

ACCRUAL ACCOUNTING AND THE PUBLIC SECTOR

Marc Robinson
School of Economics and Finance
Queensland University of Technology

1. Introduction

Over the last couple of years, the Commonwealth and the almost all State governments have put their annual budgets and departmental accounting on an accrual basis. Accrual accounting has, as a consequence, almost entirely replaced traditional 'cash' accounting in the Australian public sector. This is a great step forward. Accrual accounting has great advantages, particularly in the fiscal policy context.

Notwithstanding the advantages of accrual accounting, it has to be frankly acknowledged that insofar as the move to accrual accounting was 'sold' on the basis of improved fiscal transparency, it has failed. Ministers, parliamentarians and other lay uses would appear to be very much confused by the new accrual-based Budget Papers. So even are many trained economists.

This paper aims to do a number of things. Firstly, it outlines the elements of accrual fiscal measures, including the Commonwealth's new 'fiscal balance' measure. Secondly, it presents a view as to the key benefits of adopting accrual accounting in government. Thirdly, it points to some of the key reasons why the Budget Papers and other government financial reports have become unnecessarily confusing, and suggests some solutions.

2. Accrual Fiscal Measures

Prior to the move to accrual accounting, Australian governments used traditional 'cash' accounting. This measured financial flows in terms of outlays (money paid out) and revenue actually received. The basic 'cash' budget balance equals outlays minus cash revenue, and in stock terms is equal to the change in net debt from one year to the next (ignoring valuation effects). Over the years, the flawed nature of the cash budget balance as a measure of fiscal policy stance resulted in a number of quasi-accrual adjustments being made, leading ultimately to an 'underlying' cash budget balance measure which excludes privatisation receipts.

Under accrual accounting, government reports financial flows in terms of an *operating statement* equivalent to a business profit and loss statement. If the budget *operating balance* is zero, then this year's operating expenses are being fully covered by this year's revenue. Expenses, of course, are not the same as outlays. Expenses measure this year's costs of production, whereas outlays does not. Depreciation, for example, is an expense, whereas capital outlays are not, because capital outlays this year contribute to production over a number of years into the future and cannot therefore be regarded as a cost of production this year.

Accrual accounting has also, for the first time, given governments *balance sheets*. The balance sheet recognises a range of assets and liabilities. The 'value' of all assets minus all liabilities in the balance sheet is termed *net assets* or *net worth*. Accounting complications aside, this year's operating balance is equal to the change in net worth between the end of this financial year and the end of the previous financial year.

What types of assets and liabilities are included in the balance sheet? There are, firstly, *non-financial assets* such as land, capital equipment and inventories. There are also *financial assets* and liabilities, defined as assets and liabilities which give rise to cash flows. Conventional debt is a financial liability, but so also are other liabilities such as superannuation obligations to public servants and lease obligations. The budget ('general government') balance sheet also includes amongst financial assets a figure representing the value of government's equity holdings in public enterprises.

Net financial worth is defined as *financial assets* minus financial liabilities, and is therefore equal to net worth minus the value of non-financial assets. The net financial worth of the Commonwealth as at 30 June 2000 was minus \$71.6 billion. This being a negative figure, it probably makes more sense to talk about net financial *liabilities* (NFL), or broadly-defined debt, of \$71.6 billion. Three-quarters (\$53.1 billion) of this was conventional net debt. The rest was largely accounted for employee entitlements (\$81.8 billion) offset by public enterprise equity (\$61.8) (Treasury, 2000).

3. Accrual Accounting and Commonwealth Fiscal Policy

Prior to the introduction of accrual accounting, the Commonwealth's headline fiscal policy indicator was the underlying cash balance. It was the cash budget balance which the Howard government had in mind when, upon coming to office, it declared its key medium-term fiscal policy objective was to 'achieve underlying budget balance on average over the business cycle'. With the arrival of accrual accounting, however, the cash budget balance has been supplanted in this context by a new headline fiscal policy indicator—the so-called *fiscal balance*. The key fiscal policy objective has now been reformulated so as to require 'fiscal balance, on average, over the course of the business cycle' (Treasury, 1999a, p 1.14).

What is this new fiscal balance measure? Simplifying a little, fiscal balance equals the operating balance minus net investment. If the fiscal balance is zero, then enough revenue is being raised not only to cover the costs of production of all goods and services delivered to the community, but also to fully pay for increases in the public capital stock. Fiscal balance is thus a measure of net lending by government from the private sector. If the fiscal balance is zero, government is not drawing on private sector savings to cover either its capital outlays or its operating costs. Fiscal balance is not (and does not purport to be) a measure of government savings. Savings is the excess of income over consumption, and is therefore equal to the operating balance rather than the fiscal balance. If the fiscal balance is zero, government savings equals government net investment.

Fiscal balance can also be viewed from a stock perspective. As mentioned above, the operating balance equals the change in net worth. Net investment, on the other hand, equals the change in the capital stock: ie in the change in non-financial assets. Because fiscal balance is defined as the operating balance minus net investment, it is equal to the change in net worth minus the change in non-financial assets. Since net worth equals non-financial assets plus net financial worth, it follows that fiscal balance equals the change in net financial

worth. A deficit on the fiscal balance must mean a commensurate increase in net financial liabilities (broadly-defined debt).

This helps us compare the cash budget balance with fiscal balance. Prior to the introduction of accrual accounting, it was considered that the cash budget balance was a good measure of government net lending, for the obvious reason that a cash deficit means a commensurate increase in net debt. However, to use the cash budget result as a measure of government savings is in effect to count as part of savings any financial assets which government accumulates to fund increases in non-debt liabilities (pursuant, for example, to arrangements to ensure 'full funding' of superannuation obligations). Clearly, however, putting aside reserves to meet an obligation when it becomes due is not, properly speaking, saving. This mistake is avoided if one uses the fiscal balance measure, which only counts increases in asset holdings as savings insofar as they are not offset by increases in liabilities (whether conventional debt liabilities or non-debt liabilities). Fiscal balance can therefore be said to measure Government net lending with greater precision than does the cash budget result. It is for this reason that it is regarded by the Commonwealth Treasury as 'the accrual counterpart of the underlying cash balance' (Treasury, 1999b, p 2).

The introduction of this new fiscal measure makes strong sense given current Commonwealth fiscal policy. The current Government has taken the view that, in order to boost national savings, government should not borrow at all from the private sector. Expressed differently, the policy requires not merely that Government should save, but that the magnitude of government savings ought to equal net public investment.

Although extremely important, boosting national savings has not been the only key theme of current medium-term fiscal policy. The Government has also attached great importance to dramatically reducing, or eliminating, public debt. Privatisation receipts have been extensively used for this purpose. Government leaders have asserted that debt is an unfair burden on future generations, and that low or zero debt is a good way of ensuring fiscal sustainability and maintaining the confidence of the international money markets.

Logically, one might think that following the introduction of accrual accounting, the attack on narrowly-defined net debt might have broadened out into an attack on broadly-defined debt (net financial liabilities). However, the focus has continued to be on conventionally-measured debt. It is perhaps relevant here that the prognosis for debt reduction is much less optimistic if one focuses upon broadly-defined debt rather than upon conventional debt. The Mid-Year Financial and Economic Outlook projections released by the Government in November 2000, for example, projects a \$57 billion reduction in conventional debt from 30 June 2001 to 30 June 2004, to *minus* \$14 billion. However, the reduction in broadly-defined debt implicit in the MYFEO projections is less than half that (\$27 billion), from \$71 billion to \$44 billion. The projected elimination of debt could therefore be said to derive solely from the use of an unduly narrow definition of public debt. Not only that, but when additional infrastructure spending and a potential economic downturn are taken into account (the MYFEO assumes the continuation of the current economic boom), it might well be that there is ultimately no reduction in broadly-defined debt.

4. Accrual Accounting and the 'Golden Rule'

Although accrual accounting has been important to the Commonwealth in permitting it to refine its medium-term fiscal policy targets, it is not possible to do justice to the fiscal policy

significance of accrual accounting without discussing an alternative fiscal policy approach: that embodied in the so-called ‘golden rule’ of public finance.

The ‘golden rule’ is primarily concerned with intergenerational equity and with fiscal smoothing in relation to capital outlays irregularities. The golden rule can be taken, in a shorthand way, to assert that taxpayers in each time period should ‘pay their way’, in the sense that they should as a group pay for all outlays from which they benefit, without requiring any subsidy from taxpayers in other time periods. The golden rule requires the contemporaneous tax funding of any outlays the benefits of which are entirely enjoyed contemporaneously. It rejects, however, the proposition that capital outlays should as a matter of principle be tax-financed at the time it is undertaken. Instead, it asserts that the costs associated with capital outlays should be spread over time in accordance with the distribution over time of the benefits which that capital outlays generate. It defends, within limits, the use of debt and other financial liabilities for this purpose. The golden rule has long roots in public finance practice. Perhaps its most notable recent manifestation has been in the UK, where the incoming Blair Labour government explicitly adopted the golden rule as its primary medium-term fiscal policy principle (UK Treasury, 1997). In Australia, the Queensland Government recently adopted broadly the same approach under its *Charter of Fiscal and Social Responsibility*. The fiscal policy stance of the Bracks Government in Victoria is also broadly consistent with the golden rule approach.

To proponents of the golden rule, the accrual operating balance is of great importance because it is a useful indicator of the intergenerational equity stance of fiscal policy. The golden rule requires that governments achieve a balanced accrual budget—in other words, a zero operating balance—on average over the course of the business cycle (Robinson, 1998a). A zero operating balance requirement is (‘revaluations’ aside) equivalent to a ‘constant net worth’ rule.

Exponents of the golden rule are not indifferent to the issue of fiscal sustainability. They recognise that it is essential that the debt and other financial liabilities be kept at moderate levels, and well within the taxable capacity of the nation. Hence, for example, what the British call the ‘sustainable investment rule’—a rule requiring that the ratio of narrowly-defined debt/GDP not exceed a certain moderate ceiling. Accrual accounting helps once again here, because it is clearly more appropriate to articulate a fiscal sustainability rule in terms of a maximum ratio of net financial liabilities to GDP than in terms of debt/GDP.

It is not possible to discuss the issue of national savings policy properly here. Current policy is based upon the proposition that higher government savings leads to higher national savings and thence to lower current account deficit. However, even if one accepts this proposition, it does not follow that one is obliged to accept that the appropriate target level of government savings should be the quantum of government net investment. One alternative policy would, for example, be to target a structural operating surplus of a defined magnitude (eg a certain percentage of GDP). This is what the Bracks Government has done in Victoria, also perhaps more for fiscal ‘safety margin’ reasons than as an instrument of national savings policy.

As noted above, the golden rule is primarily concerned with intergenerational equity and fiscal smoothing. With regard to fiscal smoothing, a key point is that capital outlays tend to have built-in irregularities. For example, there can be a ‘bunching’ of assets replacement requirements when a disproportionate number of assets wear out around about the same time. This might be followed by periods of below-average replacement requirements.

Discontinuous changes in population growth rates and other demographic factors can also have amplified impacts on capital outlays requirements. Because the golden rule does not require all capital outlays to be contemporaneously tax-financed, it permits governments to respond to medium-term fluctuations in capital outlays (Robinson, 1996). In the short and medium terms, the golden rule might imply either deficit or surplus structural cash budget balances/fiscal balances. If the long run trend is for the stock of public capital to grow broadly in line with GDP, the golden rule would imply a small structural deficit in the long-run average cash budget balance/fiscal balance.

The issue of intergenerational equity is in fact rather more complicated business than simply ensuring that taxpayers each year pay the full cost of the services which they receive from by government. Governments redistribute incomes, and one form of income redistribution which they carry out is redistribution across people's lifetimes. That is, during certain periods of life, such as retirement, the average person experiences positive net fiscal benefits (in other words, the cost of services and transfers received from government exceeds taxes paid). During other periods, net fiscal benefit tends on average to be negative. The rationale of the involvement of the State in such lifecycle transfers arises from capital market imperfections. Other than in exceptional steady-state demographic growth circumstances, lifecycle fiscal transfers by Government make the golden rule a somewhat imperfect intergenerational equity principle. Concretely, it misses out on the intergenerational equity case for governments to build fiscal reserves to deal with prospective fiscal challenges such as a period of heavy health and aged care outlays arising from the retirement of a large numbers of 'baby boomers'.

At a theoretical level, these broader intergenerational equity considerations can be addressed within a framework which recognises future expenditure and revenue (on a constant-policy basis) as assets and liabilities in a comprehensive Government balance sheet, along the lines proposed by Buitter (1990). So-called 'generational accounting' (Auerbach, 1994) takes a different, but broadly equivalent, approach to the same problem. However, neither of these theoretical frameworks are capable of yielding simple and practicable fiscal policy rules (Haveman, 1994; Buitter, 1995). In this context, a good case can be made for the golden rule as an approximate intergenerational equity rule, to be supplemented with additional policies where necessary for dealing with demographically-related fiscal discontinuities (Robinson, 1997).

5. Managerial Benefits of Accrual Accounting

The above discussion has emphasised the fiscal policy advantages of accrual accounting. This emphasis will strike some as surprising, because the recent extension of accrual accounting across the Australian public sector has been largely driven by perceived microeconomic/management accounting benefits rather than fiscal policy considerations.

The managerial accounting case for accrual accounting in the public sector focuses upon its role in product (output) costing. Accrual accounting is being combined with output costing systems to enable departments to measure the 'full' costs of each of the products they deliver the community. This information is seen as a powerful tool with which to drive efficiency improvement. It is supposed to deliver unit product cost information which can then be used for performance measurement and benchmarking or market testing purposes.

The product costing argument for accrual accounting has some merit. It can, however, be argued that the managerial benefits of accrual accounting are somewhat reduced by conceptual and practical problems such as

- the prevalence in the public sector of major output measurement problems,
- significant practical problems in accurate cost attribution at the individual product level,
- differences between accounting concepts of cost and decision-relevant economic concepts of cost.

In the new Accrual Output Budgeting (AOB) system which have been adopted almost right across the country, the managerial benefits of accrual accounting are seen as extending much further than this. Traditionally, surplus/deficit measures were seen as meaningless at the level of the individual government departments, which was regarded as inherently loss-making. Under AOB, by contrast, departments are seen as businesses, with their own operating statements. Like businesses, departmental performance under AOB is to be measured by reference to the bottom line profit or loss.

It is not possible here to evaluate accrual output budgeting, other than to say that, notwithstanding the system's considerable merits, the jury is still out on how far it is practicable to turn non-profit government departments into profit-oriented entities. In any event, the case for accrual accounting is logically separable from the case for AOB. It is perfectly possible to adopt accrual accounting without also adopting the full-blooded AOB framework. This is precisely what NSW, for example, has done.

6. The Accrual Confusion

The confusion which seems to prevail amongst those attempting to use the new accrual-based Budget Papers and departmental financial reports no doubt partly reflects a lack of familiarity on the part of some with accrual principles. Unfortunately, however, there is much more to it than that. The Budget Papers have been made opaque and confusing in a number of ways which might have been avoided.

Perhaps the most serious problem is that in Australia we have not adopted not just one accrual accounting system, but two. There is the system based upon Australian Accounting Standard (AAS) 31. And there is the Government Finance Statistics (GFS) system developed by the Australian Bureau of Statistics (in conformity with international standards developed by the International Monetary Fund and United Nations). The numbers generated by these two systems tend to differ quite significantly. For example, the 1999-2000 Commonwealth budget operating balance was \$13.5 billion on a GFS basis. By contrast, the AAS 31 operating balance before abnormals was \$9.5 billion (and, just to confuse things even more, there was a \$22.9 billion AAS 31 operating balance *after* abnormals). GFS net worth was minus \$11.6 billion, while AAS 31 net worth was minus \$52.9 billion (Treasury, 2000).

Merely having two accounting systems is a serious retrograde step in Australia. Prior to the introduction of accrual accounting in Australia, there has been huge progress towards the standardisation of government budget accounting, based upon the cash accounting version of GFS. This progress has now been reversed.

Why two systems? AAS 31 is driven by the idea that government accounting should operate just like private sector accounting, whereas GFS is tailor-made for public sector policy

purposes. This means that AAS 31 incorporates accounting policies which do not necessarily make a great deal of sense in a government context. In particular, AAS 31 treats a range of 'revaluations' as if they were ordinary revenue or expenses, whereas GFS excludes revaluations from the operating statement. One implication of this is that if government were to make a profit on the sale of a public enterprise (because the sale price exceeds the enterprise's balance sheet value), this profit would under AAS 31 be treated as if it were ordinary revenue. If this accounting approach were to be accepted, it would mean—irrespective of whether fiscal policy was guided by the current fiscal balance rule, or by the alternative golden rule approach—then any such profit could be immediately applied to increase government consumption outlays. Few economists would regard the immediate spending of one-off fiscal gains as passing either a fiscal responsibility or an intergenerational equity test.

It is easy to see why such an accounting approach makes sense in a business context. The purpose of accrual accounting in business is the meaningful calculation of profit, and profits on asset sales are clearly just as much part of profit as are profits earned by selling products. In the non-profit budget sector of government, however, different considerations apply. Government accounting should reflect these considerations, in the way a GFS does.

The Commonwealth Treasury fully recognises this, and has sensibly excluded revaluations when it derives the fiscal balance from the AAS 31 operating balance. Things would have been so much simpler, however, if the Commonwealth and other Australian governments had simply standardised on the GFS approach from the outset.

Similar comments apply to the treatment of abnormals. As mentioned above, the 1999-2000 Commonwealth AAS 31 operating balance after abnormals of \$22.9 billion, \$13.4 billion higher than the AAS 31 operating balance before abnormals. The difference between these figures was principally due to the increase in the balance sheet valuation of the government's equity in Telstra from book to anticipated market value, pursuant to the decision to sell the government's remaining equity in the telecommunications carrier (a decision since blocked by the Senate). Once again, the Commonwealth Treasury did the right thing by treating the operating balance before abnormals as the primary measure, and ignoring these abnormals when deriving the fiscal balance. Again, however, this simply highlights the inappropriateness of an accounting system which permits an abnormal of this type to impact upon the operating statement in the first place.

It is of considerable concern in this context that the requirement to distinguish between the operating balance before abnormals and the operating balance after abnormals does not apply in relation to accounting periods after 1 July 2000 (ABS, 2000, p 23). Although one would expect that the Commonwealth Treasury and responsible State Treasuries would continue to make this distinction even though not obliged to, the fact remains that the accounting standards have opened the door to serious manipulation of the operating balance. This is particularly unfortunate given that so much progress had been made under the former cash accounting regime in reducing the scope for manipulation of this type.

The tension between AAS 31 and GFS is not the only area of unnecessary confusion in the new accounting and budgeting regime. The new appropriations arrangements, associated with accrual output budgeting, are arguably a problem, and could be simplified (Robinson, 2000). At a more technical level, the adoption in the Australian public sector of the complex

the 'deprival value' methodology of asset valuation and depreciation, is also open to question (see Robinson, 1998b).

That it is possible to produce a more user-friendly set of accrual-based Budget Papers can be confirmed by a quick glance at the Budget Papers produced by the British Treasury (easily found on the Web).

7. Conclusion

The introduction of accrual accounting into core government in Australia is a very positive development, with both fiscal policy and managerial benefits. Usually, the managerial benefits have received most attention, whereas this paper suggests that the fiscal policy benefits have received too little attention. Unfortunately, accrual accounting has been implemented in a manner which introduces an unnecessary degree of complexity into government accounts, making these accounts very difficult for non-experts to understand. Urgent action to remedy this problem is now required.

REFERENCES

- ABS (2000), *Information Paper: Accruals-based Government Finance Statistics*, Canberra.
- Auerbach, A, J Gokhale and L Kotlikoff (1994), 'Generational Accounting: A Meaningful Way to Evaluate Fiscal Policy', *Journal of Economic Perspectives*, 8 (1), Winter, 73-94.
- Buiter, W (1990), *Principles of Budgetary and Financial Policy*, MIT Press, Cambridge, Mass.
- Buiter, W (1995), 'What do Generational Accounts Tell Us about the Effects of the Budget upon Intergenerational Distribution and Saving Behaviour?', *Conference Paper*, s. 111, Centre for Economic Performance Seminar, Cambridge.
- Haveman, R (1994) 'Should Generational Accounts Replace Public Budgets and Deficits?', *Journal of Economic Perspectives*, 8 (1), Winter, 95-111.
- Robinson, M (1996), 'The Case Against Balanced Budgets', *Australian Journal of Public Administration*, 55 (1), March, 48-62.
- Robinson, M (1997), 'Intergenerational Equity, Deficit Rules and Generational Accounting', EFIC Discussion Paper No 45, Queensland University of Technology, Brisbane.
- Robinson, M (1998a), 'Measuring Compliance with the Golden Rule', *Fiscal Studies*, 19 (4), 447-62.
- Robinson, M (1998b), 'Accrual Accounting and Public Sector Efficiency', *Financial Accountability and Management (UK)*, 14(1), 21-37.
- Robinson, M (2000), 'Financial Control in Australian Government Budgeting', EFIC Discussion Paper, Queensland University of Technology, Brisbane.
- Treasury (1999a), *Budget Paper No 1, 1999-2000*, Commonwealth Treasury, Canberra.

Treasury (1999b), *Fiscal Policy under Accrual Accounting: Information Paper*, Commonwealth Treasury, Canberra.

Treasury (2000), *Final Budget Outcome, 1999-2000*, Commonwealth Treasury, Canberra.

UK Treasury (1997), *Equipping Britain for Our Long-Term Future: Financial Statement and Budget Report*, London: The Stationery Office.