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CAPITAL CHARGING AS A VFM TOOL IN PUBLIC SERVICES

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CAPITAL CHARGING AS A TOOL OF NEW PUBLIC MANAGEMENT

Though implementation is inevitably complex, the essence of capital charging is very simple: namely, that the costs of capital facilities used in public service provision should be rendered explicit. Such transparency is intended to introduce new discipline to decisions about the acquisition, use and disposal of publicly financed assets (henceforth, asset management). The translation of this simple idea into practice raises substantial difficulties which stem from two principal sources: first, the sheer number of assets held by government; and second, the diversity of those assets, some of which resemble the assets held by commercial businesses whereas others are markedly different.

The motivations for adopting capital charging are considered in detail in the next section. In the meantime, the rationale may be summarised as follows: political decision-makers and managers, for whom capital is no longer a free good, will face improved incentive structures and these will lead to improved asset management. Given the fiscal pressures confronting all governments, the prospect of improved Value-for-Money (VFM) is highly appealing.

There are five important points to make about the design of capital charging systems. The first is that they adopt some kind of replacement-cost measurement basis, a decision which is probably inevitable when a multitude of assets has been acquired over many years, at historical costs which are now unknown and which certainly reflect price levels ruling at irrelevant dates. Significantly, this involves using a measurement basis which now has few, if any, parallels in the (unregulated) private sector.

Second, capital charging is highly congruent with several features of what is now described as New Public Management (NPM) (Hood, 1991 and 1995; and James and Manning, 1996); in fact, it can be regarded as part of NPM's toolkit. When there is purchaser-provider separation, especially if accompanied by competition within an internal market, the level playing

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field[1] will be seriously distorted if there is no accounting for capital costs. Indeed, when thinking about capital charges, it is always useful to visualise multiple purchasers and providers, even if such institutional separation does not exist and is not contemplated.[2] On the provider side, the task is to identify, value and account for assets. On the purchaser/funder side, the critical question relates to the basis on which providers will be equipped to pay capital charges.

For example, in the context of multiple purchasers/funders and multiple providers, one end of the spectrum represents *full reimbursement* (i.e. each purchaser is given additional funds exactly equal to the capital charges which its providers have to pay).[3] The other end of the spectrum is when the additional funds are distributed to purchasers on the basis of *full weighted capitation* (i.e. on the measured characteristics of the population served), without regard to the asset bases of the particular providers with which individual purchasers contract.[4] The central decision-maker can structure the distribution formula so that x% (where $0 \leq x \leq 100$) is distributed according to weighted population, and $(1-x)$% is distributed on the basis of actuals. Clearly, the degree to which capital charges 'bite' depends upon the chosen value of x: not at all if $x = 0$ and fully if $x = 100$. The decision as to where to locate on this spectrum should be an informed one, shaped by evidence about the extent of 'local' management control over asset bases and the timescales over which asset holdings can be reconfigured.

Third, a decision must be taken as to whether there will be two flows of funding to purchasers (i.e. 'normal' revenue funding and capital charges funding), or whether these are to be integrated into a single flow. There are decisive arguments for keeping these flows separate when the capital charging system is not operating on full weighted capitation. In the presence of full weighted capitation, the arguments are more finely balanced. On the one hand, integration emphasises the importance of total costs as a relevant criterion for purchasing decisions. On the other, continued separation brings greater visibility to capital charges; this may be judged particularly important if current asset holdings are acknowledged to be inappropriate, but 'local' managers have limited control over the timescales for reconfiguration.

Fourth, when capital stops being a free good, and providers must remunerate the publicly funded capital placed at their disposal, it is essential that purchasing budgets are increased so that, in aggregate, the funds are available to pay not only the existing costs of providers but also the newly recognised costs of using capital facilities. For example, if running costs are £1,000 and capital costs are £200, the purchasing budgets must be increased to £1,200. Thus, the Ministry of Finance will now be paying out £1,200 whilst receiving back £200 as capital charges, leaving net expenditure unchanged. Under this arrangement, capital charges do not affect, *on aggregate*, the amount of resources which can be used in service provision. However, moves towards weighted capitation will *redistribute purchasing power*, thereby putting pressure on purchasers which buy from providers with 'excessive' assets. Shaoul's (1996) conclusion that 'the [capital charging] medicine administered to cure a minor ailment is likely to kill the patient' should therefore be rejected. In absolute terms, there are huge amounts of assets (whose better management will produce significant gains) and, whilst individual providers may 'suffer', there can be no suffering at the aggregate level. It would be entirely against the spirit of capital charging to make providers pay capital charges without simultaneously increasing purchasers' budgets; in terms of the numbers above, such a policy would reduce expenditure by 16.7%. Nevertheless, this is what happened in New Zealand because it was claimed that there would be remarkable efficiency gains in Crown Health Enterprises; in practice, they were so financially distressed that they did not actually pay capital charges. Such a failure to uplift purchaser budgets will compromise a capital charging system, especially if it can be represented as a non-transparent device to cut real expenditure on public healthcare.[5]

Fifth, capital charges can have a gearing effect with regard to centrally prescribed efficiency gains. Using the same numbers as above, the extension of an efficiency-gain target of 3% to costs (including capital charges) of £1,200 means that, in the short run when capital facilities resist down-sizing, a saving of 3.6% is required on the other costs of £1,000. Whereas the gearing effect is relatively modest in this case (20%), it will be much more pronounced in the case of capital-intensive facilities, such as defence and the road network. Those who set such efficiency-gain targets must recognise the need to recalibrate them after the introduction of capital charging.[6]

THE DIVERSE ORIGINS OF CAPITAL CHARGING

Although capital charging systems were not implemented until January 1991 (central government in New Zealand) and April 1991 (National Health Service (NHS) in the United Kingdom), it is relatively easy to discern the origins and antecedents. Here, attention will be paid to three factors: professional and auditing concerns about estate management; academic and professional criticism of the misleading nature of cash accounting under which assets were neither capitalised nor depreciated; and the influence of NPM ideas about promoting competition within the public sector.

First, there is a history of concern about the quality of asset management in public services. In the case of the NHS, there is substantial documentary evidence over a lengthy period of time: for example, the reports to ministers of Woodbine Parish (1970) and Davies (1983); the VFM reports of public auditors (National Audit Office, 1988; and the Audit Commission, 1991); and independent studies (Meara, 1991). Although less well-documented, there is evidence that these problems are endemic in asset-intensive parts of

UK central government. Whilst Davies' (1983) proposal for notional rents was never implemented, it has properly been viewed as a precursor of capital charging.

Second, there has similarly been a history of criticism of the lack of capital accounting in the public sector, with the contention being — advanced with varying degrees of explicitness — that accruals accounting (particularly asset valuation and depreciation) would lead to greater efficiency in asset management. Internationally, these arguments are synthesised in the work of Lüder (1988, 1991 and 1993) and have been vigorously disseminated by the OECD (1993), where the focus has primarily been on central government. In the United Kingdom, the initial focus was on health, where the ideas came closest to the policy process in Perrin et al.'s (1978) work for the Royal Commission on the NHS, after which the agenda was carried forward by academic accountants (Lapsley, 1981 and 1986; and Perrin, 1984).

Third, it was probably not coincidental that implementation of capital charging in the United Kingdom had to await the April 1991 launch of the NHS internal market. The need to construct some kind of level playing field on which NHS providers could compete provided a *policy* imperative, which was more effective in securing action than *management* worries about estate management or claims about the benefits of accruals accounting. Enthoven's (1985) advocacy of internal markets in health proved to be remarkably well-timed, as it was taken up by a Conservative Government frustrated that more resources for the NHS apparently did nothing to deflect political flak. Purchaser-provider separation, especially when intended to pave the way for competition, both within the public sector and with the private sector, created a stimulus to address capital accounting and charging. In such contexts, these look less like optional extras and more like building blocks.[7] The UK Treasury's Chief Accountancy Adviser has consistently stressed that capital charging will be one of the principal mechanisms generating benefits from Resource Accounting and Budgeting (RAB) (Likierman, 1995 and 1996). This discussion indicates that, when capital charging is extended across central government itself, considerable attention is needed as to whether purchaser-provider separation exists or is a credible possibility. Capital charging will be part of Resource Budgeting (RB) which will be implemented in central government in 2001–02.

Irrespective of their starting point, those who argued for capital charging, or some variant, shared a common belief that there existed within government considerable scope for the improved management of capital assets. In principle, comprehensive and up-to-date asset registers could be maintained under cash accounting, but practical experience indicates that this rarely occurs. Capital accounting and/or charging would be necessary, whether to generate these savings directly or to contribute towards the framework within which competition would stimulate cost savings.

EXPERIENCE TO DATE

Conclusions about practical experience with capital charging have to be tentative at this juncture. Two points need always to be borne in mind. First, despite it being possible to trace back the intellectual origins and antecedents, the amount of practical experience to date is limited in both place (New Zealand and the United Kingdom, with developments coming on stream in Australia) and time (only the 1990s). The benefits of capital charging will take time to emerge, as this represents an investment in better asset management; the costs of implementation come first, followed by the expected benefits. On the other hand, there may be 'Hawthorne effects' (Pollitt, 1990), in the sense that *any* policy innovation on asset management might produce some benefits, though these would not be enduring.

Second, the task of identifying and quantifying the benefits of capital charging confronts a number of familiar obstacles to policy evaluation. In circumstances where many reform strategies are pursued simultaneously, it will undoubtedly prove difficult to attribute measured improvements in performance to particular tools, of which capital charging is just one. Moreover, issues of access to commercially sensitive information are likely to limit the kind of methodologies which academic researchers can adopt. Evaluations which require systematic access to financial data (e.g. on particular investment or closure decisions) can only be done by public auditors with rights of access to original documents. These VFM audits should supplement evaluations undertaken by, or for, the central policy and finance ministries.

Quite apart from logistical issues connected with the resourcing of such evaluatory activities, there is a structural problem. Historically, the systematic evaluation of public programmes has been seriously neglected (Gray and Jenkins, 1993).[8] This weakness has been compounded since the adoption of NPM reforms which, despite the associated rhetoric about programme evaluation, frequently escape evaluation. In part, this is a consequence of those charged with transforming public management being preoccupied with 'doing' and impatient of delay. However, calls for the evaluation of NPM tools are frequently viewed as subversive because they are taken to imply doubts. One of the risks attached to NPM relates to the way in which power can become highly centralised and pluralist elements suppressed. In such a climate, evaluation will probably not be carried out, and its objectivity would in any case be called into question.

An Aberdeen University survey (Heald and Scott, 1996a and 1997), conducted in 1994, demonstrated widespread acceptance of capital charging by NHS financial and property managers in Scotland, with the principle under little challenge. With hindsight, interviewees found it odd that capital assets had hitherto been left so invisible. Though there were differences in the wording of questions between the Aberdeen University survey and that conducted in 1993 by NHS Estates (1994), the 'qualified-positive' conclusions of the two studies were broadly similar. Survey work in New Zealand, conducted both by the Treasury in 1992 and by Price Waterhouse on its behalf in 1993, strongly endorsed the introduction of capital charging in central government (Price Waterhouse, 1993). Given that capital charging has been in place in both New Zealand and the United Kingdom for eight years, the time has now arrived for a large-scale evaluation. Not least, this is required to address scepticism about the use of higher-powered incentives in public services, as expressed by Lapsley (1997) and Bevan (1997).

HANDLING CRITICISM OF CAPITAL CHARGING

The cross-sectional surveys discussed above provided a generally positive account of capital charging. Nevertheless, there have been criticisms in the literature and media, and these are addressed in this section. Criticisms of particular implementations are first discussed, after which attention turns to criticism of the conceptual basis of capital charging. Finally, those criticisms which explicitly or implicitly attack the entire NPM reform package are addressed. Although such criticisms are sometimes interwoven, it is essential to be clear about exactly what is being criticised, as the nature of the appropriate response differs.

First, critics of the failures of implementation are likely to include those who support the principle of capital charging; their concern is to highlight mistakes in particular cases, not least because this is a valuable means of drawing lessons for application elsewhere. This was explicitly the motive underlying Heald and Scott's (1996b) discussion of how avoidable mistakes increased the cost of NHS implementation and delayed benefit generation. Of particular importance was the weakness of the centre (i.e. the Management Executives directing the four NHS systems in England, Scotland, Wales and Northern Ireland) in terms of staffing, technical accounting and systems expertise, and overall resources. Viewed from the operational level, this manifested itself in shortcomings in technical guidance, information dissemination and system regulation, leading in turn to the exercise becoming too finance-driven and insufficiently inclusive of either top-level managers or estates professionals. These failings were partly predictable (the NHS has a bad reputation for systems implementation), but also reflected a failure at the centre to appreciate the scale of the exercise. Such misjudgements certainly increased the total costs of implementation, and reduced discounted net benefits. By way of mitigation, this was largely unmapped territory, and those who follow, whether in UK central government or in the public healthcare systems of other countries, ought to be able to implement more quickly and at lower cost.

Second, the criticism can be about the design of a capital charging system, rather than about the principle of having one. For example, it might be argued that capital charging should proceed on the basis of Historical Cost (HC) rather than the Depreciated Replacement Cost (DRC) basis which was adopted in the NHS. Alternatively, an argument might be made for the adoption of a Modern Equivalent Asset (MEA) measure of DRC, rather than valuing existing assets on the basis of a like-for-like replacement. Even the limited credibility attaching to HC in this context is removed when capital charging is motivated as one building block of purchaser-provider separation, especially within the context of an internal market or of a formula funding model. Providers whose assets were acquired many years ago would often enjoy an enormous advantage over those whose assets were acquired more recently.

Whether to pursue the MEA route is clearly one of the key areas where judgements have to be made; indeed, this is one of the significant differences between the systems adopted in 1991 in New Zealand and in the United Kingdom; the former opted for the MEA version (under the name of 'optimised DRC') and the NHS adopted DRC. Influential factors behind the NHS not taking the MEA route were fears about the amount of discretion which would be conferred upon NHS managers (who could argue at length about what the MEA would look like), and the demands such a system would place upon property valuers (Heald and Scott, 1996c). Asset valuation in UK central government, most notably in defence, is making extensive use of MEA, though the method is still described as DRC, not as optimised DRC. In the Ministry of Defence (MoD), there would be huge differences between DRC and its MEA counterpart. One motivation for the choice of the latter has been to dampen the increase in the defence budget consequent upon the adoption of RAB.[9] Comparative experience, both cross-sectoral and cross-national, will form an interesting topic for future research.

The valuation of assets for the purpose of capital charging has increased the stock of knowledge about assets held by government. Mayston (1993) characterises health assets as being putty at the investment appraisal stage (there are substantial options about how an acute hospital is configured), and then clay afterwards (hospital assets, once constructed, are rather inflexible). In a similar vein, Heald and Scott (1996b) drew attention to the higgledy-piggledy way in which many NHS hospitals have developed, with wings and other buildings grafted on at various dates. A considerable amount of what is classified as public expenditure on existing sites does not increase the balance sheet value of assets by an equivalent amount; 'reconfiguration' often leads to the phenomenon of 'missing capital' (Heald and Scott, 1996c). As a consequence of the interaction between their highly specialised nature and the dominant position of the NHS in UK healthcare, the Net Realisable Value (NRV) of NHS hospitals is likely to be far below DRC, especially when the MEA version is not used. Mayston's (1996) critique of NHS capital charging, which he would like to see replaced by an entirely different scheme, rests heavily upon arguments about misleading signals for investment/closure decisions and for make/buy decisions (e.g. in connection with community care). It is argued that capital charges will exaggerate the opportunity cost of asset retention, a point echoed by the Institution of Professionals, Managers and Specialists (1996).

Nevertheless, it can be powerfully argued that imperfect instruments for charging for capital are better than capital invisibility. The imperfections stem less from system design than from the diverse nature and highly specific character of many public assets. Judgements on this matter will depend in part upon how the commentator views the pre-history of capital charging. Evidence about poor decisions on asset acquisition and management needs to be set within the context of a lengthy period in which the Treasury, by means of sophisticated economic guidance (e.g. Treasury, 1991), attempted to improve practice across government (Milne, 1988). Given that the NRV of hospitals, once built, is predictably very low, it is inevitably true that DRC-based capital charges will overstate the opportunity cost of continued use. In this case, there are undoubted attractions in making managers cautious about the assets they acquire, and hence the future capital charges they take on. Accordingly, it is not unreasonable to combine a measure of concern about divergent signals with the view that DRC-based capital charges are preferable to the alternatives of either no capital charging or the very low capital charges which would ensue from a system which adjusted valuations to reflect NRV. This is yet another manifestation of the way in which the time horizon on which attention concentrates can affect judgements, paralleling the much-discussed tension in public sector pricing policy between Short-Run Marginal Cost (focusing on how to use existing assets) and Long-Run Marginal Cost (focusing on decisions about asset acquisition and disposal) (Webb, 1976; and Bös, 1981).

Third, capital charging can be criticised precisely because of the way in which it contributes to the functioning of internal markets, when the commentator believes that their adoption is a flawed strategy. For example, Mayston (1996) makes a systematic attack on the NHS internal market, not just a critique of capital charges and elements of deregulation of the NHS labour market. Moreover, it is often difficult to separate out discussion of specific mechanisms from controversy about the nature of the 'real' agenda of NPM. Indeed, this agenda is variously represented as a means of managing public services more efficiently and of thereby sustaining them in an era of fiscal shortage, or as an inferior substitute to, and possible precursor of, privatisation. In such contexts, there is frequently a divergence between the apparent and real issues of contention. Whatever the motivations might have been for adopting certain NPM tools, there remains the question about whether they can be detached from those origins.

Undoubtedly, one influence upon views held about NPM tools such as capital charging is the kind of mental image that policy-makers and commentators have of the political and bureaucratic decision-making process

(Wolf, 1988). The most far-reaching case of public sector reforms, that in New Zealand, has undoubtedly been strongly influenced by its Treasury's untypically explicit analysis of the policy process (New Zealand Treasury, 1987; and Horn, 1995), constructed from a number of analytical perspectives, most notably public choice theory (Mueller, 1989). The comprehensive policy package which has emerged has been vigorously attacked by Kelsey (1995) and acclaimed by the OECD (which commends it to other countries perceived to have excessively large public sectors). Naturally, this context tends to lead to polarised views about NPM tools. In particular, they are suspected by some for their association with views reasonably interpreted as being hostile to government involvement in 'productive' activities. Others may support them because of the way in which tools such as organisational fragmentation, purchaser-provider separation, accruals accounting and capital charging undoubtedly do restructure government into more readily privatisable chunks. Besley (1996), whilst acknowledging the contribution of public choice theory to the analysis of government failure and policy feedbacks, addressed the damaging consequences of the excessively hostile approach to the state which (he considered) public choice theory promotes. This tone can be obstructive of the search for better government, which is increasingly recognised as one of the keys to improved economic performance. Hirst (1996) and Lacey (1997) each addressed issues arising from the United Kingdom's recourse to quasi-markets in public services, emphasising some convergence of approach across OECD countries, whilst stressing that such initiatives should be properly evaluated.

EXTENSION TO CENTRAL GOVERNMENT

The UK Government has adopted capital charging across central government as part of its RAB package (Treasury, 1995). The benefits of RAB are expected to be derived from better management accounting within central government, as a basis for improved decision-making and enhanced performance information in support of public accountability (Likierman, 1994; and Pallot and Ball, 1997). There is an important sense in which Resource Accounting (RA) should be viewed as setting a platform on which NPM tools like capital charging can be brought into play and greater transparency about asset utilisation secured. This indirect function of RA is arguably more important than the production of a large number of accruals-based financial reports.

It is useful to discuss particular programme areas. First, in terms of cost structure, prisons closely resemble hospitals: there are multiple sites, with 'footprints' which are characteristically dense with buildings, yet labour costs still constitute the largest proportion of total costs (National Audit Office, 1994). However, there is no purchaser-provider separation within the Prison

Service and almost no local control over workload (a traditional feature of prison management recently accentuated by the chronic overloading of the system). Deriving maximum benefit from capital charging requires a prior redesign of the management process. Given the important role now attached to both private management of public prisons and the Build, Own, Operate and Transfer method of increasing total prison capacity, dealing with the accounting for, and management of, capital assets and long-term commitments to purchase must be seen as a high-level managerial task. As system overloading will prevent budgetary delegation for the foreseeable future, benefits from capital charging have to come from greater cost visibility and improved capability at the centre to make investment decisions, including public and Private Finance Initiative (PFI) alternatives. The institutional arrangements for prisons (separate Next Steps executive agencies for England plus Wales, and Scotland, but still embedded in the Northern Ireland Office) do not affect these considerations. Even when agencified, prisons have close relationships with the parent department; moreover, Vote-funded agencies are within the departmental boundary and publicly financed prison assets are therefore on-balance sheet.

Second, defence raises a plethora of issues (Gillibrand and Hilton, 1998), partly because of the volume and value of asset holdings and partly because of the long-standing ambiguity about the distribution of power between politicians, military personnel and top civil servants. Indeed, the technical accounting issues (which have understandably dominated the implementation phase) pale when set alongside the chronic misalignment of managerial authority and budgetary delegation.[10] The imminent arrival of capital accounting and charging has undoubtedly focused attention upon the asset holdings of the MoD, with recent reports tackling different aspects such as equipment storage costs (National Audit Office, 1998b); the management of office space (National Audit Office, 1999); the identification and disposal of surplus property (National Audit Office, 1998a); and the modification of defence equipment (National Audit Office, 1998c). This intensification of VFM audit scrutiny of the defence asset base, paralleled by managerial developments within the Strategic Defence Review, owes at least something to the prospect of greater transparency through capital accounting and charging.[11]

Third, completely different circumstances surround the UK road network, whose DRC will be extremely large. There is an obvious difficulty as to who is held responsible for asset acquisition and disposal; the Highways Agency, or one of its regional managers, can reasonably be held responsible for the condition of the road network but has far less ability to dispose of existing roads than an NHS manager has to dispose of an existing hospital. Whereas aggregate information on the productive potential of the road network is useful for both top-level decision-makers and the discharge of public accountability, it will be difficult to avoid a 'wheelbarrow' approach to capital charging; additional funding is automatically provided to allow the Agency to pay its capital charges.

A crucial task is to think conceptually about how different government activities are now configured. An obvious point is that UK central government has been 'hollowed out', due to the combined effects of measures such as privatisation, agencification (e.g. Next Steps executive agencies) and the transfer of function to Non-Departmental Public Bodies (popularly known as 'quangos').

EXPORTING CAPITAL CHARGES

Given the rapid internationalisation of the NPM agenda (James and Manning, 1996), three specific issues are worth exploring: the extent to which the experience can be transferred to non-OECD economies; the steps which might be taken in circumstances unfavourable to the adoption of accruals-based capital accounting; and the considerations which should influence judgements about how to configure NPM tools in different sectoral and cultural contexts. Such a discussion is useful in terms of guiding international organisations, like the World Bank, with remits to improve public management in often difficult environments. Moreover, it is illuminating as it focuses attention on certain aspects of UK and New Zealand experience which are not necessarily explicit. A certain modesty should always inform exercises in lesson-drawing, as is emphasised by the growing political science literature on lesson-drawing and policy transfer (Dogan and Pelassy, 1990; and Rose, 1993).[12]

First, there is ample evidence from the budgeting literature that innovations do not necessarily travel well, and that tools and processes transplanted from one context and culture to another often fail to take root in the new terrain (Dean, 1989). The accruals game in government tends to be dominated by certain Anglo-Saxon OECD countries (excluding the United States), supplemented by developments in Iceland and Sweden. The issue arises as to the transferability of their experience. Tanzi (1996) stressed the scarce talent in both developing and transitional economies when considering the issue of how governmental tasks might be allocated between central and local government. The availability of skills is clearly also relevant to the viability of NPM-style accounting reforms; the issue is not simply whether a particular economy has such accounting and information systems skills but also whether these can be mobilised by government. There are several obstacles, some of which will not be easily resolved: the availability of higher pay in the private sector; the low prestige attached in certain countries to employment in government; and a culture within government resistant to accounting.[13] Clearly, attention must be paid to the financial management capability of particular governments; this means that accounting and management tasks must be prioritised in each setting. Moreover, it is necessary to form judgements about what is appropriate, given the present state of budgeting development; changes to management structure and delegation can be prerequisites for accounting reform. Paradoxically, capital charging is a mechanism which is more likely to be beneficial in the context of a relatively well-functioning system, where the aim is to secure further performance improvements. Where this precondition is not satisfied, it is advisable to concentrate on simpler mechanisms.

Second, in both New Zealand and the United Kingdom, capital accounting and capital charging have been viewed as integral parts of the same package. Even in these sophisticated economies, with a well-developed accounting profession and a high skills base, this transition has proved a large task which is unquestionably resource intensive. Elsewhere, and certainly in developing and transitional countries, it is advisable to proceed cautiously, for fear of diverting accounting and financial management skills away from more urgent tasks (e.g. tracking cash, reducing fraud and developing both financial and VFM audit). This raises the question as to whether capital charging could be implemented in isolation from a full system of capital accounting. Indeed, the proposals of Davies (1983) can be reinterpreted in this light. However, rather than make the rental charge notional (i.e. no money changes hands, but the amount is reported), there is a strong case for converting the rental charge into a cash payment so that it attracts the proper level of management attention. Naturally, making this a cash transaction imposes the requirement of thinking through the funding of the capital charge. Although this raises considerable complexities, the benefits from capital charging are likely to be derived from this interaction between 'funding' and 'paying'. Greater visibility will therefore attach to capital assets. Logically, it should be possible to insist upon the preparation and maintenance of asset registers, even in the absence of capital accounting and capital charging. Nevertheless, UK experience suggests that, whatever the central guidance says, this is regarded as a very low priority task unless either it meets operational requirements (e.g. fighting equipment) or money is involved.

Where there are grounds for doubting the viability of even this slimmed-down system of capital charging, there remains recourse to simple budgetary mechanisms, the most obvious of which is allowing managers control over the use of a high fraction of the proceeds from asset disposals. There is an obvious dilemma. Allowing substantial retention of disposal proceeds strongly motivates asset rationalisation, but has two disadvantages: it rewards those who had accumulated surplus assets and limits the ability of the centre to secure redistributions between programmes. Where there is limited scope for the adoption of more sophisticated stick-type measures such as capital charging, more generous portions of carrot are unavoidable.

Third, a key issue in policy design relates to the decision about which 'tools' to use in particular cases. This is illustrated by the public funding of New

Zealand universities, where much effort has been devoted to the development of capital charging without thus far securing implementation. In reality, what has held up the process is not any technical issue, but the predicted redistribution of funds among universities.[14] Paradoxically, far less attention has been paid in New Zealand to the design of the funding system (e.g. there is no separate funding of teaching and research). In contrast, the United Kingdom has pushed capital charging aside with reference to higher education funding and emphasised the refinement of formula funding for teaching and research. This comparison raises two issues: whether to use the full panoply of instruments in each case; and whether to back off from intractable political difficulties.

The case also shows how certain issues, seemingly ones of technical design, can raise matters of political choice. In the case of UK universities, most asset build-up has been facilitated by capital grants from public funding bodies to institutions which are classified as part of the private sector. With regard to such assets, capital charging is likely to be resisted because of the retrospection which it necessarily involves. In the case of a few institutions, donated assets are quantitatively important, thereby raising a serious dilemma for the design of capital charging. Disregarding donated assets severely tilts the playing field and can divert public funds from service delivery into a search for donations, whilst the capital charging of donated assets is likely to dry up their future supply, exactly at the time when governments wish to encourage their substitution for publicly funded assets.[15] There is no technical answer to such policy trade-offs.

Quantitatively more important than donated assets will be assets financed under the PFI (Treasury, 1993), launched by the Conservative Government in 1992 and then embraced by the 1997 Labour Government, despite hostility whilst in opposition. Capital charging as a discipline might be undermined by the availability of PFI assets. The motivation for capital charging has been to persuade managers to get rid of unnecessary assets, not to encourage the substitution of off-balance sheet assets for conventionally acquired assets. The key attraction of the PFI is that it retimes the scoring of asset acquisition, a feature which has come to obscure the real question as to whether this tool is more cost efficient than conventional procurement. There are two separate issues to address: whether, in any particular case, the PFI route is cheaper than its (hypothetical) public sector comparator;[16] and whether measures to reassure private consortia that public purchasers will buy their output will damage efficiency by tilting the playing field.

CONCLUSION

The adoption of accruals accounting in central government (IFAC, 1998) provides a platform on which capital charging can be installed. The incremental cost of this tool is clearly much reduced when asset valuations have already been undertaken for financial reporting purposes. Experience to date with RA in UK central government indicates progress up the learning curve, a finding which is important because of the economic importance and political sensitivity of transaction costs. Capital charging is now unlikely to disappear; its effectiveness will in part depend on the contribution which accounting researchers make towards policy design and evaluation.

Experience with capital charging places several issues on the long-term policy and research agenda, of which four are now briefly examined. First, the emerging literature on the effects of capital charging indicates that it is difficult to detach consideration of tools from perspectives on whether the NPM package as a whole is likely to be beneficial. In turn, these perspectives are themselves connected to interpretations which are placed upon policy objectives, most notably whether the adoption of NPM is designed to enhance or emasculate public services. There is, for example, a sharp contrast between the analysis of Gray (1998) (the task is to make government 'business-like' without losing a sense of public values) and Miller (1996) and Olson, Guthrie and Humphrey (1998) (the importation of 'private accounting' at least threatens, probably damages, public service values). The divergent assessments of this article and, for example, Froud et al. (1998) and Shaoul (1998), can in part be traced to this source. Where there is agreement, however, is in the calls for better evaluation. Notwithstanding the inherent difficulties, the performance of VFM mechanisms forming part of the NPM toolkit should not itself escape evaluation. One of the key tasks for policy-makers is to judge 'when' and 'where' the application of capital charging is appropriate, with the proper criterion being the incremental contribution and incremental cost. There have to be checks on whether expected benefits have been realised, even when attribution to particular mechanisms may remain controversial. The final judgement on capital charging must await systematic surveys of estate condition and capacity utilisation after the system has been operational for a number of years. In terms of beneficial or dysfunctional effects on asset management, where impacts on replacement and disposal would unfold over long periods, experience with capital charging still covers only a short period.

Second, there is an almost philosophical issue about the desirability of transparency. We support the view, advanced repeatedly by Perrin (1984), that information should be publicly available about the value of public assets, on the expectation that this will generate both better asset management and enhanced public accountability. We understand, but reject, the view that such information should be suppressed because — to repeat a contention — national security would be put at risk if politicians and voters knew the opportunity cost of defence assets. At the last resort, much depends upon how much confidence one places in the democratic process.[17] An emerging concern is the trend for government to place certain assets (the Millennium Dome is a good example) into private legal forms outside the scope of government accounting and to emphasise procurement in off-balance sheet PFI forms. The issue therefore arises as to how assets, held outside the departmental boundaries defined for RA, should be treated under capital charging. These assets obviously contribute to programme outputs; disregarding them would not only be misleading but would also encourage transfers of assets to 'just outside' the departmental boundary. Indeed, that would defeat the key motivation of increasing the visibility attached to public assets. Moreover, the PFI is acquiring considerable importance as a delivery mechanism for public services which does not involve public sector asset holding. Yet PFI schemes involve commitments to purchase over long timescales, meaning that the effects of the PFI on capital charging, and vice versa, require attention (Broadbent and Laughlin, 1999).

Third, much depends upon how effectively managers utilise assets. Most assets are inherited, gross investment being comparatively small relative to the asset base. The functional areas with extensive holdings of assets within the central government boundary seem to be those where there is an urgent need for a better alignment between managerial authority and budgetary delegation.

Fourth, it is vitally important that the funding side of capital charging receives greater policy attention and becomes better understood. Our most important criticism of capital charging in New Zealand and the United Kingdom public healthcare sectors relates to non-funding in the former and the failure in the latter to recognise, as a policy variable, the balance between reimbursement and weighted-capitation funding.

NOTES

1 The motivation for seeking a level playing field is to simulate competition. However, the precise meaning of the term must always be monitored carefully, as this can be context-dependent. To take a sporting analogy, Manchester United play Wimbledon on the basis of the same rules of football, yet the disparity in resources between the super-rich (the former has the highest turnover of any football club in the world) and lesser clubs (the latter no longer has its own stadium and attracts low gates to the stadium where it lodges) is immense. In the public services context, establishing a level playing field sometimes means competing on a common set of rules (for example, the Research Assessment Exercise in UK higher education) and sometimes involves compensation for unequal needs and/or resources (for example, the formula-funding distribution of healthcare resources to NHS purchasers). Whether a level playing field is achieved will depend considerably upon the control which the central agency or funder exerts over providers; for example, securing comparable accounting across NHS Trusts is an entirely different matter from that of bringing private health providers into the quasi-market (as was claimed to be the intention of the 1991 reforms).

2 In some cases, such as higher education, there may be multiple providers receiving their money from a single funder, via a formula-funding model.

3 This requires the construction of a purchaser-provider matrix so that each purchaser is funded to pay the capital charges of its forecast actual providers. If purchasing patterns deviated from those built into the matrix, the matrix would be re-run; however, small departures are likely to

be ignored. If a purchaser switches its purchases from high capital charge to low capital charge providers, it will receive less funding to pay capital charges.

4 Purchasers thus keep the full benefit of any reductions in capital charges they pay as a result of moving their business between providers.

5 This association of capital charging with sharp spending reductions on public healthcare should be interpreted in terms of New Zealand's changed political culture since the economic reform process began in 1984. There continue to be disputes in the literature about the overall benefits and costs of the New Zealand reforms. For divergent assessments, see Kelsey (1995), Evans et al. (1996), Scott (1996), Silverstone et al. (1996) and Nagel (1998). In contrast, the UK internal market reforms were associated with real growth in expenditure on public healthcare.

6 Mellett (1997) noted that rising asset values will lead to higher resource requests which governments may not wish to meet, thereby inducing a downwards squeeze on real spending.

7 The push to implement capital charging came from the highest level, and seems to have been assisted by the pivotal role of Sheila Masters, a well-known advocate of capital accounting in the public sector (Masters, 1993). A partner in KPMG, she was seconded to the post of Director of Finance, NHS Management Executive, during the key policy development phase of 1988–91, having earlier been seconded to the Treasury from 1979–81 when Current Cost Accounting financial targets and the External Financing Limit system — both extended to the NHS in 1991 — were being applied to nationalised industries.

8 This is not to deny the inherent difficulty of evaluation, but rather to stress that the adoption of NPM tools makes confronting this task even more urgent. The language of NPM revolves around 'outputs' and 'outcomes'. If this is not to be empty rhetoric, a real effort must be made to monitor, in an open-minded way, the best available proxies for outputs and outcomes.

9 In the future, however, the lower asset base will lead to lower depreciation charges and capital charges on existing assets, with the effect that the commissioning of new generations of military equipment will ratchet upwards defence spending on an accruals basis.

10 To some extent, this reflects the fact that the MoD is a relatively unreformed part of the civil service, less deeply influenced by the financial management reforms which have been a continued feature of UK central government since the early 1980s. However, some of this misalignment appears to be instrumental; the obscuring of accountability for decisions is part of the tacit accommodation which serves to contain the three-pronged tensions between the military, civil servants and ministers, whose cultures, assumptive worlds, career paths and incentives are markedly different.

11 Recurrent themes in these and other reports are the need for better asset information and for improved incentive structures: 'The Department should ensure that the introduction of Resource Accounting and Budgeting will lead not only to a fuller picture of storage costs, but also to a stronger basis for decision-making and management action' (National Audit Office, 1998b, para 2.23); and 'At present there is little or no incentive for these branches to give up space as it is provided free of charge by the budgetholder' (National Audit Office, 1999, para 4.13).

12 'Social scientists can improve understanding of policy transfer or lesson-drawing. Specifically, they can identify the conditions under which policy transfer occurs, when policy transfer is either appropriate and will enhance 'best practice' or when it will lead to policy failures, and finally, they can aid decision-makers in the process of policy transfer. In doing so, social scientists are not simply studying policy transfer but are constitutive of the process and become agents of transfer, albeit some will be more passive observers of transfer than actively engaged in spreading ideas and approaches' (Stone, 1999, p. 58).

13 Initiatives to improve public financial management skills in client governments have been launched by, *inter alia*, the World Bank which is developing its own internal capacity in government accounting; for example, a high-level seminar (*PSM21: Developments in Public Sector Accounting*) on 2–3 March, 1998.

14 The UK reader might reflect upon what would happen if a proposed UK capital charging scheme were to make the University of Luton a major gainer at the expense of the University of Oxford.

15 Abstracting from transactions costs, donated or lottery-financed assets reduce the publicly financed proportion and thus the first-round tax-borne cost. What happens at the second and later rounds might cancel out this saving if laxer financial disciplines were to damage efficiency mechanisms (like capital charging) or lead to much higher total investment.

16 Newly published information has shown that the tender process for the third Dartford crossing revealed that, for all the bidders and technical options, the present-valued cost was higher when the bidders were required to raise finance themselves rather than making use of traditional public procurement (Jackson, 1997).

17 Such nervousness can be found in other functional areas. Beyond the functions of the minimal state, one response to this view is that, if political processes are thought so flawed, there is a powerful case for minimising public action.

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