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**Accrual Output Budgeting in Australia**

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# ACCRUAL OUTPUT BUDGETING IN AUSTRALIA

\*Marc Robinson

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## Abstract

This paper examines the system of ‘accrual output budgeting’ which was introduced by most Australian governments at the end of the 1990s. It explains the key features of the system, and its roots in ‘market’ models. Key difficulties with the model are identified: including the unsuitability of many publicly-funded outputs to funding on a price-per-unit-of-output basis and the information problems which arise in determining the ‘efficient’ price of outputs.

## Keywords

budgeting, market, price, output heterogeneity

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## Introduction

As part of a broader ‘new public management’ reform agenda, public budgeting in Australia has in recent years been reconfigured along the lines of a new budgeting system known as ‘accrual output budgeting’ (AOB). The essence of AOB is the attempt to transform public budgeting into a process whereby government purchases outputs<sup>1</sup> from its departments, under circumstances intended to emulate the competitive market. The system was derived from the New Zealand ‘contract’ budgeting system (NZT 1996; Mascarenhas 1996; Robinson 2000), which was itself adapted from the British National Health System (NHS) ‘internal market’ model introduced in the early 1990s (Culyer, Maynard and Posnett 1992; Bartlett and Harrison 1993).

AOB first came into full operation in 1998, in the states of Victoria and Western Australia (VDTF 1997a; WAT 1996a, 1996b). The Commonwealth (ie national) government and most other state governments achieved this position the following year (DOFA 1998,1999a; SADTF 1998a, 1998b; QT 1997a). There are differences between the AOB systems adopted in the various Australian jurisdictions, but there is also a great degree of commonality. To date, the major (partial) abstainer is the government of the most populous state, New South Wales.

## Accrual Output Budgeting ‘purchase’ arrangements

As noted above, the proximate origins of AOB may be traced back to ‘internal market’ model introduced into British National Health Service in the early 1990s. The NHS internal market model, which itself drew on earlier US ‘prospective payment’ systems of health finance, represented an attempt to place the provision of one specific type of public-funded service on a market footing. Since the early 1990s, Governments in many countries have introduced a variety of other service-specific internal market models, and some of these appear to have

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worked well. A distinctive feature of AOB is that it aspires to apply the internal market model to *all* public-funded services.

Internal markets, including AOB, draw their inspiration from the ‘pure market’ model of purchase transactions in competitive markets. A pure market purchase transaction involves a binding agreement between independent parties for the supply of clearly pre-specified goods or services (‘outputs’) at a pre-agreed price (OECD 1993). It requires that actual output delivery be unambiguously measurable, and that payment be made to the supplier only for outputs actually delivered. Pure market transactions possess the key characteristics of what Williamson (1985) refers to as ‘classical’ contracting. The feasibility of such contracting is a necessary condition for the emergence of textbook-style pure competition, which involves vigorous price-based competition for standardised outputs. In the presence of such competition, the price of outputs is wholly determined by the market, and in the short run need bear no relationship to the cost structure of any particular supplier firm. Indeed, there is a tendency for prices to reflect the efficient costs of production (ie long run minimum average cost). If a particular supplier is inefficient, it can expect to shoulder the full consequences of that inefficiency. There is no capacity for it to share the pain with purchasers.

Consistent with the pure market model, under AOB departments are supposedly funded via what is considered to be a ‘price’ paid for their outputs. The aim was that funding would be set as a function of output quantities. In the simplest form of this idea, funding would be determined by multiplying a price-per-unit-of-output by the planned quantity of the output concerned (VDTF, 1997b: 18). Such an approach would place budgeting on precisely the same basis as a simple market transaction (such as the placement of an order for off-the shelf products and known prices from, say, a stationery supplier). A less simplistic variant of the same idea was that a per-unit price would be paid to cover the variable costs of outputs, with ‘base’ funding provided to cover fixed costs. This approach has been pursued at the Commonwealth level, through ‘purchasing agreements’ negotiated by the Department of Finance and Administration and each department.

A further reflection of the pure market model has been the distinction between output ‘prices’ and output costs. Most Australian AOB jurisdictions announced early on that the ‘price’ paid to departments for outputs would, after a transitional period in which it is set on the basis of departmental costs, be based on the *efficient* (as opposed to the *actual*) cost of production. This would be determined by market or ‘benchmarked’ prices (eg DOFA1999b, 27; VDTF 1999c, 9, 11; SA 1999, 3; QT 1998a, 23). Also reflecting the competitive market model, official AOB documentation in most jurisdictions is full of allusions to the goal of ‘paying’ departments only for actual outputs delivered (what we might call ‘payment for results’). However, as discussed below, only one jurisdiction has made an attempt to actually put this problematic notion into practice.

A key implication of the price/cost distinction is that, in principle, it makes profit measures a business-style performance measure for budget-dependent government agencies. Part of the AOB package has been the introduction of full accrual accounting into the budget sector, and this has of course included the production of operating statements. However, the type of operating statements employed reflects not simply accrual principles, but also the market model. The operating statements employed in AOB jurisdictions treat the ‘price’ paid for departmental outputs via the budget as *revenue* earned by the department. The implication of this is that if ‘price’ is set to reflect efficient cost, and a department is unable to produce the

output concerned at efficient cost, it will make a loss on the production of that output. Just as in the case of a private sector firm operating in a competitive market, inefficiency will therefore show up in the financial bottom line (see, eg QT 1998b, 12). This approach also explains why many of the Australian AOB jurisdictions require departments to report *output* operating statements (supposedly showing profit/loss on specific product lines) as well as an overall departmental operating statement.

The contrast between this and the traditional view of public budgeting is marked. Traditionally, budget funding was not considered to be revenue earned by departments. Departmental 'revenue' was taken to refer only to user-charge revenue received by the department from the public. It followed from this view that departments were inherently loss-making. In Australia, this traditional (and arguably well-founded) approach is reflected in the different approach taken by the New South Wales Government (which, as noted earlier, has not adopted AOB) to accrual financial reporting. In NSW budget documentation, agency budget funding is not treated as revenue. User-charge revenue is. As a consequence, the 'bottom line' of NSW departmental budgeted operating statement is not a profit/loss figure, but rather a 'net cost of service' figure which represents the cost to the budget of departmental service-provision.

AOB aims to improve performance not merely through increased clarity and accountability, but by facilitating maximum competition for the supply of tax-financed outputs. As the Commonwealth Department of Finance puts it, AOB 'complements the use of competitive tendering and contracting in the public sector' (DOFA 1998, vii). AOB-generated information on the unit 'full' costs of outputs is seen as particularly important in this context. It is for this reason that the Victorian Treasury's AOB output costing guidelines, for example, stipulate that 'where products or services are contestable in nature, unit costs should always be provided' (VDTF 1997b, 21).

The market model and the emphasis upon departmental accountability for outputs delivered have led to important changes to appropriations arrangements. Prior to AOB, Australian Parliaments appropriated funds to departments in two categories: current and capital expenditure. No distinction was made between, on the one hand, expenditure on goods and services for which departments were responsible (and for which they could therefore be held accountable) and, on the other hand, expenditure which was beyond departmental control (examples of which include interest on government debt, and welfare entitlement expenditure pursuant to standing appropriation). Under AOB, however, this distinction becomes crucial (DOFA 1998, 15). As a consequence, Australian Parliaments now appropriate funds to each department<sup>2</sup> in three categories: payments for departmental outputs ('controlled' outputs); payments for items not under departmental control ('administered' items); and appropriations to fund new capital funds.

As a reflection of the business model and specifically of the aim to transform departmental operating statement into business-style performance measures, the 'payment for departmental outputs' appropriation is now an accrual appropriation. This means that departments are required to cover non-cash costs (eg depreciation, accumulating liabilities to employees) as well as the cash costs of their outputs from this appropriation<sup>3</sup>.

AOB is, of course, a system of performance budgeting. The term ‘performance budgeting’ refers to systems which explicitly link budgetary resource allocations with the results (outputs or perhaps outcomes) which government agencies are expected to achieve with those resources, as a means of promoting better performance in service delivery (OECD, 1995; Shand, 1998). The starting point for most contemporary forms of performance budgeting, AOB included, is program budgeting, the original aspiration of which was to base budgeting upon outputs. Program budgeting was standard public budgeting practice throughout Australia prior to the arrival of AOB, having been adopted in the 1980s. AOB incorporates much of the former program budgeting framework. Thus, under AOB the annual government budget documentation reports the breakdown of funds allocated to broad output groups within each Department, very much like the former ‘programs’<sup>4</sup>. These output groups are groups of related outputs—where ‘related’ often means that they aim at delivering the same type of outcome<sup>5</sup>. Each output group is, in turn, comprised of a number of less aggregated output groups, like the former ‘sub-programs’.

The budgetary allocations of funding to output groups are not binding. Instead, parliamentary appropriations for departmental outputs are ‘global’, just as they were under the former program budgeting regime<sup>6</sup>. In other words, they specify for each department one aggregate sum to cover all the outputs for which the department is responsible. This arrangement reflects a consensus that it is important to retain flexibility to reallocate funds between outputs during the year in response to changing demand or unanticipated events. The intention is, however, that this flexibility should in no way compromise the principle of accountability for the delivery of specified outputs, irrespective of whether there is some variation in the output deliverables during the year.

Although AOB has its roots in program budgeting, it is clearly a very different system. Essentially, it attempts to build a market-type superstructure upon program budgeting foundations (WAT 1996a, 2). In this respect, it differs considerably from many other forms of performance budgeting which operate around the world today. Most contemporary forms of performance budgeting seek to go beyond program budgeting in tightening up the linkage between results and funding, and in nearly all cases this involves the stipulation of explicit output/outcome targets linked to budget funding. However, the other versions of performance budgeting do not pretend to set budget allocations by multiplying output ‘prices’ by quantities, nor do they generally regard agency profit results as a key performance measure. To take one US example, in the State of Florida under a system of ‘performance-based program budgeting’ the annual budget acts passed by the legislature include for each agency a set of output and outcome targets (Florida Office of Program Policy Analysis and Government Accountability, 2000). In the United Kingdom, there has developed since 1998 a system of Public Service Agreements and Service Delivery Agreements between the Government and agencies linked to the budget (HM Government, 2000). In Australia, the only state not to have adopted accrual output budgeting—New South Wales—has over recent years been progressively introducing a system of Service Resource Allocation Agreements between agencies and executive government (NSW Treasury, 2000).

### **Government’s ‘ownership interest’**

The idea that Government should conduct arms-length purchase transactions with its departments in the same manner as it might with private providers of outsourced outputs is a problematic one, not least because Government ‘owns’ the former. The New Zealand system

attempted to resolve this by dichotomisation of the purchaser and ownership functions of Government, although arguably without great success (Schick 1996). Australian AOB has picked up the same theme (eg VDTF 1998a, 300). The underlying idea is that the purchase relationship should be complemented by a separate ownership relationship designed to emulate the relationship between shareholders and firms in the private sector.

Consistent with this, capital appropriations to departments have now been re-labelled as ‘equity injections’<sup>7</sup>. Finance ministries also assert that, in addition to equity injections, departments may now, just like private corporations, have access to two main alternative capital funding sources. The first of these is so-called ‘depreciation-based’ capital funding, which in most Australian jurisdictions is conceptualised as a drawing down of accumulated depreciation reserves. The other is what has been referred to as the ‘rearrangement of the asset structure’—accounting jargon for funding derived from departmental asset sales (Robinson, 2002a). Implicit in both of these alternative capital funding sources is the problematic notion that departments might enjoy a considerable measure of the freedom which private sector firms enjoy in such funding decisions.

So-called ‘capital charging’ has been introduced in most, but not all, Australian AOB system (eg DOFA 1999c; VDTF 1998b)<sup>8</sup>. Clearly, in a budgeting system supposedly based upon output prices, it is logical to treat the opportunity cost of capital as a cost to be taken into account in price-setting. Accordingly, the State governments which impose capital charges treat it as an ‘above the line’ expense in operating statements, as is done elsewhere in the world where capital charging is employed. However, the Commonwealth Government takes a different approach, treating the capital charge as a ‘below the line’ (after profit) entry, conceptualising the payment by agencies of the capital charge as the equivalent of a profit dividend paid to shareholders.

## **Problems of the pure market model**

The AOB attempt to apply ‘pure market’ principles to public budgeting represents not only its most distinctive, but also its most problematic, aspect.

The core ‘market’ idea that funding should be determined by the payment of a specific price-per-unit for each output type is perhaps relatively unproblematic when applied to relatively homogeneous (standardised) outputs. Unfortunately, however, many publicly-provided services are highly heterogeneous in nature, and are quite unsuited to funding via a fixed price-per-unit. ‘Heterogeneity’ refers to differences in the level of services, and therefore in costs per unit of output, which arise from differences in client or case characteristics between units of the ‘same’ type of output. Consider the example of assistance/intervention provided in cases of children perceived to be ‘at risk’ of abuse. The type and extent of activity associated with such cases varies considerably depending, amongst other things, upon the seriousness of any abuse which has already taken place and the circumstances of the family. Some cases may involve extensive assistance, while others may require much less state involvement. When outputs are characterised by substantial heterogeneity—and this is often the case in the public sector—funding via the payment of a fixed amount per output can be entirely inappropriate, and may lead to highly undesirable consequences.

Nor is this the only reason why the principle of funding on a per-unit-price basis cannot be applied across the board in the public sector. There are also many ‘contingent capacity’ services, where the need to maintain a capacity to provide a service rapidly in response to unpredictable demand means that funding must be based not on output quantity produced, but on the maintenance of a desired service-delivery capacity. The armed services, emergency services, and emergency departments of hospitals are just a few examples of such services.

In this respect, it can be argued that AOB’s central problem lies precisely in the scale of its ambition. Although there are strong grounds for believing that service-specific internal market models can and do work well in respect to certain types of outputs (example of which are acute inpatient medical services and prisons). Internal markets are more likely to work in relation to services which are relatively standardised. The example of output-based hospital funding models arguably suggests that they may also work for outputs which display moderate degrees of heterogeneity but which are produced in large volumes by multiple producers. However, the proposition that they can provide a general template for all government-financed services is unconvincing.

Given these realities, it is hardly surprising that theory and the principle of output-based funding under AOB tend to diverge somewhat. Research interviews suggest that, notwithstanding the way the system is supposed to operate, in most Australian States budget allocations are in practice almost never decided *even in part* by multiplying planned output quantity by output prices.

The Commonwealth government has made a more serious attempt to apply the principle of output-based funding through so-called ‘purchase agreements’ which are negotiated between each agency and the Department of Finance and Administration (DOFA). Under these agreements, a significant portion of the funding provided to agencies comes through per-unit ‘prices’ paid for a range of output-types. Alongside this output-price funding, there is also a large component of ‘base’ funding provided, which is not an explicit function of output quantities. However, under this system the ‘base’ funding provided does not by any means represent only funding for fixed costs. Many of the outputs produced by Commonwealth agencies are not funded, even in part, through per-unit ‘prices’, and funding for both variable and fixed costs associated with these outputs is in effect included in the base funding components of agency funding. Even then, many of the outputs covered by per-unit prices in the purchasing agreements are quite heterogeneous, and this is the source of many practical difficulties.

Similarly, the ambition of setting prices based upon market or benchmarked prices is highly problematic. Market price comparators are in very many cases simply not available. Benchmarking, on the other hand, is costly and does not necessarily provide robust information on the ‘shadow’ market price. It is therefore unsurprising that progress in separating output ‘prices’ from costs appears to be slow (Vertigan, 1999).

As mentioned earlier, there are frequent references to the principle of ‘payments by results’ in the official literature expounding the AOB system. Putting this principle into practice is, however, no easy matter. The principle was never implemented in New Zealand, notwithstanding some enthusiasm on the part of the NZ finance ministry (NZT 1996, 38). In Australia, the same is true in most states. Only in the state of Victoria has there been a recent attempt to make payment by results a reality. Under the Victorian system, when a department

initially draws upon appropriated funds in order to meet the costs of producing outputs, the funds provided to it are considered to be an advance of funds. The department then 'invoices' Treasury on a quarterly basis for the outputs it has delivered. The theory was that, depending upon how fully the department has delivered on its required outputs, it will be permitted to formally recognise as revenue in its accounts some or all of the funds which have been provided to it. If the department were to less than the quantity (or quality) of output 'agreed' in the budget, it would record an 'operating deficit' in its accounts, because the revenue it was permitted to recognise would be less than the expenses it had incurred (VDTF 1998a, 302-3).

Whatever the theory in Victoria, the system does not appear to have worked in practice. There has to date been no instance of Victorian departments being "paid" revenue less than its expenses as a consequence of adjudged under-performance. Political considerations are part of the explanation: individual ministers have successfully fought off certain attempts by Treasury to inflict such paper losses upon departments which it perceived as under-performing. However, the more fundamental problem is the inherent ambiguities of output measurement, particularly in the presence of significant heterogeneity.

### **Benefits of Accrual Output Budgeting**

The above analysis suggests that the 'market' principle of funding based on output prices can only be selectively applied in the public sector. If this is the case, then it may well turn out that the approach is of considerable benefit when applied to more standardised, mass produced outputs. However, the system is too new to permit firm conclusions to be drawn in this respect.

Setting aside the distinctive 'market' aspects of AOB, the system has had certain other clear benefits. It has led to a renewed effort to improve and extend performance measures and indicators. Considerable work is being undertaken to articulate the linkages between outputs and outcomes, and strategy. Moreover, it has been associated with a major drive to shift public sector accounting in Australia onto an accrual basis: a step which arguably has many benefits in other areas, including fiscal policy (Robinson, 2002b).

### **Conclusion**

The application of market purchase principles across the board to public budgeting seems profoundly problematic. The AOB objective of funding outputs generally via the payment of output prices is not a realistic one, although it is clearly capable of useful application on a selective basis. This implies that the AOB objective of making the operating result a key performance measure for government departments, in the way it is for businesses, is not a realistic one. Given this, one might predict that over time the market paraphernalia of AOB will progressively be downplayed.

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## Endnotes

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<sup>1</sup> In Australia, as in New Zealand, 'outputs' have been defined to include not only services provided to the community, but also services (such as policy advice) which is provided by departments to ministers or to other elements of the political leadership (Cabinet, Parliament etc). There is some debate about whether inter-agency intermediate services might sometimes be considered to be outputs.

<sup>2</sup> Or, more accurately, to each ministerial portfolio.

<sup>3</sup> A full explanation and evaluation of the AOB appropriations may be found in M Robinson, 'Financial Control in Australian Government Budgeting', *Public Budgeting and Finance*, 22 (1), 2002.

<sup>4</sup> Output groups, moreover, are being defined in such a way as to more truly reflect the concept of an output than had been the case under Australian program budgeting practice. Departments have, for example, rarely been permitted to use 'corporate services' as an output group, although corporate services programs were common under program budgeting.

<sup>5</sup> The Commonwealth refers to 'Outcomes' rather than output groups, but the meaning is the same.

<sup>6</sup> The Commonwealth submits appropriations to Parliament in a form grouped into 'outcomes'. However, this allocation is not binding, and is purely for informational purposes (DOFA, 1998: 33; 1999c).

<sup>7</sup> The Commonwealth differs from the states in now making loans to departments as well as equity injections (DOFA, 1998: 33; 1999c).

<sup>8</sup> Capital charging (Heald and Scott 1995; Heald 1996; Robinson 1998) is a private-sector idea the first application of which to the public sector appears to have been the British NHS. New Zealand subsequently extended capital charging to the whole budget sector. The idea is that, in addition to depreciation, a type of 'interest' charge is levied upon departments for the use of the capital which they have tied up, particularly in physical assets. Because it means that capital is longer provided 'free', capital charging is thought by its proponents to reduce wasteful capital expenditure and to encourage the identification and sale of surplus assets. The rate at which the capital charge is set is supposed to reflect the opportunity cost of capital provided to Departments. In thus providing a 'return on the equity provided by the Government' (DOFA 1999a, 2), it is considered to mimic private sector shareholders expectations that enterprises to which they provide capital should earn at least a 'normal' rate of return.