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The Role of Resource Accounting in the UK Government's Quest for 'Better Accounting'

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Abstract—The UK government intends to introduce resource accounting to central government departments under the banner of 'Better Accounting for the Taxpayer's Money'. Under the proposed system of resource accounting, as outlined in a White Paper, an annual depreciation charge is to be incorporated in the cost statement and fixed assets included in a balance sheet at their depreciated replacement cost. This paper locates the proposed changes in accounting method for government departments in the general spread of accruals accounting through the public sector, and explores the relevance of accruals as a basis for measuring the results of activity undertaken by government departments. It goes on to examine the impact of the specific accounting change envisaged in the White Paper from both theoretical and practical aspects. The benefits envisaged in the White Paper are considered along with the extent to which they are likely to be realised, together with any consequences not explicitly foreseen. The conclusion is that, while the revised accounting techniques may be different, the proposition implicit in the White Paper's title that they are better is not proven by the evidence presented.

1. Introduction

In his November 1993 Budget, the Chancellor of the Exchequer announced the proposed introduction of resource accounting[1] to UK central government departments. This was followed by a Consultation Paper in July 1994 (HMSO, 1994), which specified that resource accounting would be implemented in the majority of government departments by 1 April 1997 and in all departments by April 1998. Subsequently, a White Paper was published in July 1995, which states that 'the first published accounts will be in respect of 1999–2000' (HMSO, 1995: 46).

One of the consequences of the move to resource accounting will be to use accruals, rather than cash, to measure and report the costs of activities, and this will involve the introduction of a depreciation charge into the operating cost statement and the inclusion of depreciated fixed assets in the balance sheet. This paper reviews the form of, and drivers for, the introduction of accruals accounting, with a particular emphasis on depreciation accounting and the possible consequences of its use.

Depreciation accounting is the process by which fixed assets are assigned values that are allocated to the accounting periods during which the assets provide service. The amount allocated to each period is recognised as part of the cost of the activity carried out, and the amount not yet allocated at a particular date is included in a valuation statement. The concept of depreciation has a long history, being known in Roman times (Edwards, 1989: 84), and 'The practice of charging depreciation [by businesses in the UK] became more common after 1800...' (Edwards, 1989: 84). In the UK private sector, the move towards its universal use was steady, and it is now required by both legislation and standard accounting practice.

The public sector has a less established history of depreciation accounting, although a debate about its relevance was certainly taking place by the start of this century (Coombs and Edwards, 1992; Edwards, 1992), and its adoption has been incremental, with separate parts adapting it to their own particular circumstances. The lack of uniformity, covering both whether to use depreciation accounting and, if so, the basis of the underlying calculations, is not surprising: the public sector has a considerable diversity of activities and aims. Thus, the term 'public sector' encompasses a large number of diverse organisations, each with

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[1] Definition: 'Resource accounting comprises a set of accruals accounting techniques for reporting on the expenditure of central government and a framework for analysing expenditure by departmental aims and objectives, relating these to outputs where possible' (HMSO, 1995: 49).

its own accounting procedures developed over the years.

By the late 1970s, a range of accounting procedures for depreciation had evolved throughout the public sector. In some cases, where a predominantly market ethos existed, a system of depreciation accounting as found in the private sector was applied (Henley et al., 1983: 23), especially for nationalised industries where the requirement to use 'commercial' accounting was laid down by statute (for a summary, see Henley et al., 1983: 142–143). Alternatively, organisations either had some element analogous to depreciation, for example local authorities' practice of including a portion of loan principal in the annual revenue account (Jones and Pendlebury, 1992: 167), or else they ignored depreciation altogether (Likierman and Taylor, 1990: 36). Perrin (1984) noted that nationalised industries and public corporations broadly followed the same conventions as found in commercial accounting, while central government generally did not capitalise or depreciate fixed assets (Perrin, 1984: 64). However, whatever the starting position of the individual parts, the trend has been for depreciation accounting to be advocated throughout the public sector, sometimes driven by external pressures, such as seeking a flotation of shares, and at other times through internal consideration, as was the case with local authorities (Jones, 1993: 105–112).

Different routes have led to the adoption of depreciation accounting by the separate parts of the public sector. Those parts that traded in a commercial environment, such as coal or steel, used depreciation accounting as an accepted principal of how such organisations should account for their activities, and retained it when taken from the private sector into public ownership, although the precise wording of the accounting requirements varied from industry to industry (Henley et al., 1983: 142–143). In other cases, its adoption was an imperative arising from policy decisions. For example, the privatisation of British Telecom required the creation of a commercially-based entity to encompass activities previously conducted as part of a government department. To be ready for transfer to the private sector by the sale of its shares, the accounts had to use the techniques appropriate to that sector. In the case of the National Health Service, rather than being driven by the requirements of privatisation, a quasi-market for health care was established using the full cost, including depreciation, of the procedures traded (HMSO, 1989: 12). NHS Trusts were established to mimic private sector providers and pursue their objectives as separate entities; this imitation includes the use of depreciation accounting. Similarly, Executive Agencies established as trading funds produce accounts that conform to the requirements of the Companies Acts (Pendlebury et al., 1994: 33).

Another route to the use of depreciation accounting in the public sector has recently arisen. In 1994, the government produced a Consultation Paper (HMSO, 1994) as a first step towards the use of resource accounting in government departments. It recognises that 'One of the most important single changes in the proposed system is the improved treatment of capital' (p. 4). This will involve the switch from accounting for flows on the cash basis to the preparation of cost statements, including depreciation, and a balance sheet containing fixed assets at their written-down value. The proposers of the change indicate that accounting will not be a 'mere technical discipline' (Jones, 1994: 109) but 'a technology that actively (and politically) constitutes the world rather than passively (and neutrally) regulates and/or reports it' (Morgan and Willmott, 1993: 4). The Consultation Paper intends that the use of resource accounting will be more than a measurement exercise, as it is foreseen that it will 'require a substantial change in ...[department's]... working methods and cultures' (HMSO, 1994: iii). Depreciation accounting is being used as a policy in its own right, rather than just as an adjunct to some other objective.

The White Paper describes the change it proposes as 'a milestone in modernising the state' that will make 'better management of public spending' possible (HMSO, 1995: i). However, as Mayston (1993: 76) has noted: 'Simply transplanting the private sector accounting model to the public sector ... may then impose substantial costs but uncertain benefits.' Furthermore, accounting change cannot be viewed in isolation, even if it is the subject of its own White Paper. Lawrence et al. (1994: 70) show 'how accounting technologies and practices are so "fabricated" as integral parts of broader social and institutional changes', while accountants 'make the picture ...[and]... people think and act on the basis of that picture!' (Hines, 1988: 254).

Against this background, this paper's purpose is to outline the operation of accruals accounting as envisaged by the White Paper and its impact on accounting reports. It investigates whether the accounting theories developed in respect of depreciation accounting provide a justification for its adoption, or whether it is simply the byproduct of external forces consistent with the implementation of government policies. In the latter case, the relationship between the proposed accounting system and the extent to which accruals accounting can assist, or hinder, the achievement of policy goals will be examined. The paper concludes that, given the incorrigible nature of depreciation measures, the questionable relevance and accuracy of valuation bases, and the inability of managers to control costs based on accounting allocations, the use of accruals accounting may not warrant the description 'better', used by the government in its publications.

2. Measuring and reporting government department results

The Treasury has recently published a draft set of accounting policies (H M Treasury, 1995). In summary, these use the framework of Generally Accepted Accounting Practice as operated in the UK, but adapt it where necessary to accommodate the circumstances of government departments. In consequence, the accounting concepts and conventions to be applied include the usual ones of going concern, accruals, consistency, prudence and materiality, together with one described as a 'central government specific accounting convention' (H M Treasury, 1995: 4) called 'notional cost items', which are included to show the full cost of service provision even though there has not been, and will not be, a related cash transaction.

The usual valuation basis for tangible fixed assets is to be net current replacement cost, with property included in the balance sheet at its open market value for existing use. There are some categories, such as heritage and military assets, which, it is recognised, will require special treatment in terms of recognition and valuation, but this has yet to be formulated. The absence of a current policy for these assets and the stated intention to issue a code of practice suggests that the decision to implement accruals accounting was taken prior to full consideration of the consequences, and ignores the chance that it may not be possible to generate a meaningful approach in this area.

Depreciation is to be provided for all fixed assets with a finite useful life, including intangible fixed assets, which are to be capitalised at their fair value on purchase or acquisition, and amortised. In addition to depreciation and amortisation, the government 'intends to develop mechanisms whereby departments are charged for the cost of their capital employed' (HMSO, 1995: 10). No further information is provided on how this charge is to be calculated, but the intention to operate it is clear from the specimen accounts provided in the White Paper (HMSO, 1995: 35). In this respect, the White Paper is less developed than its preceding Consultation Paper, which suggested alternative ways of reflecting the opportunity cost of capital by departments (HMSO, 1994: 9).

The White Paper lists five principal financial reports, which together will comprise the Annual Departmental Resource Accounts to be prepared by government departments ranging from Agriculture to the Welsh Office (HMSO, 1994: 48–52). The reports are given in Table 1 together with a brief description of their purpose, a link to their private sector equivalent and brief comments.

It is interesting to note that the original Consultation Paper places accruals accounting at the heart of resource accounting, and observes that it is already established in many parts of the public sector, such as nationalised industries and the NHS (HMSO, 1994: iii). However, the form of the accounting reports given in Table 1 reveals significant differences between the system now proposed and that already operated elsewhere in the public sector. More specifically, the use of the operating cost statement, rather than an income and expenditure account, has the effect that the operating resources that come under the organisation's control are not compared with those expended. In consequence, the amount by which the resource base has grown, or been eroded, as a result of operations is not revealed. This is even at variance with the accounting policies put forward to implement resource accounting, which state: 'The matching or accruals concept requires that "income and expenditure are accrued ...[and] matched with one another so far as their relationship can be established or justifiably assumed ..." ' (H M Treasury, 1995: 5).

3. Depreciation accounting

Accruals accounting involves two main areas of change relative to cash-based accounts: adjusting revenue income and expenditure cash flows for changes in working capital balances, and operating a system of depreciation accounting. Cash flows and working capital balances are relatively straightforward to establish, as they are based on transaction values, and so the second of these is the more radical—it will result in the accounts including the depreciated value of the stock of capital assets and a charge for their use during the year. Further complexity arises because the valuation basis is decoupled from the related transactions, as valuation is to be at current cost, and depreciation is a 'non-cash expense'.

Private sector techniques do not have to be slavishly adopted by the public sector, and it is possible for an entity to report in terms of income and expenditure only items of a revenue nature, as did the system that existed in the NHS for many years (Mellett, 1992). This view was recognised in 1990 by the chief accountancy adviser to the Treasury and head of the Government Accountancy Service who wrote:

> 'The Next Steps initiative...will inevitably bring into government reporting some of the features of private sector accounting practices. However, it is important to resist the temptation to assume that this will lead to public sector accounting and reporting assuming every characteristic of the private sector. There are fundamental differences be-

Table 1
Principal financial reports

Accounting report (HMSO, 1995: 25)	*Summary of resource outturn*	*Operating cost statement*	*Balance sheet*	*Cash flow statement*	*Statement of resources*
Purpose	Compares outturn with estimate by vote to provide Parliamentary control	Shows administrative and programme costs	Reports assets, liabilities, reserves and general fund	Analyses net cash outflows by operating and investing activities	Analyses results by aim and objective
Private sector equivalent	Summary master budget variance analysis	Income and expenditure account; profit and loss account	Balance sheet	Cash flow statement	Segmental analysis
Comment	Specialised report with no published private sector counterpart	Mixes elements of income and expenditure to arrive at the 'net resource outturn'	Standard Companies Act format amended for public sector	Starts with the total cost figure using accruals and adjusts it to the cash basis	Specifies the aims and objectives of the department and links them with their associated expenditure

tween the two and, while any examples of valuable concepts or best practice from the private sector will be adopted where they yield an advantage, these differences remain' (Hardcastle, 1990: 28).

Seeking an answer to the question of why depreciation accounting is deemed to be a valuable concept worthy of transfer to government departments would be greatly assisted if it could be put in the context of an overarching conceptual framework. However, as Jones (1992: 260) states: 'What remains clear, for the private sector and the public sector, is that we have no generally-accepted theory or evidence about the purpose of the publication of financial statements.' Without agreement on the purpose, it is not possible to proceed to the stage of deciding what valuation basis to adopt. Alternatively, reasons can be sought for the spread of depreciation accounting to the public sector in a more piecemeal manner by examining both theoretical and practical aspects, and these are now considered below.

3.1. Theoretical Aspects of Depreciation Accounting

From the theoretical viewpoint, the concept of depreciation as a cost is well established. For example, Leake (1912: 33) stated: 'It cannot by any means be denied that depreciation...is as much a part of economic cost as is, for instance, the sum paid by the manufacturer for wages.' The conceptual case in favour is developed in the early work of Hicks (1946), who defined a person's income as:

> 'the maximum value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning.' (p. 172), and, 'If a person's receipts are derived from the exploitation of a wasting asset...we should say that his receipts are in excess of his income, the difference between them being reckoned as an allowance for depreciation' (p. 187).

Hicks therefore views depreciation as a necessary charge to arrive at a measure of income, and by 1955 it was contended that 'The struggle to get depreciation recognised as a cost appears to have been won' (Goldberg, 1962: 238).

However, even if over the years depreciation has been accepted as an element of cost, problems of operationalisation have been identified and remain. When discussing the controversial nature of depreciation, Bonbright (1937: 189) refers to 'the inherent difficulties of *measurement*—difficulties to which no experts have yet found satisfactory solutions'. The consequence of these difficulties is spelt out by Baxter (1981: 2): 'Depreciation measures can have a great effect on a company's results, yet they are chosen from a wide range of possible figures, by rules that are vague and little understood.' Rather than address the measurement problems, an alternative view is represented by Thomas. He classifies the assets that give rise to depreciation as 'multi-year goods' (1969: 3) and argues elsewhere that, since allocating the cost of such assets to separate accounting periods is an incorrigible, or arbitrary, procedure, the resulting figures are essentially meaningless and irrelevant:

> 'They [allocations] have been rejected as being unrelated to the purported topic of financial statements: a firm's economic state and activities. They have no more significance for these economic matters than do the calculations of astrologers.' (Thomas, 1974: 63)

Despite the existence of convincing arguments against depreciation accounting and its associated problems, the fact is that it is deemed appropriate for use by government departments, and so explanations must be sought for this empirical observation, to account for the adoption of what, on a priori grounds, is at best a necessary, but flawed, method. Hence, in line with the positive approach of Watts and Zimmerman (1986), the adoption of depreciation accounting in the public sector is an observed phenomenon to be explained by the fact that its use is perceived to confer a benefit on those causing it to be implemented. The positive approach to theorising, which requires the theory to 'explain and predict accounting practice' (Watts and Zimmerman, 1986: 2), examines the motives underpinning the introduction of depreciation accounting by reference to its impact on the various contractors. Where central government provides resources and specifies the accounting policies to be used, it can be viewed as the principal, while the departments are the agents contracted to implement the government's policies.

The use of depreciation accounting, as envisaged in the White Paper, can be considered at two levels: there are general features of the technique that apply wherever it is used, and there are also properties that are peculiar to its use by government departments.

At the general level, in the context of the firm as a whole, Zimmerman (1979) develops examples that 'suggest that cost allocations might be useful devices for controlling and motivating managers' (p. 504). In a theoretical example, he shows how an allocation of overheads acts as a lump sum tax to reduce discretionary spending on perquisites in a principal-agent scenario. The broader question of how to identify principals and agents in the public sector presents specific problems (Mayston, 1993: 76), but the existence of an accountability relationship gives evidence of such a relationship. Using this approach in the context of the White

Paper, central government, or more precisely the Treasury, is revealed as the ultimate principal and the various spending departments as the associated agents.

Making each agent include depreciation in its costs has an upward effect at a time of rising asset values, which may impact on its ability to extract additional resources from the government; the extent to which additional capital charges are not approved must be met by a squeeze on revenue expenditure. Reported anecdotal evidence suggests that spending on perquisites for managers does take place, but, by creating downward pressure on all costs, it is possible that a minimising, or reducing, effect takes place. Departments may request more resources because costs are rising, but the extent to which this is met will be conditioned by whether the government wants to be seen to be 'squeezing' the resources consumed by the public sector. On the other hand, if the government simply provides resources equal to the capital charges, any hope of encouraging managers to optimise their use of capital assets is removed.

Pallot (1992: 52) contrasts the property dimension of assets with the resources dimension, and suggests that concentration on the former in the public sector would provide a necessary framework of accountability. The private sector relies on the latter, as its accounting procedures have been based more on a decision-usefulness approach which, even if more apparent than real, is acknowledged as an objective of the sector's financial statements (Accounting Standards Board, 1991: para. 12). The introduction of full accruals accounting for government departments, together with a balance sheet that includes a value for fixed assets, changes the perception of those assets. They now appear as resources to be dealt with in the same way a commercial firm uses its fixed assets. The rights of property appear to have shifted from the community to a specific entity which will deal with them in its own, or more realistically its managers', interests. While Berle and Means (1932) analysed the divorce between the ownership and control of assets in the context of private sector undertakings, Jones (1993: 124) differentiates the position of government since 'government is "ownership" *compulsorily* divorced from "control".' In these circumstances, depreciation accounting is giving visibility to the fact that the ownership of assets held by the government, and ostensibly 'owned' by the public, has been divorced from their control, which is exercised by the executives and managers of the entities in whose balance sheet they appear.

Mautz (1988) examines public sector fixed assets from the viewpoint of the cash flows that result from their ownership. He argues that, although something, such as a national monument, may be regarded as a 'treasure' of great value, to the entity charged with its upkeep it in fact has a negative value. This is because ownership of the asset brings with it nothing but expense, and the present value of an indefinite negative income stream must itself be negative. The current proposals do not go as far as identifying government departments as revenue generating units, and so the nature of their fixed assets has not changed. To this extent, the White Paper reforms are not the same as in other parts of the public sector, such as the NHS, where assets are held for their revenue-producing potential and so are expected to deliver positive future cash flows.

Ijiri (1978: 145) addresses an aspect of reliability with the question of 'how well the user understands the accounting process by which the measure is made'. Evidence suggests that there is general backing for the concept of depreciation in that a survey of Health Authority Finance Officers concluded that 'there is clear support for a system of depreciation accounting' (Lapsley, 1986: 293), and, in a study in 1993 of the financial awareness of health service managers (Marriott and Mellett, 1995), 78% of respondents answered 'yes' to the question: 'Do you agree that it is a good idea to charge depreciation on capital assets?'. However, only 41% identified the correct definition of a fixed asset, and only 34% could identify the correct written-down value of a fixed asset after one year's depreciation and revaluation. Clearly, these levels of lack of awareness bring into question the reliability of the depreciation accounting system under the criterion of how well its users understand its output, and there is no reason to suppose that greater levels of awareness exist in government departments than were found elsewhere.

Anthony (1989: 95) espoused the view that 'non-business accounting should be the same as business accounting in most respects', with one of the main areas of difference relating to 'contributed capital'. The public sector, unlike the private, has in its possession assets that have accrued to it by way of gift; the asset itself may be given directly, or the funds to enable its purchase may be provided by benefactors. These assets raise accounting problems once it has been decided that full accruals accounting should be used. The first problem is whether they should be included in the accounts at all, and the second, which only arises if they are, is how to account for them. The accounting procedure specified for donated assets is that they 'should be capitalised and include [sic] in the balance sheet at a fair value' (H M Treasury, 1995: 16). Having confirmed that donated assets should be included, there is no further indication of how they should be accounted for, although it is implicit that some form of donated assets reserve account would be needed to maintain the balance sheet's integrity.

The question of depreciation of donated assets is not addressed, but is of significant importance. Arguments in favour of treating depreciation on donated assets as an expense are that this approach facilitates cost comparisons, gives a full measure of service efforts and provides the basis for calculating cost reimbursement. However, Anthony (1989: 64) argues that 'depreciation on contributed capital assets should not affect income' because these assets did not cost the organisation anything. Evidence from elsewhere in the public sector indicates that a single solution has not been adopted; NHS Trusts charge depreciation on donated assets in the income and expenditure account but offset this with an equal transfer from the donated asset reserve, while universities include a depreciation charge, but offset it in the statement of movements on reserve. The existence of such alternatives indicates another area where incorrigible approaches exist, which will have to be resolved by dictat rather than appeal to irrefutable logic.

3.2. Policy Aspects of Depreciation Accounting

The theoretical aspects of depreciation accounting outlined above do not provide an unequivocal conclusion as to whether it is an appropriate policy for government departments where, irrespective of the arguments for and against its use, its implementation is underway. The simple fact of its adoption cannot be used as proof of its relevance; as Burchell et al. (1980: 10) describe the position: 'There is little in the development of accounting as practised that would lead one to describe its essential rationale in terms of the furtherance of economic efficiency or rationality.' However, as noted by Hopwood (1984: 178), 'those with the power to determine what enters into the organisational accounts have the means to articulate and diffuse their values and concerns'. Hence, it is by examining the government's values and concerns that the impetus for its adoption may be found.

From the normative standpoint, depreciation is an imprecise measure of capital asset consumption, but its use can be justified if it conforms with the interests of those causing its application. This provides an explanation, other than the simple dogma of 'private good, public bad' (Parston, 1994) and the contention that 'only by taking a more business-like approach can the government continue to bear down on the cost to the taxpayer' (HMSO, 1994: iii), in that accruals accounting furthers the policy objectives of the government.

A number of benefits consistent with government policy are listed in the Consultation Paper (HMSO, 1994: vii), and are seen as flowing from the adoption of depreciation accounting. These include providing 'more accurate and relevant management information', 'better informed decisions on the balance between current and capital expenditure' and 'promoting the better use of resources', with the possibility of reducing the public sector's call on funds. These represent high expectations from an accounting system which, because of arbitrary allocations and valuations, is unlikely to measure with any precision what it purports to, namely the resources consumed as a result of owning fixed assets with finite lives during an accounting period, and the value of those assets at the end of the period. It is a proxy of consumption value, and those setting the accounting policies expect their objectives to be furthered, as the accounting process has produced 'an answer sufficient for action' (Boulding, 1962: 53) and decision-makers respond to the resulting accounting numbers as if they are accurate.

Moving from cash to accruals accounting is seen in the Consultation Paper as being 'based on principles first laid down in the Financial Management Initiative [FMI] in 1982' (HMSO, 1994: iii). Gray and Jenkins (1993: 59) locate the FMI in the context of seeking 'to promote *accountable management*' and note that, when considering efficiency and effectiveness, there is a 'particular initial emphasis on a range of indicators of both operational achievements and their costs'. The introduction of resource accounting redefines these costs to include capital charges and, by identifying the resources consumed by each departmental aim, facilitates a comparison with alternative ways of achieving the aims, such as using outside contractors. This analysis sees the use of accruals accounting as being consistent with the government's policy of competitive tendering (HMSO, 1994: 7). However, when carrying out comparisons with the private sector or preparing competitive in-house bids, central government departments will have to use full cost based on current values, while any private sector competition can take a longer-term view and use predatory pricing in the short term while reporting the outcome in historical cost, which can be expected to be lower than current cost.

The use of accruals accounting gives economic visibility to features that were previously ignored, and adds a further aspect to those for which managers are accountable. Once stocks of capital assets and their related costs have been identified as matters to be valued and reported, the question arises of how managers are intended to respond. It is clearly the government's intention to exert downward pressure on costs, but it is in the nature of capital charges that they come in large, fixed, indivisible amounts. This restricts the extent of potential managerial control, especially in the short term. The government envisages 'changing the focus of Parliamentary control to voting resources... with the cash implications voted only as a single departmental total' (HMSO, 1995: 14). This emphasises resource consumption as the headline figure, with a consequent possible blurring between its revenue and capital constituents, both of which tend to increase over time. Revenue costs increase because of price rises, but can be mitigated by paying for increases with efficiency gains. Capital costs, even if no extra assets are acquired, will rise as they are adjusted to reflect current valuations, but efficiency gains are not always possible. In the medium to long term, asset restructuring or relocation may be feasible, but this imposes additional transitional costs. Alternatively, costs will fall if assets are revalued downwards, but this does not reflect managerial efficiency; indeed it could result from poor acquisition decisions in the past.

The inclusion of capital assets in the accounts should make managers more aware of their stock of capital assets and encourage them to use them as efficiently as possible (HMSO, 1994: 2). In the examples provided in the White Paper, capital charges are notional and do not result in cash flows, and managers may not feel it necessary to respond to the signals these charges deliver as, in cash terms, there are no consequences. However, Parliament will be providing a fixed amount of resources, and it is possible that growth in the capital element may have to be offset by restricting revenue spending. In the NHS, where capital charges have entered into costs for a number of years, there are now calls to recognise and compensate for their distorting impact, as 'the technical revaluations meant an authority could be paying more for services that have not actually changed' (Day, 1995), and managers are taking decisions in response to them (Heald and Scott, 1996).

4. Unanticipated and unwelcome outcomes

It can be argued that the drive to account for government department results using private sector practices is potentially misguided if the private sector techniques are themselves deficient. A decade ago, Hopper (1986: 11) made a plea for 'a more careful consideration of accounting within the public sector. Otherwise, methods of dubious validity may be imported with unsought consequences upon the public sector's efficiency'. The subsequent decade has witnessed considerable debate about the reliability of accounting in the private sector, and recognition has been given to the 'expectations gap', which exposes the limitations of corporate accounting reports and their failure to convey the reality behind the numbers. These concerns are evidenced in both general commentary (Griffiths, 1986; Smith, 1992) and in specific cases, such as the collapse of Polly Peck (Mitchell and Sikka, 1993: 37).

To treat central government departments as if they are simply private sector entities with a duty to produce accounts that show a 'true and fair view' or 'present fairly' the results, is likely to bring with it all the private sector problems associated with latitude in selecting accounting policies. In the NHS, this has been avoided by being extremely prescriptive. For example, asset lives and revaluation indices are specified centrally. On the other hand, imposing restrictions such as these removes the accounts' ability to reflect local differences. Managers might be instructed to increase the value of buildings by 5%, as this is the national average, but in specific instances this is likely to over or under-state the true position. The choice lies between the possibility of, in all cases, being about right or being precisely wrong, and highlights the contrast between decentralisation of responsibility for activity and the centralisation of the rules for monitoring the activity, with a resulting restriction of local freedom.

If it is accepted that private sector procedures are not perfect, the next question is whether they are superior to current public sector practice. The judges of this are those proposing the introduction, and they are obviously convinced of the expected benefits. While the introduction of revised accounting practices is directly government's responsibility, Mayston (1993: 88) identifies other potential gainers from changes made in the public sector as including 'management consultants, accountants and potential private sector suppliers of public services', and these are likely to constitute a pressure group for reform. This premise is reinforced by examining the list of respondents to the discussion document given in the White Paper, which notes that 'All respondents supported the proposal to implement resource accounting' (HMSO, 1995: 4). There were 35 respondents, including the ASB, five professional accounting and allied bodies, seven accounting firms and the Management Consultancies Association. The financial interests of such groups are likely to benefit from the adoption of accruals accounting: new systems must be established; software and hardware developed and supplied; asset registers created; and training provided. The need felt by these groups to carry their techniques into the public sector may be consistent with the proposition that private sector accounting is itself facing problems and:

> 'that the homeland is on fire, or at least becoming significantly less fertile territory to occupy than in the past, with a consequent need to seek out new lands to take over and absorb. Nomadic behaviour and the search for new territory to occupy may then be the result of short-sighted predatory policies in the homelands rather than of a superior culture' (Mayston, 1993: 89).

The White Paper (HMSO, 1995: 21) states that training will be vital to the reforms' success, and part of this will relate to the underlying concepts as well as the technical aspects. To some degree, the extent to which the concepts are understood is reflected in the technical ability to put them into operation. An indication of the fact that there are deficiencies is contained in the specimen accounting statements in the White Paper (HMSO, 1995: 25–40). The balance sheet relates to the end of the year, but the opening balance sheet is not provided. It is possible, using data from the accompanying notes, to construct the position at the start of the year, and this reveals that whoever prepared and authorised the White Paper did not understand the relationship between working capital movements, costs and cash. The related note indicates that stocks and debtors have increased while creditors have decreased; in fact the opposite is true in all cases. The note also reports an increase during the year in a long-term loan, but there is not any such item in the closing balance sheet. Such errors at this stage imply a worrying lack of expertise on the part of those advocating this method of accounting.

Notwithstanding any theoretical objections, it appears that an accounting system based on accruals will be instituted for government departments and, in these circumstances, attention can be turned to the way the system operates. There is no reason, in the accounting context, why it is not possible to prepare an income and expenditure account rather than an operating cost statement. Elsewhere in the public sector, where accruals accounting exists, the income and expenditure account has been used to match the revenue resources received by the entity with how they have been used, leaving a surplus or deficit. In some cases, the result has been used to assess performance by employing it to calculate the return on capital employed and comparing this with a specified target. Using an income and expenditure account would establish consistency with other parts of the public sector and would also enable a cash flow statement in a more standard format to be prepared, starting with the adjusted income and expenditure account balance.

One consequence of adopting accruals accounting for government departments is that it will provide an indication of the extent of capital maintenance. Even in the absence of an income and expenditure account it is possible to ascertain whether the value of capital has been maintained from the balance sheet. Limited companies are only allowed to make distributions out of profits (HMSO, 1985: Part VIII) or, to put it another way, they must maintain the value of their money capital before any return can be paid to ownership, and the sector's accounting techniques have developed to enable compliance with this rule. While private companies have to maintain the money value of their capital, the valuation rules given in the White Paper maintain an approximation to its replacement value, which is a more stringent condition in times of rising prices. It also presupposes that capital maintenance is necessarily a government objective, or even a feature it would wish to disclose and be monitored by.

Applying the notion of capital maintenance to any part of the public sector brings inter-generational equity into consideration. Identifying a surplus or deficit each year would, over time, enable a conclusion to be reached about whether a government is eroding, enhancing or maintaining the asset base. The government is keen to put downward pressure on public expenditure, and one way to do this is to allow the capital infrastructure to degrade; accruals accounting would reflect this in its reports. A decline in the value of the infrastructure would provide a basis for criticising the government, and it would be difficult to counter charges of neglect since it is using a system that gives 'Better Accounting for the Taxpayer's Money'.

In fact, redrafting the example in the White Paper shows a deficit whereby expenditure exceeds income. This raises the question of how the deficit has been financed and introduces a further feature of accruals accounting; it makes explicit the working capital position and movements in it. It has been possible for departments to use working capital as a buffer against changes in cash allocations, but accruals accounting would reveal the extent to which current expenditure has resulted in increases or decreases in the constituent balances. In the short term, it may be possible to maintain expenditure while reducing central government funding by running down working capital; this enables the government, at crucial times, to appear to maintain expenditure programmes while reducing the cash it needs to collect to pay for them.

Redrafting the cash flow statement in the White Paper to make it more like a private sector one makes it clear that the deficit on the income and expenditure account has been funded by running down debtors and stocks and increasing creditors. Some accounts users, such as pressure groups and opposition parties, may consider that the capital maintenance aspect alone is sufficient justification to introduce accruals accounting, but it is not a potential benefit claimed in the White Paper.

Rutherford (1990: 13) points out that creative accounting exists in the public sector, but the possible extent of this is curtailed in the current proposals by the clearly stated convention that 'Resource accounts should be prepared so as to reflect the economic substance and financial reality of the transactions and activities underlying them, rather than only their formal legal character' (H M Treasury, 1995: 6). This approach, together with accruals accounts prepared in the way indicated above, would also have the effect of removing the possibility of not disclosing 'creative funding' based on policy decisions to enhance or curtail the balances of assets and liabilities carried forward from one period to the next.

5. Conclusion

The production and dissemination of financial information hopefully meets its users' needs; otherwise it is difficult to justify the expense involved. Mayston (1992: 228) recognises users' central role: 'As a normative objective for financial reporting, the meeting of users' needs has now been accepted as the central objective by a long series of reports.' The providers of information also have an interest, explained in positive terms: 'Financial reporting is sometimes better characterised by the phrase *selective financial misrepresentation*' (Revsine, 1991: 17) under which participants in the production and use of financial information are motivated to support approaches that 'selectively misrepresent economic reality when it suits their purpose' (Revsine, 1991: 17). The question of whether the introduction of resource accounting is beneficial can therefore be looked at from the viewpoint of the extent to which it meets both producers' and users' requirements.

Benefits for the government stem from the focus on the stock of capital assets; with this attention should come an end to the idea of such assets being 'free goods'. Therefore, it can be expected that surplus assets will be identified and disposed of to avoid their related charges. This complies with the government's aim of generating cash inflows by the disposal of surplus public sector assets (Bevins, 1994). However, the charges are only notional, and largely outside managers' control. In this climate, additional controls are needed to ensure that disposals and the pursuit of lower costs do not have an unacceptably adverse effect on the services provided.

Changing the basis of measurement may also be advantageous. The resources consumed during the first year reported on the new basis will appear greater than previously, simply because of the inclusion of capital charges. If there is steady upward revaluation, the resources committed annually will also appear to increase as the result of indexation, but this will be at no cash cost. To avoid misunderstanding, the users of the information will have to be aware of the impact of the changes, but lack of financial awareness, especially concerning depreciation, has been found in both the public and private sectors (KPMG Peat Marwick, 1992; Marriott and Mellett, 1994). Problems will arise if managers do not realise how their actions with regard to fixed asset acquisition and disposal translate into accounting measures, and functional fixation has been discerned at times of accounting change (Barnes and Webb, 1986).

The reference to 'taxpayers' in the White Paper's title suggests that they are likely to be users of the reports and benefit from the use of accruals accounting. This can be questioned on two counts. First, the resources being accounted for are those of the entire population. Although the funding comes largely from the taxpayer, the proposed system deals with its disposition once it comes into public ownership. Second, it is a fiction that government resources are in some way owned by the public; once in the public sector, the government is effectively free to do what it likes with them, as exemplified by the privatisation of public corporations. An indication of the interest the public has in the government's financial reports is provided by Likierman and Taylor (1990: 58), who list the sales of the 1990 public expenditure White Paper: 1,644 complete sets were sold and the sales of individual departmental chapters range from 378 to 1,507.

Turning to revenue items, as long as there is adequate disclosure, it will be possible for anyone who is interested to convert the reports provided, with their obscurities whether intended or not, to a more standard set of accounts. The use of expenditure, rather than payments, will reveal the true balance between the inputs and outputs, and show whether any 'expenditure smoothing' is taking place. From the public's viewpoint this is useful information, but might not be what the government had foreseen when advocating the system.

Whether the use of full accruals accounting is better than cash accounting depends on the criteria by which it is judged and who is judging it. The government obviously looks on it as an improvement, as evidenced by the White Paper's title. However, 'better' is a subjective term, and the extent to which accounts based on full accruals are better than their predecessors is debatable; it is clear that they are not 'the best', as they bring with them all the deficiencies of private sector accounts. The whole basis of revaluation and allocation is open to question, but, even if this is overlooked, there is no human, social or environmental dimension.

Finally, taking the title of the project as a whole—'Better Accounting for the Taxpayer's Money'—it may be more accurately described as 'Different accounting for public sector costs, assets and liabilities'.

References

Accounting Standards Board (1991). *Statement of Principles Chapter 1: The Objective of Financial Statements*. London: ASB.

Anthony, R.N. (1989). *Should Business and Non-business Accounting Be Different?* Boston, Mass: Harvard Business School Press.

Barnes, P. and Webb, J. (1986). 'Management information changes and functional fixation: some experimental evidence from the public sector'. *Accounting, Organizations and Society*, 11(1): 1–18.

Baxter, W.T. (1981). *Depreciating Assets*. London: Gee & Co.

Berle, A.A. and Means, G.C. (1932). *The Modern Corporation and Private Property*. New York: Harcourt, Brace & World (revised edition 1968).

Bevins, A. (1994). 'Clarke plans Whitehall sell-off to ease tax cuts'. *Observer*, 17 July, p.5.

Bonbright, J.C. (1937). *The Valuation of Property, Volume 1*. New York: McGraw Hill.

Boulding, K.E. (1962). 'Economics and accounting: the uncongenial twins' in *Studies in Accounting Theory*, Baxter, W.T. and Davidson, S. (eds.). London: Sweet & Maxwell.

Burchell, S., Clubb, C., Hopwood, A., Hughes, J. and Nahapiet, J. (1980). 'The roles of accounting in organizations and society'. *Accounting, Organizations and Society*, 5(1): 5–27.

Coombs, H.M. and Edwards, J.R. (1992). 'Capital accounting in municipal corporations 1884–1914: theory and practice'. *Financial Accountability and Management*, 8(3): 181–201.

Day, S. (1995). 'Compensate HAs for capital charge rises'. *Public Finance*, 7 July, p.5.

Edwards, J.R. (1989). *A History of Financial Accounting*. London: Routledge.

Edwards, J.R. (1992). 'Companies, corporations and accounting change'. *Accounting and Business Research*, 23(89): 59–73.

Goldberg, L. (1962). 'Concepts of depreciation' in *Studies in Accounting Theory*, Baxter, W.T. and Davidson, S. (eds.). London: Sweet & Maxwell.

Gray, A. and Jenkins, B. (1993). 'Codes of accountability in the new public sector'. *Accounting, Auditing and Accountability Journal*, 6(3): 52–67.

Griffiths, I. (1986). *Creative Accounting: How to make your profits what you want them to be*. London: Firethorn Press.

Hardcastle, A. (1990). 'Financial accountability and reporting in central government'. *Public Money and Management*, 10(2): 23–28.

Heald, D. and Scott, D.A. (1996). 'Assessing capital charging in the National Health Service'. *Financial Accountability and Management*, 12(3): 225–244.

Henley, D., Holtham, C., Likierman, A. and Perrin, J. (1983). *Public Sector Accounting and Financial Control*. Wokingham: Van Nostrand Reinhold.

Hicks, J.R. (1946). *Value and Capital (2nd ed.)*. London: Oxford University Press.

Hines, R.D. (1988). 'Financial accounting: in communicating reality, we construct reality'. *Accounting, Organizations and Society*, 13(3): 251–261.

HMSO (1985). *Companies Act*. London: HMSO.

HMSO (1989). *Working for Patients: Working Paper 2*. London: HMSO.

HMSO (1994). *Better Accounting for the Taxpayer's Money: Resource Accounting and Budgeting in Government* (Cm 2626). London: HMSO.

HMSO (1995). *Better Accounting for the Taxpayer's Money: Resource Accounting and Budgeting in Government* (Cm 2929). London: HMSO.

H M Treasury (1995). *Resource Accounting and Budgeting in Government: A Summary of Accounting Policies Working Draft*. London: H M Treasury Publishing Unit.

Hopper, T. (1986). 'Private sector problems posing as public sector solutions'. *Public Finance and Accountancy*, 3 October, pp. 11–13.

Hopwood, A. (1984). 'Accounting and the pursuit of efficiency', in Hopwood, A. and Tomkins, C., (eds.), *Issues in Public Sector Accounting*. Oxford: Philip Allan.

Ijiri, Y. (1978). *The Foundation of Accounting Measurement*. Houston: Scholars Book Co.

Jones, R. (1992). 'The development of conceptual frameworks of accounting for the public sector'. *Financial Accountability and Management*, 8(4): 249–264.

Jones, R. (1993). *The History of the Financial Control Function of Local Government Accounting in the United Kingdom*. New York and London: Garland Publishing.

Jones, M.J. (1994). 'Accounting change, communitarianism and etatism: the university and colleges of Oxford 1800–1923'. *Critical Perspectives on Accounting*, 5: 109–132.

Jones, R. and Pendlebury, M. (1992). *Public Sector Accounting (3rd ed.)*. London: Pitman.

KPMG Peat Marwick (1992). *Financial Quiz: Summary Report*. London: Taylor Nelson.

Lapsley, I. (1986). 'Capital asset accounting in UK non-trading organisations'. *Financial Accountability and Management*, 2(4): 273–294.

Lawrence, S., Manzurul, M. and Lowe, T. (1994). 'The great experiment: financial management reform in the NZ health sector'. *Accounting, Auditing and Accountability Journal*, 7(3): 68–95.

Leake, P.D. (1912). *Depreciation and Wasting Assets*. London: Henry Good & Son. Reprinted by Arno Press, New York (1976).

Likierman, A. and Taylor, A. (1990). *Government's New Departmental Reports: Challenges and Potential Problems*, Research Report 19. London: Chartered Association of Certified Accountants.

Marriott, D.N. and Mellett, H.J. (1994). *Resources, Responsibility and Understanding in the NHS*, Research Report 37. London: Chartered Association of Certified Accountants.

Marriott, D.N. and Mellett, H.J. (1995). 'Depreciation accounting in the public sector: lessons from the NHS'. *Public Money and Management*, 15(3): 39–43.

Mautz, R.K. (1988). 'Monuments, mistakes and opportunities'. *Accounting Horizons*, 2(2): 123–128.

Mayston, D. (1992). 'Capital accounting, user needs and the foundations of a conceptual framework for public sector financial reporting'. *Financial Accountability and Management*, 8(4): 227–248.

Mayston, D. (1993). 'Principals, agents and the economics of accountability in the new public sector'. *Accounting, Auditing and Accountability Journal*, 6(3): 68–96.

Mellett, H.J. (1992). 'The application of depreciation accounting to the National Health Service'. *Accounting, Business and Financial History*, 2(2): 161–179.

Mitchell, A. and Sikka, P. (1993). 'Accounting for change: the institutions of accountancy'. *Critical Perspectives on Accounting*, 4(1): 29–52.

Morgan, G. and Willmott, H. (1993). 'The "new" accounting research: on making accounting more visible'. *Accounting, Auditing and Accountability Journal*, 6(4): 3–36.

Pallot, J. (1992). 'Elements of a theoretical framework for public sector accounting'. *Accounting, Auditing and Accountability Journal*, 5(1): 38–59.

Parston, G. (1994). 'Dangers in dogma'. *Guardian*, 10 August, p.15.

Pendlebury, M., Jones, R. and Karbhari, K. (1994). 'Developments in the accountability and financial reporting practices of executive agencies'. *Financial Accountability and Management*, 10(1): 33–46.

Perrin, J. (1984). 'Accounting for public sector assets', in Hopwood, A. and Tomkins, C., (eds.). *Issues in Public Sector Accounting*. Oxford: Philip Allan.

Revsine, L. (1991). 'The selective misrepresentation hypothesis'. *Accounting Horizons*, 5 (December): 16–27.

Rutherford, B. (1990). 'Towards a conceptual framework for public sector financial reporting'. *Public Money and Management*, 10(2): 11–15.

Smith, T. (1992). *Accounting for Growth*. London: Century Business.

Thomas, A.L. (1969). *Studies in Accounting Research No. 3, The Allocation Problem in Financial Accounting Theory*. American Accounting Association.

Thomas, A.L. (1974). *Studies in Accounting Research No. 9. The Allocation Problem: Part Two.* American Accounting Association.

Watts, R.L. and Zimmerman, J.L. (1986). *Positive Accounting Theory*. Englewood Cliffs, NJ: Prentice Hall.

Zimmerman, J.L. (1979). 'The costs and benefits of cost allocations'. *Accounting Review*, LIV(3): 504–521.