not increase as consumption of the good increases. The prices of these public goods or social necessities, like health, education and mode of public transportation, are not necessarily determined by market forces. In most cases the government is the primary supplier of public goods (Hercok, 1989).

Jones and Pendlebury (1992) and Hercok (1989) state that the central or the local government funds the broad provision of public goods in most countries. It is claimed by Musgrave and Musgrave (1984) that the government gets its funding from various sources—the most important being taxes and rates paid by the public. The government, while controlling and
using public sector resources and finances, is expected to be accountable to the public (Broadbent & Guthrie, 1992; English, 1990; Hercok, 1989).

The performance auditing literature suggests that the government is accountable to the public through oversight bodies in most jurisdictions (Funnell & Cooper, 1998; Radcliffe, 1998; Thompson, 1996; Funnell, 1994; Persaud & McNamara, 1993, 1994; Hamburger, 1989; Yamamoto & Watanabe, 1989). The oversight bodies are known by different names in different jurisdictions. For example, in countries that are based on the Westminster system of governance, the oversight bodies are called the Office of the Auditor-General (OAG) or the National Audit Office (NAO), and in the U.S. they are known as the Office of the Comptroller-General (OCG) and the General Accounting Office (GAO) (Dittenhofer, 2001; Burrowes & Persson, 2000; McCrae & Vada, 1997; Parker & Guthrie, 1991; McRoberts & Hudson, 1985).

The public sector provides the citizens with much desired social necessities and the funding for the provision of these social necessities is through public finance (Musgrave & Musgrave, 1984). Therefore, while using and controlling public sector resources, the government in most jurisdictions is expected to be accountable to the public by oversight bodies, which are known by different names in some jurisdictions (Dittenhofer, 2001; McCrae & Vada, 1997; Parker, 1990). The provision of public goods and public sector accountability are two themes central to the literature describing the role of performance auditing in the public sector.

1.2 The Perceived Role of the Public Sector Performance Auditor

Literature on performance auditing in the public sector suggests that the roles of the performance auditor are to (i) examine the records of the auditee, (ii) form an opinion based on results of the examination, (iii) write a report based on the opinion, (iv) present the report to Parliament or Congress, and (v) carry out a follow-up of the performance audit report recommendations (Morin, 2001; Wheat, 1991; Pendlebury & Shriem, 1990; Hamburger, 1989; Adams, 1986). The performance auditor does so to evaluate the performance of
management and the use of public sector resources. It is claimed that the performance auditor's report will lead to improvements in public sector performance because the performance auditor is expected to identify and indicate inefficient and/or ineffective practices and would therefore suggest strategies for improvements (Thompson, 1996; Adams, 1986). These issues are discussed in section 1.4.

Authors generally agree that the performance auditor examines the auditee's records in terms of the objectives of performance auditing (Morin, 2001; Parker & Guthrie, 1991; Hatherly & Parker, 1990). According to Parker and Guthrie (1991) and Pugh (1987), an examination of the auditee's records are carried out to arrive at a decision and form an opinion on how the management of a public sector entity have used resources to achieve the objective/s of the entity.

Jacobs (1998), McCrae and Vada (1997), and Parker and Guthrie (1991), state that the performance auditor expresses his/her opinion on how he/she thinks the management of the public sector entity have used resources to achieve the objectives of the entity. The performance auditor also forms an opinion on the adequacy of the internal control procedures used to achieve the objective of the entity in terms of economy and efficiency.

After reaching an opinion on how the resources have been used, the performance auditor is usually expected to compile a report based on that opinion (Funnell & Cooper, 1998). According to Funnell and Cooper (1998) and McCrae and Vada (1997), the performance audit report is an evaluation of management's decisions on the usage of an entity's resources to achieve its specified objectives. Therefore, the performance audit report reveals the performance auditor's opinion on the usage of the public sector resources, and whether the stated objectives of the entity have or have not been achieved. McCrae and Vada (1997), Wheat (1991), and Pendlebury and Shriem (1991, 1990), claim that the performance auditor in his/her report recommends ways by which the performance of the entity can be improved. This suggests that, the perceived role of the performance auditor as described in the literature studied, is both to hold the auditee to account and to advise on future actions.
According to the performance auditing literature, the performance audit report, once compiled, is presented to Parliament in countries that follow a Westminster system of governance (Funnel & Cooper, 1998; Parker & Guthrie, 1991), or, in the U.S., to Congress (Burrowes & Persson, 2000; Thompson, 1996). Performance audit reports, once presented to Parliament or Congress, make public the performance of public sector entities. These reports also provide an opportunity for members of Parliament or Congress to comment on and debate the performance auditor's findings and opinions.

McCrae and Vada (1997) and Pendlebury and Shriem (1991, 1990) propose that the performance auditor's role includes a follow-up activity as the final stage of the performance audit program. The follow-up activity focuses on the recommendations the performance auditor had suggested in his/her report regarding the management and the performance of the respective public sector entity. The purpose of the follow-up activity according to Pendlebury and Shriem (1991, 1990), is to investigate i) whether the recommendations suggested by the performance auditor to improve the management and the performance of the public sector entity have been implemented, and ii) (if yes) to determine if the recommendations improved the management and performance of the entity. The follow-up activity carries the performance auditor's role into involving actions beyond and above forming an opinion. Therefore it is distinguished from the role of the external financial auditor. In a public sector context, the performance auditor systematically evaluates the auditee's management and control of public sector resources and the performance of the public sector entity (Parker & Guthrie, 1991).

The themes of provision of public goods, and public sector accountability appear to be central to understanding the perceived roles of performance auditor as described in the literature studied. Based on these themes the performance auditor performs the various roles, as has been described in this section, with an intention of determining effective and efficient resource management in the public sector.
2.0 EMERGENCE OF PERFORMANCE AUDITING

An evaluation of the performance auditing literature identified eight possible socio-political and economic themes that have influenced the emergence and practice of performance auditing in the Anglo-American public sector. The themes include: auditor-general influences; central and local governments; government fiscal policies; pressure from lobby groups; review committees; statutes and legislation; the public sector accounting profession; and the reorganisation of the audit office/general accounting office. These themes have been summarised and are presented in Table 1.

Table 1: Major Socio-Political and Economic Influence on Performance Auditing

<table>
<thead>
<tr>
<th>The socio-political and economic themes</th>
<th>1.1</th>
<th>Countries</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Including performance auditing reports as a part of formal reporting but independent of annual audit report.</td>
<td>✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓</td>
<td></td>
</tr>
<tr>
<td>Personal and Professional influence of Auditor-Generals</td>
<td>✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓</td>
<td></td>
</tr>
</tbody>
</table>
2. Central Government and Local governments

| Central Government request for control on public sector entities; | ✓ | ✓ | ✓ | ✓ | Flesher and Zarzeski, 2002; Burrowes and Persson, 2000; Niesner, 1999; Jacobs, 1998; Broadbent and Guthrie, 1992; Wheat 1991; Guthrie, 1990a &b; English, 1990; Pendlebury and Shriem, 1990; Yamamoto and Watanabe, 1989; Pugh, 1987; Adams, 1986; Dillon, 1985; Skene, 1985 |
| Review of 1972 Local Government Act in 1982 UK | ✓ | ✓ | ✓ | ✓ |
| Improve financial management and efficacy | ✓ | ✓ | ✓ | ✓ |
| Economic Reforms in the Public Sector | ✓ | ✓ | ✓ | ✓ |
| Shift in public administration from resource allocation based on equity to concepts of efficiency in the management of public sector resources. | ✓ | ✓ | ✓ | ✓ |

3. Government Fiscal Policy:


4. Pressure from lobby group

| Calls from social and political lobby groups for greater government accountability in the management of public sector resources at national level due to i) increased public awareness of government fiscal policy ii) the increase in government spending iii) increase in taxes to fund new public sector programs iv) At local government level, ratepayers called for accountability due to increase in local government spending and the likelihood of increases in local taxes to fund local government spending v) Performance audit issues used to lobby political support in the State of Alberta in Canada. | ✓ | ✓ | ✓ | ✓ | Flesher and Zarzeski, 2002; Dittenhofer, 2001; Burrowes and Persson 2000; Guthrie and Parker, 1999; Keen, 1999; Yamamoto and Watanabe, 1989; Glynn, 1982. |
5. **Review committees set up by Government.**

<table>
<thead>
<tr>
<th><strong>Treadway Commission in USA, 1976</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Committee reports which recommended ways to improve public sector accountability for example Coombs Commission 1976 in Australia</td>
</tr>
</tbody>
</table>

6. **Legislation, New and/or changes to Public Sector Audit Act, Finance Act, Local Government Act**

<table>
<thead>
<tr>
<th><strong>Enactment of the Foreign Corrupt Practices Act 1977 in USA- prohibiting bribes in various forms.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to the UK National Audit Act 1983, as a result of change the UK Auditor-General was given the mandate to undertake performance audit.</td>
</tr>
<tr>
<td>Local Government Finance Act 1982 UK</td>
</tr>
<tr>
<td>Changes to Australian Audit Act 1979- change provided authority to the Auditor-General to undertake performance audit.</td>
</tr>
<tr>
<td>Changes to the Canadian Auditor General Act</td>
</tr>
<tr>
<td>Changes to the New Zealand Public Finance Act 1982</td>
</tr>
</tbody>
</table>

7. **Influence of the Public sector Accounting Profession**

<table>
<thead>
<tr>
<th><strong>Public sector audit profession contributed to promulgation of the public sector auditing standards.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Formation of taskforce in USA to put forward a comprehensive definition of performance auditing and review the scope of the performance auditing practices.</td>
</tr>
</tbody>
</table>

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Burrowes and Persson 2000; Guthrie and Parker, 1999; Persaud and McNamara, 1993/1994; Heaton, Savage and Welch, 1993; Broadbent and Guthrie, 1992; Wheat 1991;
We present the themes roughly in order, as we perceive it to be, from the most influential to the least influential. A discussion on the order of the themes is presented below, followed by a brief description of how the table was constructed, and then an analysis of the themes is provided.

### 2.1 Order of Influence

It is viewed that the AG/GAO leadership was the most influential, primarily because in all the countries studied for this research the AG/GAO was appointed under law and authorised to undertake public sector auditing. This aspect provided an opportunity for the AG/GAO to go beyond traditional public sector auditing into auditing for performance, thus expanding the scope of the public sector audit. Central and local governments were placed second on the list, as these institutions are recipients of audit reports and, in their quest to strengthen control over public sector resources; they have had to ensure that the resources were used for the intended purposes. One way of ensuring this and controlling the management of the resources was to request effectiveness and efficiency audits.

The third theme follows — the increase in government spending that is the fiscal policy. Increased government spending is significant because it raises the issues of budgetary control and accountability. The next significant theme is pressure from lobby groups, through their demands of accountability, and traditional audits focused on the stewardship function instead of performance. The fifth theme is the review committees. These influenced the emergence of

| 8. Reorganisation of the Office of Auditor General or the General Accounting Office, or Office of the Auditor-General/ National Audit Office | Reorganisation of the Audit Office or General Accounting Office led to the extended the scope of audit, which included performance auditing. National Audit Office- developing and providing guidance and auditing statements on the conduct of appropriate performance auditing | ✓ | ✓ | ✓ | ✓ | Flesher and Zarzeski, 2002; Dittenhofer, 2001; Burrowes and Persson 2000; Keen, 1999; Persaud and McNamara, 1993/1994; Heaton, Savage and Welch, 1993; Broadbent and Guthrie, 1992; |
performance auditing by suggesting changes in the legislation. This is followed by the statutes and legislation as these provide the AG/GAO with statutory rights to undertake performance auditing. The public sector accounting profession is viewed as the seventh theme because the profession added credence to the practice of performance auditing by promulgating the appropriate auditing standards. The reorganisation of the OAG/OCG/OIG is the eighth theme, as this enabled certain audit staff to be responsible for performance auditing. In some countries the National or State Audit Office (NAO/SAO), created a section such as ‘performance audit’ implying that performance auditing was under the jurisdiction of the AO/GAO. It is important to take into account that most of these themes were simultaneously occurring and providing scope for performance auditing.

2.2 Analysis of Influence on Performance Auditing

The themes shown in Table 1 reveal eight major sources of influence affecting the emergence of performance auditing in the Anglo-American countries studied and cross nationally, some common points emerge. For example, the countries studied experienced an increase in government spending during the years 1962 to 1972 (Yamamoto & Watanabe, 1989), and as a consequence, political and social lobby groups demanded greater government accountability in the management of public sector resources. The demand for improved accountability generally seemed to influence the emergence of performance auditing (Flesher & Zarzeski, 2002) and this is reflected in the themes to follow.

2.2.1 Theme 1: Auditor-General/General Accounting Office Influence

There are claims that the AG/CG in particular for most countries, and the GAO in the U.S., greatly influenced the practices of performance auditing (Flesher & Zarzeski, 2002; Burrowes and Persson, 2000; Dittenhofer, 2001; Morin, 2001; Radcliffe, 1998; Broadbent & Guthrie, 1992; Guthrie, 1990a). The AG/ GAO/CG have either voluntarily or on the request of the central government incorporated performance auditing by reporting audit findings on public sector resource management and by associating these findings with issues of accountability
By incorporating issues of performance in the audit reports the auditor-general/comptroller-general was performing the authorised role of an oversight body and was informing the ‘users’ of the audit reports on how public sector resources were managed. Therefore, it appears that the AG/CG raised concerns on the management of public sector resources and these concerns warranted reactions from the users of the performance audit reports. These reactions are discussed later.

Literature on performance auditing in the Australian and Canadian public sector indicates that the auditors-general had significant personal and professional influence on the emergence of performance auditing (Morin, 2001; Radcliffe, 1998; Hamburger, 1989; Adams, 1986; McRoberts & Hudson; Glynn, 1982). For example, Hamburger (1989) claims that the practice and development of performance auditing at the Australian National Audit Office (ANAO) was significantly influenced by the professional and personal attitudes and competence of the three auditors-general over a span of fifteen years. Hamburger’s (1989) study outlines how each of the AG’s influenced the shifts in the focus of public sector auditing from auditing for probity and compliance to auditing for performance in terms of economy and efficiency and effectiveness. The study also explains how the different AG’s influenced the interpretations of the term performance audit. Hamburger’s 1989 study indicates that as the OAG became influential in one aspect of performance auditing for example auditing for economy, the other aspect of auditing such as efficiency audit was incorporated. Such actions and activities on one hand enabled the acceptance of performance auditing and on the other hand raised the issues of the objectives of performance auditing thereby illustrating progressive development (or lack of) in the nature and ‘objective’ of performance audit programs.

In the Canadian context performance audits conducted by the Canadian Auditor-General and the Federal Audit Office during the years 1973 to 1978 had a focus on the use and management of public sector resources (Morin, 2001; McRoberts & Hudson, 1985). In regards to the state of Alberta, the literature suggests that the Alberta Auditor-General
influenced the practice and development of performance audits via extensive levels of reporting on public sector resource management and use of appropriated funds (Radcliffe, 1998). For example, the Alberta AG’s audit findings during the 1960 and 1970 period focussed on, the ‘non productive payment’ items which not produce public benefits (Radcliffe, 1998) and on issues of lack of accountability in the management of public sector resources (Morin, 2001; Radcliffe, 1998).

The Alberta AG’s audit findings of 1960’s and 1970’s on the management and administration of (or lack of) public sector resources appealed to the ‘users’ of the audit reports (Radcliffe, 1998). The ‘users’ in terms of the political parties, the government administrators, managers and taxpayers were positively receptive to the audit finding reports and demanded accountability from the government (Radcliffe, 1989). This aspect is developed later in the paper. The AG of Alberta was able to use the traditional audit mandate to report the audit findings in such an extensive manner as to incorporate performance auditing with the traditional probity and compliance auditing.

In the case of USA, Congress had requested the GAO after World War II to undertake ‘management audit’ for government owned companies for control purposes (Flesher and Zarzeski, 2002). Though the Congress initiated performance auditing, the GAO decided what constituted performance auditing (Wheat, 1991). In deciding what constituted performance auditing the GAO was determining the ‘objective’ of performance auditing and to some extent was also developing a ‘framework’ and practice/ structure of performance auditing.

According to Wheat (1991) changes in the leadership and staffing at GAO over the period 1960 -1980 contributed to the emergence of performance auditing in the USA. The contributions appear to have been from the respective Comptrollers-Generals who had served in the GAO during this period. Over the period 1960-1980 the CG/IG shifted the audit focus from auditing of vouchers and forming normative judgements on legality or illegality of transaction to auditing on entity performance (Wheat, 1991). Thompson, (1996) and Wheat (1991) claim that during this period the GAO published Standards for Audit of Government
Organisations Programs, Activities and Functions (which was latter revised and became known as Yellow Book in 1972). This indicates that through the CG’s leadership the GAO as an oversight institution which normally acts on the Congress’s instruction was able to extend the scope of its audit function and provided the users of the audit reports with a greater insight into public sector effectiveness.

The AG/GAO/CG influence on the emergence of performance auditing was probably the most significant in all the countries studied because the OAG/GAO and the State Audit Office had the legislative mandate to undertake accountability roles and this provided the auditors with opportunities to extend the scope of traditional audit to audit for accountability. In most countries the OAG/GAO/OCG appear to have decided the objectives and scope of performance auditing.

2.2.2 Theme 2: Central and Local Government Influence

Central and local governments also influenced the emergence of public sector performance audits by, (i) requesting the respective OAG/GAO to perform an audit on the management and control of public sector resources, (ii) nominating Committees and Commission (Burrowes and Persson, 2000; Guthrie and Parker, 1999; Dillon, 1985), (iii) amending or changing audit legislations, (Jacobs1998; McCrae and Vada, 1997), and (iv) changing the organisational form of government/ministerial departments from departments to statutory entities with a focus on commercial practice and performance (Broadbent and Guthrie, 1992). The requests for performance audits and the nominations of the Committees/Commissions appear to have been motivated by the Government’s need to ensure that the public sector entities were achieving the purposes for which the resources were entrusted to them. In requesting performance audit reports from the National Audit Office/General Accounting Office, the central and local governments were signalling an acceptance of performance auditing and its outcomes. For example, the U.S. Congress requested the General Accounting Office to undertake performance auditing in government-owned corporations to improve financial and management efficacy (Flesher & Zarzeski, 2002; Burrowes & Persson, 2000). The reason
given for this request from the Congress was explained by claims that government-owned corporations were exempt from normal congressional control (Flesher and Zarzeski, 2002). This indicates that the U.S. Congress was concerned about the management of public sector resources entrusted to government owned corporations, and was empowering the General Accounting Office with the authority to perform the public sector accountability role.

According to Heaton, Savage and Welch’s (1993) survey of performance auditing in the USA municipal governments it is claimed that certain local government authorities namely, the city councils of Lafayette, Louisiana and St. Petersburg, Florida had included performance audit as a requirement in their 1990 city charter. The authors claim that performance-auditing practices at the central government level influenced the local government authorities to include performance auditing in their charter. The implication being that events at national level had a trickle down effect at the local level of government. It is probable that government at central and local levels held the view that performance audit projects would address the issues of accountability and would promote financial efficacy.

In U.K the local government authorities influenced the emergence of performance auditing by undertaking a review of the 1972 Local Government Finance Act in 1982 (Grimwood and Tomkins, 1986). The 1982 review provided the AG with the mandate to undertake performance auditing in the local government municipalities. At central government level the National Audit Act in 1983 was reviewed and it provided the AG with the mandate to undertake performance auditing. The need for the 1982 review of the Local Government Finance Act and the changes to the Audit Act in 1983 authorised the AG to undertake performance auditing can be linked to Broadbent and Guthrie (1992) arguments that the government at the central was changing the organisational form of traditional government departments to that of statutory bodies whereby the statutory bodies had to operate according to the ‘rules’ of a ‘commercial entity’ that is being focussed on outputs. At local government level, services like ‘refuse’ collection were provided on commercial basis in most municipalities (Pendlebury and Shriem, 1990; 1991) and the local government municipalities used the performance auditing as a means of demonstrating the effectiveness with which the
resources were managed and the outputs achieved. Thus, the local government administrators shifted the focus from administration of public sector resources to performance of public sector resources.

Literature, suggests that both the central and local government contributed to the emergence of public sector performance auditing by acting as a catalyst in various ways. These were by requesting the GAO/NAO/OAG to conduct performance audits, nominating Committees/Commissions whose primary purpose was to recommend ways to improve public sector accountability, and/or regulating changes to the audit or finance acts. A common feature amongst the jurisdictions studied indicates that the central government’s acceptance of and contributions to the development of performance auditing had a direct ‘trickle down’ influence at the local government level.

2.2.3 Theme 3: Fiscal Policy

In most countries government fiscal policy, in terms of increasing government expenditure (Yamamoto & Watanabe, 1989), combined with the growth in the size of the public sector (Jacobs, 1998; Wheat, 1991) contributed to the emergence of performance auditing. In countries like USA, U.K, Canada and Australia, increased government spending led to situations whereby governments possibly had to raise taxes to fund the increased spending and new public sector projects (Yamamoto and Watanabe, 1989). In order to raise taxes and sustain the public sector growth, government is expected to demonstrate that public funds and resources were used in an accountable manner and not with extravagance or waste (Jacobs, 1998, Wheat, 1991).

Skene (1985) suggests that during the 1970’s when New Zealand was experiencing public sector growth with a consequent increase in government spending, the AO took it upon itself to comment on government expenditures which it thought was wasteful or extravagant. By providing the government with reports on departments and entities which used the resources in a wasteful and extravagant manner the AO appeared to be signalling to the government to
cut back on the funds and other resources allocated to such departments. There are suggestions in the literature that the New Zealand government took major steps to cut back budgetary allocations to such government departments and in late 1980’s there was a reduction in the size of the public sector (Pallot, 2003, Jacobs, 1998; Skene, 1985). The Central government’s fiscal policy implementation combined with the audit findings on the management of resources during the 1970’s contributed to the emergence of performance auditing in New Zealand.

According to Wheat (1991), the state and local governments in the USA faced major financial constraints during the 1970’s. The central government grants were reduced and the taxpayers were not in the favour of tax increases (Raaum and Soniat, 1993; Wheat, 1991). As a result, the state and local governments shifted their focus from the provision and delivery of services to effective administration, management and performance of resources (Raaum and Soniat, 1993). It appears that the funding constraints at the local government levels in USA, contributed to the emergence of performance auditing as the local government administrators were concerned with performance rather than being solely concerned with provision of services to benefit the public.

2.2.4 Theme 4: Lobby Group Influence

Increased government spending and large budget deficits have a strong link to lobby groups and the public demanding greater government accountability with respect to the use of public sector resources in most jurisdictions (Flesher & Zarzeski, 2002; Keen, 1999; Wheat, 1991; English, 1990; Glynn, 1982). For example in countries like the USA, the UK and Canada the increase in government spending signalled to the taxpayers the possibilities of increases in the taxes and rates (Thompson, 1996; Yamamoto and Watanabe 1985). The tax increase concerns (Yamamoto and Watanabe, 1985) fuelled with media reports of wasteful and extravagant management of resources (Radcliffe, 1998; Jacobs, 1998) probably raised awareness of public sector resource management and, as a consequence, the public, the taxpayers, the political
lobby groups and others called for greater accountability (Burrowes & Persson, 2000; Jacobs, 1998; Yamamoto & Watanabe, 1989).

Some writers have opined that the politicians representing the taxpayers and acting as a lobby group in Canada, the USA, the U.K and New Zealand had raised concerns regarding the management of public sector resources in the Parliament/ Congress and had used the AO/GAO reports to question the performance of the public sector (Burrowes and Persson, 2000; Jacobs, 1998; Thompson, 1996). In turn the government had to rely on the audit reports to answer the concerns raised by the politicians (Radcliffe, 1998; Skene, 1985). Such reliance on audit reports by the politicians and the government indicates that this provided an impetus to the AG/CG to extend the scope of traditional audit to performance audit.

Furthermore, the AO/GAO has a mandatory right to undertake public sector auditing (Funnell, 1998; Thompson, 1996; Parker, 1990). Therefore, it is probable that the AG/CG while using the legislative authority to include comments on economical and efficient use of public sector resources was also prompted by the politicians to undertake performance auditing and provide a opinion on the management of public sector resources.

Radcliffe (1998) notes that the emergence of performance auditing in the Canadian state of Alberta was greatly influenced by the politicians. During the 1960 and the 1970 state elections the Albertan politicians while campaigning for the electoral votes used the issue of public sector resource (mis)management (Radcliffe, 1998). In using the resources (mis)management issue the politicians from different political groups suggested to the public that the government may be able to improve the public sector accountability through the practice and development of performance audit. This view of the politicians’ influence on the emergence of public sector performance auditing links with the views expressed by Jacobs (1998) and Thompson (1996) who claim that the politicians used the audit reports to indicate to the government the issues of public sector accountability and the impending tax burden on the taxpayers to support increases in public spending.
The media is viewed as a lobby group, which contributed to the development of performance auditing by publicising the audit findings. There are claims that the media was instrumental in publishing the audit reports from the OAG/GAO on issues of wasteful and extravagant use of public sector resources (Burrowes and Persson, 2000; Thompson, 1996; Jacobs, 1998). In publicising the audit reports and highlighting waste in public sector, the media was conveying a lack of public sector accountability and this may have initiated the politicians’, the government’s and the taxpayers’ demand for greater public sector accountability. This may have initiated the governments in most jurisdictions to consider the contributions of performance auditing as a means of getting the public sector entities to achieve accountability.

One possible answer to calls for accountability is to demonstrate to the lobbyists that public sector resources were used to achieve the purposes for which they were assigned. Performance audit reports were widely accepted as reports addressing the issues of economy, efficiency and effectiveness with which the public sector resources were used (Parker, 1990) and therefore they may have been used by the different lobby groups to raise issues of accountability and to answer issues of accountability.

The politicians who are usually viewed as the taxpayer representatives and the media, a means of publicising information, contributed to the development of performance auditing by raising issues of accountability and by calling for an accountable government. Hence most public sector entities were subjected to performance auditing.

2.2.5 Theme 5: Review Committee Influence

A culmination of factors led the government in Australia during the 1970’s and 1980’s and the Congress in U.S. after the World War II to set up review committees to address the issues of public sector efficacy and auditing (Flesher and Zarzeski, 2002; Guthrie, 1990a). The general purpose of the review committee was to suggest ways to improve public sector accountability via financial management reforms or auditing (Burrowes & Persson, 2000; Guthrie & Parker, 1999; Persaud & McNamara 1993, 1994; Broadbent & Guthrie, 1992; Wheat, 1991). For
example, during World War II, the USA Congress felt that there was lack of financial and management control in federal owned companies which were exempt from Congressional control. To seek a remedy to this issue, a Congressional Review Committee was commissioned in 1945. The 1945 Review Committee chaired by Harry F. Byrd, recommended that the GAO audit all government corporations and that the corporations be audited for efficacy of financial management and internal controls (Flesher and Zarzeski 2002). In 1945, the USA Congress passed the Government Corporation Control Act, which incorporated the Review recommendations and the federal government owned corporations were subjected to mandatory performance auditing.

In the Australian context, the review committees contributed to the emergence of public sector performance auditing at both the central and state government levels (Guthrie, 1990b). According to Guthrie and Parker, (1999), the Australian government had established a royal commission to investigate efficiency in the Australian government administration after World War 1 because of the economic crisis. The authors claim that the Royal Commission on Public Expenditure of the Commonwealth of Australian with a View to Efficiency and Economy (RCPECA, 1919) had indicated that Australia had as much a need for ‘an auditor of economic efficiency, as for an auditor of accuracy and honesty’ (p. 309). This indicates that the foundation for public sector performance auditing was laid as early as 1919 by the RCPECA. Despite this recommendation in 1919, the Australian Audit Office did not actively pursue performance auditing until 1970’s (Guthrie and Parker, 1999).

The literature informs that during 1970’s the AAO actively engaged in performance auditing and as a result, issues of public sector resource management and administration and whether the AAO be given the mandate to undertake performance auditing surfaced in the Australian public sector (Guthrie and Parker, 1999; McCrae and Vada, 1997). To address the above issues the Australian government set up RCAGA (the Royal Commission on Australian Government Administration) in 1974.
It is claimed that in its Review Report, RCAGA recommended that OAG be given the powers to undertake public sector performance audit and the focus of such audits be on ‘departmental performance’ of the public sector entity and not the government policy (Dillon, 1985). RCAGA contributed to the emergence of performance auditing by recommending changes to the 1901 Audit Act which would allow the OAG to undertake performance auditing (Dillon, 1985).

The suggestions of review committees paved the way for the continuance of performance auditing in most countries. There are assertions in the literature that the central governments of UK, New Zealand and Canada had also nominated and set up review committees to address the issues of public sector administration and changes in legislation to expand the scope of public sector auditing (Flesher and Zazeski, 2002). In most cases the review committees had suggested possible changes to legislation and statutes which would give the AO/ GAO the authority to undertake mandatory performance auditing.

2.2.6 Theme 6: Statutes and Legislation

The political processes in almost all the countries studied led to situations in which changes were made to the statutory acts relating to public sector audits or finance so as to expand the scope of traditional public sector audit. Changes to the respective acts provided statutory authority to the AG/CG to undertake performance auditing (Burrowes & Persson, 2000; Sporkin, 1998; Jacobs, 1998; Radcliffe, 1998; McCrae & Vada 1997; Martin & Walsh, 1996). For example, in New Zealand the Audit Office undertook voluntary performance auditing from 1972 and this appears to have influenced the changes to the 1969 Public Finance Act. The literature suggests that changes were made to the Public Finance Act in 1977 to provide the auditor-general with the authority to undertake performance auditing, and in 1989 the Public Finance Act was amended, providing the auditor-general with a mandate to conduct performance auditing (Jacobs, 1998; Skene, 1985). In 2001, the Public Audit Act was revised and the AG was given the statutory mandate to undertake public sector performance audits (Public Audit Act, 2001).
In the U.K., the Local Government Finance Act 1972 was reviewed in 1982, and consequently performance auditing was incorporated as part of the Local Government Finance Act (Pendlebury & Shriem, 1990). In 1983 the National Audit Act was amended to provide the auditor-general and the National Audit Office with a mandate to undertake performance auditing in the U.K. public sector (Burrowes & Persson, 2000; Pendlebury & Shriem, 1990).

In the USA, the outcomes of the Congressional 1976 Treadway Commission’s recommendations on ‘fraudulent financial reporting’ (Sweeney, 1989) resulted in changes to the legislation for controlling fraudulent practices for example, the Foreign Corrupt Practices Act 1977 (Sporkin, 1998; Gray, 1990; Root, 1983; Kim and Barone, 1981). The purpose of this Act was to prohibit US corporations from bribing foreign government officials and political parties within and outside the USA in an effort to win or retain business deals and other such illegal actions (Martin and Walsh, 1996; Peele, 1988; Root, 1983). It is probable that the mandatory implementation of the 1977 Foreign Corrupt Practices Act, in the USA strengthened the development of performance auditing, by requiring that during an ‘audit’ process the GAO focuses on administration, management and funding or financing of the political campaigns, political agencies and other government agencies which engaged in foreign financial dealings. Furthermore, according to Thompson, (1996) ‘performance audits uncover waste and fraud’ (p14), given that the purpose of the 1977 Foreign Corrupt Practices Act is to prohibit fraudulent financial practices, it is probable that performance audit would is one possible way detect fraud in the public sector.

In most countries changes to the legislation provided the AG/CG with authority to perform mandatory audits of economy, efficiency and effectiveness for most public sector entities.

2.2.7 Theme 7: Public Sector Accounting Profession

The public sector accounting profession in countries like the USA, Australia and Canada generally contributed towards the evolution of performance auditing by promulgating public
sector auditing standards and by identifying appropriate and acceptable performance auditing practices (Keen, 1999; Nobles et al., 1993; English, 1990; Glynn, 1982). In Australia the ANAO used the 1986 International Congress of Supreme Audit Institution’s (INTOSIA), promulgated and proposed definition of performance auditing (Guthrie and Parker 1999), the ANAO may have taken this approach to provide an ‘acceptable practice’ in line with international practices and description of performance auditing.

The Association of Government Accountants in the USA formed a task force to put forward a comprehensive definition of the term performance auditing and to review the scope of performance auditing practices (Nobles et al., 1993). Furthermore, Burrowes and Persson (2000), claim that the American Institute of Certified Public Accountants published a report outlining the conduct of performance audits for both private and public sector entities in 1982. This indicates that the accounting profession was influencing the development and practice of performance auditing by providing guidelines on how to undertake performance audit programs with an expectation that the guidelines would be followed.

Similar claims as above have been made by some writers for the Australian, Canadian and the U.K public sector accountants (Flesher and Zarzeski, 2002; English 1990; Glynn 1982). It can probably be implied that the public sector accounting profession in most countries was maintaining the credibility of the profession by ensuring that performance auditing was undertaken within an accepted ‘frame’ or boundary set by the profession.

2.2.8 Theme 8: Restructure Audit Offices

In countries like Australia, Canada and New Zealand the NAO/GAO was reorganised and restructured during the 1970’s and 1980’s to establish special units/sections to undertake public sector performance auditing (Dittenhofer, 2001; Jacobs, 1998; Broadbent & Guthrie, 1992). For example, ‘performance audit section’ was established within the, ANAO in 1978 (Hamburger, 1989), the NZAO in 1987 (Jacobs, 1998). Establishing ‘performance audit unit’ within the National Audit Office in the Australian and New Zealand context implies that the
AO was seeking a mandate beyond the traditional attest auditing and was intending to devote existing resources to performance audit programs.

According to Jacobs (1998), the NZAO had started reorganising its structure in 1986 to establish a ‘performance audit unit’ and in 1987 the unit was established and was known as ‘Major Projects Unit’. There are further assertions by Jacobs (1998) that the unit was staffed by accountants and non-accountants to undertake performance audit projects in the New Zealand public sector. The establishment, staffing and resourcing of the performance audit unit in 1987 indicated the scope for the development of performance auditing in the New Zealand public sector. Developments in New Zealand public sector auditing have led to a situation where performance auditing has become an official mandate of the Office of the Auditor-General (Public Audit Act, 2001).

This study indicates that in the USA, at local government level the city councils had established ‘internal audit’ sections, which were responsible for undertaking performance audits (Dittenhofer, 2001). This indicates the acceptance of the practice of performance auditing by local government authorities and the possibility of further development in the practice and the scope of performance auditing.

Reorganising the audit office to create a ‘place’ for performance auditing may indicate a wider acceptance of performance auditing as an integral part of public sector auditing function and of the auditor general’s role. Re-organisation has occurred in both Australia (Funnell, 1997; Hamburger, 1989) and in New Zealand (Jacobs, 1998) in recent times. Yet while the ‘re-organising’ process is likely to be itself a response to other influences such as the presence of a strong auditor general or the existence of economic or political problems, the very act of re-organising may itself be an influence. Re-organisation may permit other and peripheral changes—such as establishing a distinct role for performance audit—to occur. So whether these changes to performance audit were brought about by other influences, or whether they came about as a part of the change itself, the very act of ‘change’ appears to have had a role in influencing the role of performance audit in the public sector.
2.2.9 Conclusion on Sources of Influence

From this literature it can generally be concluded that the emergence and development of the practice of performance auditing was a mixture of social, political and economic processes identified in the eight general themes identified in this review. Developments were reified with input from the auditor-general/comptroller general, the national and local governments, government fiscal policies, pressure for greater government accountability from lobby groups, the review committees set by government, changes in statutes and legislations, the public sector accounting profession, and the restructure of the audit office.

There are also a couple of other points that speak of influence or of the effect of that influence. It is noted that the timing of some of the similar events -such as restructuring or legislation or social lobbies – was nearly simultaneous in many of the countries studied. While there is too little evidence to be confident of the cause, such a ‘coincidence’ may speak of the power of international networks or common economic events. It also appeared to be the case that performance auditing was generally promoted by the OAG/GAO—a strong influence (as perceived by the literature) – and subsequently accepted by the government and the various stakeholders, including the public, as a means of addressing public sector resource management or accountability concerns. Finally, and ultimately, the emergence of performance auditing as a key element in public sector audit implies that the traditional audit scope has expanded from compliance and regularity audits to audit for performance which focuses on economy, efficiency and effectiveness.

3.0 OBJECTIVES OF PERFORMANCE AUDITING

The concepts of economy, efficiency and effectiveness frequently emerged as the objectives of public sector performance auditing (Radcliffe, 1998; Funnell, 1997; Leeuw, 1996; English, 1990; Guthrie, 1990; Parker, 1990; McRoberts & Hudson, 1985). The following discussion interprets how the terms economy, efficiency and effectiveness are used in the public sector performance auditing literature.
3.1 Economy

Several writers on public sector performance auditing hold the view that economy is associated with acquiring and minimising the cost of input used to achieve the objectives of the public sector entity without compromising the quality of the output (Gendron, Cooper & Townley, 2001; McCrae & Vada, 1997; O'Leary, 1996; Jones & Pendlebury, 1992; Glynn, 1991, 1989; Yamamoto & Watanabe, 1989). This explanation focuses on the costs of acquiring the inputs to achieve the objectives of the public sector entity. Input in the public sector context would be the volume and the price or cost of resources consumed to achieve the objectives of an entity (Jones & Pendlebury, 1992).

There are assertions that economy is linked with efficiency in the practice of public sector performance auditing (Dittenhofer, 2001; Persaud & McNamara, 1993, 1994; Grimwood & Tomkins, 1986; McRoberts & Hudson, 1985; Prasser, 1985). The linkage is implicit in the processes of acquiring the input with a focus on minimising costs, and the usage of the input in achieving the objective of the entity. The primary focus for both economy and efficiency is the input. Some writers also hold the view that both economy and efficiency focus on acquiring inputs and are concerned with protecting and using public sector resources (Dittenhofer, 2001; Persaud & McNamara, 1993, 1994).

Dittenhofer (2001) and Persaud and McNamara (1993, 1994) explain that performance auditing includes both economy and efficiency but they do not distinguish between the two. Instead, these authorities claim that economy and efficiency are together determined by establishing i) whether the entity is acquiring, protecting and using its resources economically and efficiently; ii) the causes of inefficiencies or uneconomical practices; and iii) whether the entity has complied with laws and regulations on the matters of economy and efficiency.

There are indications in the literature on public sector performance auditing that economy may be associated with inputs but the interpretations vary. The purpose and meaning of economy in the public sector context does not appear to be fully resolved.
3.2 Efficiency

Most writers on the public sector performance auditing literature do not rigidly distinguish between economy and efficiency. Instead they advocate the view that efficiency includes economy (Grendon, Cooper & Townley, 2001; McCrae & Vada, 1997; O'Leary, 1996; Jones & Pendlebury, 1992; Glynn, 1991, 1989; Yamamoto & Watanabe, 1989; Prasser, 1985). Here the suggestion is that efficiency is concerned with the relationship between inputs and outputs, therefore the major focus is on managing the resources in such a way that the output is maximised for any given resource input (McCrae & Vada, 1997). Viewing efficiency as an input-output relationship suggests that efficiency is results oriented and that the result (output) may depend on the volume of input consumed for a given output.

Yamamoto and Watanabe (1989) claim that efficiency is seen as managing the resources within an entity where the management has control over the resources. This indicates that there is no undue external or political pressure on the management to use and manage the resources of an entity in a particular way. In such instances the management may be seen to be responsible in achieving the objectives of the entity in an efficient and effective way. Management therefore, is accountable to the public via the government, on the use and management of public sector resources.

In the Australian context, most writers on public sector performance auditing have used Cutt's (1977) description of efficiency to provide an insight into the perceived purpose of performance auditing (McCrae & Vada, 1997; Pugh, 1987; Parker & Guthrie, 1991; Glynn, 1987, 1989, 1991; Dillon, 1985). Cutt (1977, cited by Dillon, 1985), describes efficiency at three levels.

Level 1 Efficiency:

The lowest level of accountability may be seen as fixed or fiduciary accountability, which is defined exclusively in terms of actual expenditure of funds and procedures by which that expenditure is accounted for.
Level 2  Efficiency:

…. may be defined in terms of the ratio of some physical measure of output from the activity or program to the costs of that activity or program.

Level 3  Efficiency or effectiveness accountability:

Effectiveness may be broadly defined to refer to the degree of success an organisation enjoys in doing whatever it is trying to do…. as distinct from efficiency II, efficiency III requires that the output measures reflect the attainment of the objectives of the activity or program in question. (Dillon 1985, p.250)

According to some authors (McCrae & Vada, 1997; Guthrie & Parker, 1990; Glynn, 1991, 1989, 1987; Pugh, 1987), efficiency at levels 1 and 2 can be evaluated by performance auditor. Level 1 efficiency focuses on the actual amount of expenditure incurred to acquire the inputs, and the performance auditor may evaluate the procedures used to account for these expenditures. Level 2 efficiency, as described by Cutt (1977), focuses on the input-output relationship with the intention to maximise output. Efficiency at levels 1 and 2 focus on the inputs and the outputs and do not appear to empower the auditor-general to question government policies. Therefore, efficiency at these levels is accepted as a purpose of performance auditing in the Australian context (McCrae & Vada, 1997; Guthrie & Parker, 1990; Pugh, 1987).

Some writers hold the view that efficiency at level 3, as described by Cutt (1977), need not be considered as a purpose of performance auditing in the Australian public sector (McCrae & Vada, 1997; Guthrie & Parker, 1990; Dillon, 1985; Pugh, 1987). The writers assert that efficiency at level 3 raises questions about the government's policy implementations, for example the 1979 Australian Audit Act does not empower the Australian Auditor-General to question the efficiency of government policies. In the performance auditing literature the meaning of efficiency, like the meaning of economy, is not definitive. However, efficiency as used in the performance auditing literature generally focuses on the input-output relationship.
3.3 Effectiveness

The public sector performance auditing literature suggests that effectiveness is concerned with the consideration of the success of, or the extent to which outputs achieve the intended or desired goals of a public sector entity (Funnell & Cooper, 1998; McCrae & Vada, 1997; O'Leary, 1996; Glynn 1991, 1989; Yamamoto & Watanabe, 1989; McRoberts & Hudson, 1985). Therefore effectiveness can be considered as focussing on the relationship between the outputs and the objectives of a public sector entity. If so, then in regards to effectiveness, the performance auditor may focus on the objective/s of an entity and evaluate how the outputs have contributed towards the achievement of the entity's objective/s.

McRoberts and Hudson (1985) claim that in public sector performance auditing, the effectiveness of a program can be assessed by evaluating and reviewing four basic issues regarding the programme. These issues include (i) the degree to which the programme continues to make sense and addresses a continuing need, (ii) the degree to which the programme's objectives are being met, (iii) the assessment of the programme's intended or unintended impacts and effects, and (iv) the relative cost-effectiveness of the present method of delivering the programme. This explanation suggests that effectiveness in performance auditing may focus beyond the inputs, outputs and aims of a programme; it may also include a political assessment on the need or desirability of continuing a programme in the public sector. As with economy and efficiency, there are multiple meanings associated with effectiveness, some of which are linked to the political as well as the objective assessment of analysis.

4.0 CONCLUSION

Over time, performance auditing appears to have become an accepted part of the public sector auditing process and practices in most Anglo-American countries. This study indicates that the offices of the auditor-generals or their equivalents in the U.S. largely undertake performance auditing in various forms but that, as a result of events and influences over time, public sector
auditing has extended beyond the traditional oversight role. The scope of public sector audits has expanded beyond and above checking for regulatory and procedural compliance, to enhancing accountability in the management of public sector resources. It can be generally concluded that the practice and the objectives of performance auditing are still developing.

The practices and the processes of public sector performance auditing have been influenced from several sources throughout the countries studied. For example, the auditor-general or the accounting general inspired the practice and influenced the emergence and development of performance auditing by undertaking performance auditing as a part of regular public sector audits. These processes and practices were further influenced by the audit office and the general accounting office, with the formulation of appropriate techniques for undertaking performance auditing. In most cases the practice was influenced by public demand and public sector budgetary constraints. Other common factors were the existence of public sector economic reforms, and the influence of central and local governments and the public sector accounting profession.

The various sources of change continue to emerge. For example, the public sector auditing profession in most countries studied is still in the process of developing acceptable practices and appropriately defining what constitutes performance auditing. It is possible that the various socio-economic and political factors within different countries will continue to impact upon the practice of performance auditing. Future development and practices may continue to be influenced by the socio-economic and political environment within the public sector.
References


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