Developing the Public Sector Balance Sheet

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Introduction

The Government's adoption of the golden rule has increased the importance of distinguishing between current and capital spending, and the Government has signalled its interest in looking at the public sector balance sheet. This article discusses the public sector balance sheet and how it could fit into the Government's fiscal policy framework:

- section 1 describes the balance sheet data presently available and recent trends in public sector assets and liabilities;
- section 2 outlines the Government's fiscal policy framework and discusses how the balance sheet might fit into that framework, which raises issues of how the balance sheet is measured and what should be included;
- finally, section 3 concludes with a look at how the balance sheet is being developed to meet more fully the requirements of fiscal policymakers.

Section 1 - The public sector balance sheet

National and sectoral balance sheets for the UK are published by the ONS, usually in the *Blue Book*[1]. They were first produced for 1975, although it was only relatively recently that they were produced on an annual basis.

As well as showing the balance between assets and liabilities, the public sector balance sheet also provides useful information on how those assets and liabilities are distributed. Most of the public sector's holdings of non-financial assets is accounted for by buildings and civil engineering works, which includes roads. Government securities (gilts) account for over half of public sector financial liabilities[2], which is not surprising as these are the main way in which the Government borrows, with National Savings being the second largest single liability.

Table 1 shows the public sector balance sheet for the end of 1997, when the public sector was estimated to hold non-financial assets of £463 billion and net financial liabilities of £341 billion. The balance between these, public sector net worth, was £122 billion. The net financial liability of the public sector is reasonably close to the figures for net public sector debt that are usually shown in Budget documents.

Recent trends in the public sector balance sheet

Chart 1 below shows recent trends in public sector non-financial assets, net financial assets and total net worth. From 1988, public sector net worth fell consistently relative to national income, reflecting two main developments:

- increasing net financial liabilities due to the deterioration in the public finances as the economy went into recession, which was reflected in a worsening of the net financial position in the early 1990s; and
- a fall in total non-financial assets, reflecting both falling land prices and the effect of privatisation whereby public corporations' non-financial assets were transferred to the private sector.

Some of these factors also show up in the division of public sector net worth between central government, local government and public non-financial corporations:

- central government net worth fell sharply as borrowing increased in the early 1990s - the effects on net worth of high government borrowing in earlier years are likely to have been offset to some degree by inflation eroding the real value of government debt;

Table 1 Public sector balance sheet - December 1997

	£ billion		£ billion
Tangible Assets		**Financial liabilities**	
Residential buildings	82	Gilts	319
Other buildings	136	National savings	63
Civil engineering works	186	Other securities	18
Plant and machinery	31	Loans	87
Other assets	22	Other liabilities	37
	458		**524**
Intangible Non-financial Assets	**5**		
Total Non-financial Assets	**463**		
Financial Assets			
Currency and deposits	32		
Securities other than shares	19		
Loans	77		
Shares and other equity	8		
Other financial assets	47		
	183	**Public sector net worth**	122
	646		**646**

Source: ONS

- local government net worth rose during the late 1980s and fell during the early 1990s, which largely reflects the effects of movements in the prices of land and buildings - including both roads and council housing; and

- public non-financial corporations' net worth fell through much of the 1980s, reflecting the effect of privatisation in transferring assets to the private sector.

Looking at the composition of tangible assets owned by the public sector also picks up similar influences:

- there has been a reasonably steady decline in the public sector's holdings of both commercial industrial and other buildings and plant and machinery, reflecting the effects of privatisation and the reduced involvement of the state in activities requiring these sorts of assets;

- movements in residential buildings seem mainly to follow significant trends in house prices; and

- civil engineering works showed a sharp drop at the end of the 1980s, due largely to the effects of falling land prices and the privatisation of the water utilities.

National and public sector balance sheets

Public sector net worth only accounts for a relatively small proportion of national net worth.

Table 2 National balance sheet - December 1997

Net worth by sector	**£ billion**
Public sector	122
o/w Central government	-140
Local government	210
Public non-financial corporations	52
Households and non-profit institutions serving households	3580
Private non-financial corporations	-386
Financial corporations	-212
National net worth	**3103**

Source: ONS

Chart 1
Public sector net worth

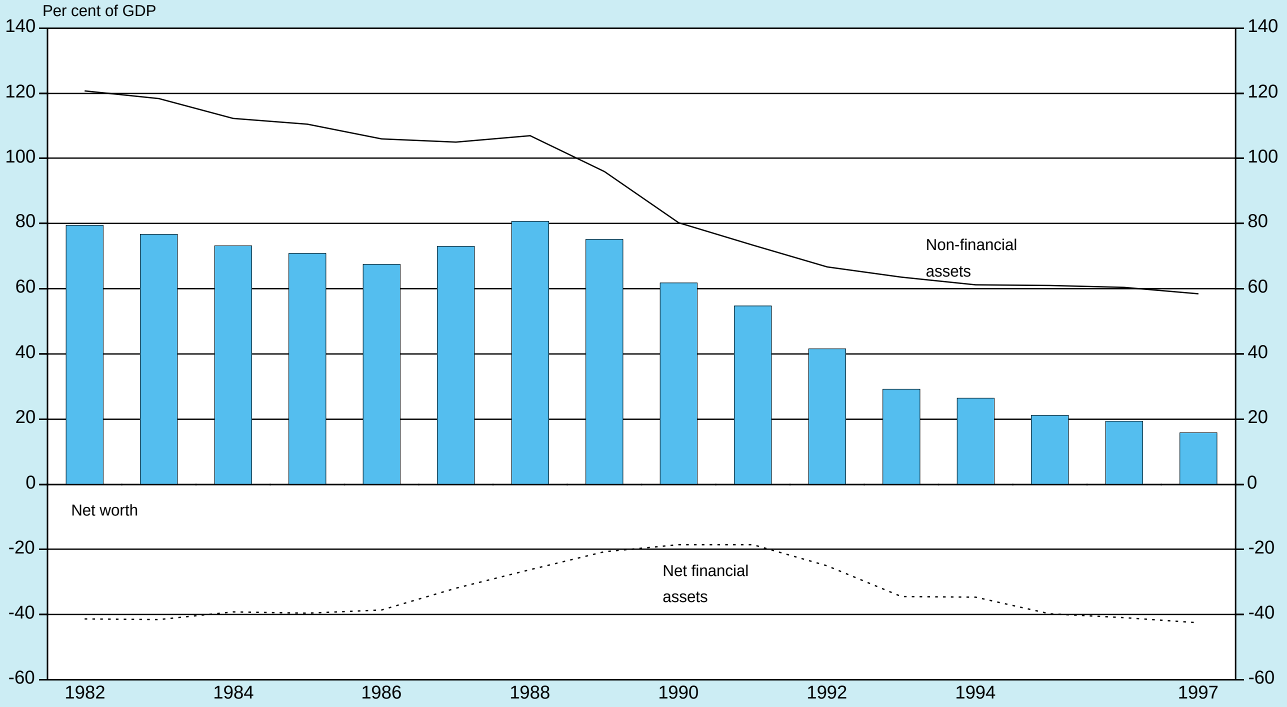


Table 2 summarises the composition of national net worth, the difference between assets and liabilities, by sector.

The sectoral breakdown shows very large personal sector net worth, and net liabilities for the company sector and for central government. This pattern reflects a number of factors:

- the personal sector, including the value of life assurance and pension funds, holds most debt issued by UK companies and the UK government; and

- almost all public borrowing is undertaken by central government, so appearing as a liability on the central government balance sheet even when it was supporting spending by public non-financial corporations or by local government.

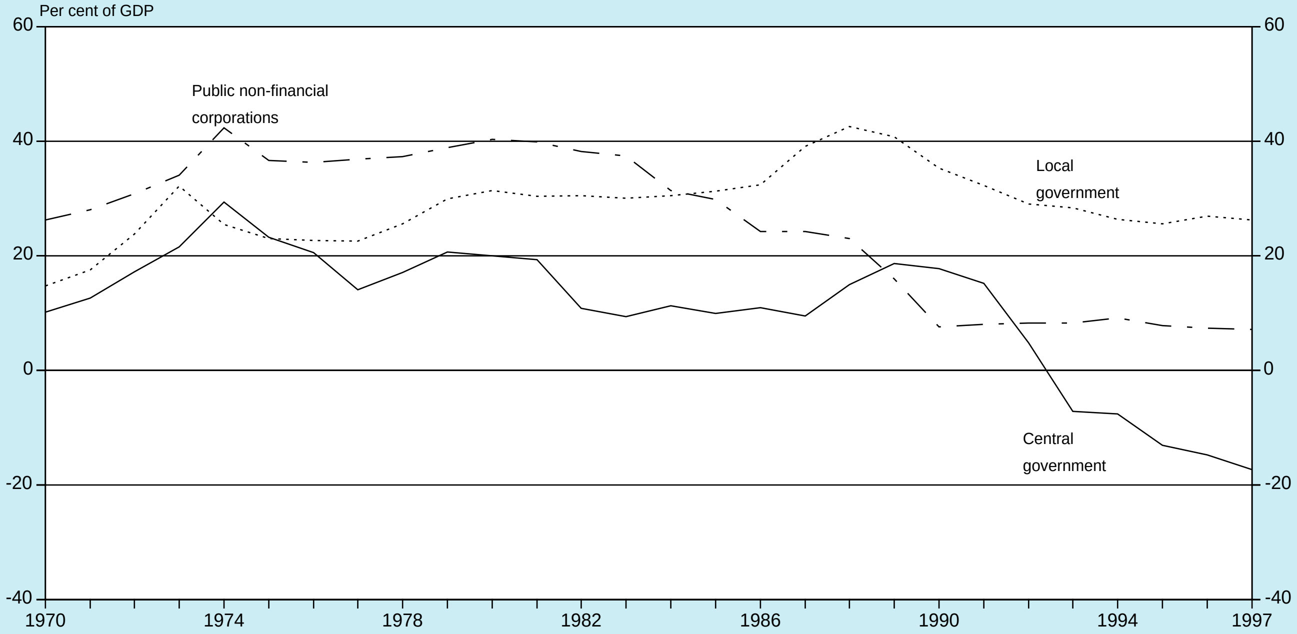
These items, however, are netted out when looking at the national picture, and do not show up in assets and liabilities that make up the national balance sheet, shown in Table 3 .

Table 3 National balance sheet - December 1997

	£ billion	£ billion
Residential buildings	1451	
Commercial, industrial and other buildings	482	
Civil engineering works	282	
Plant and machinery	445	
Stocks and work in progress	144	
Other tangible assets	119	
Tangible assets		**2924**
Intangible non-financial assets		**213**
Currency and deposits	854	
Securities other than shares	360	
Loans	276	
Shares and other equity	472	
Other assets	23	
Assets with rest of the world		**1985**
Currency and deposits	955	
Securities other than shares	295	
Loans	404	
Shares and other equity	353	
Other liabilities	15	
Liabilities with rest of the world		**2022**
Total net worth of the UK		**3103**

Source: ONS

Chart 2
Total net worth



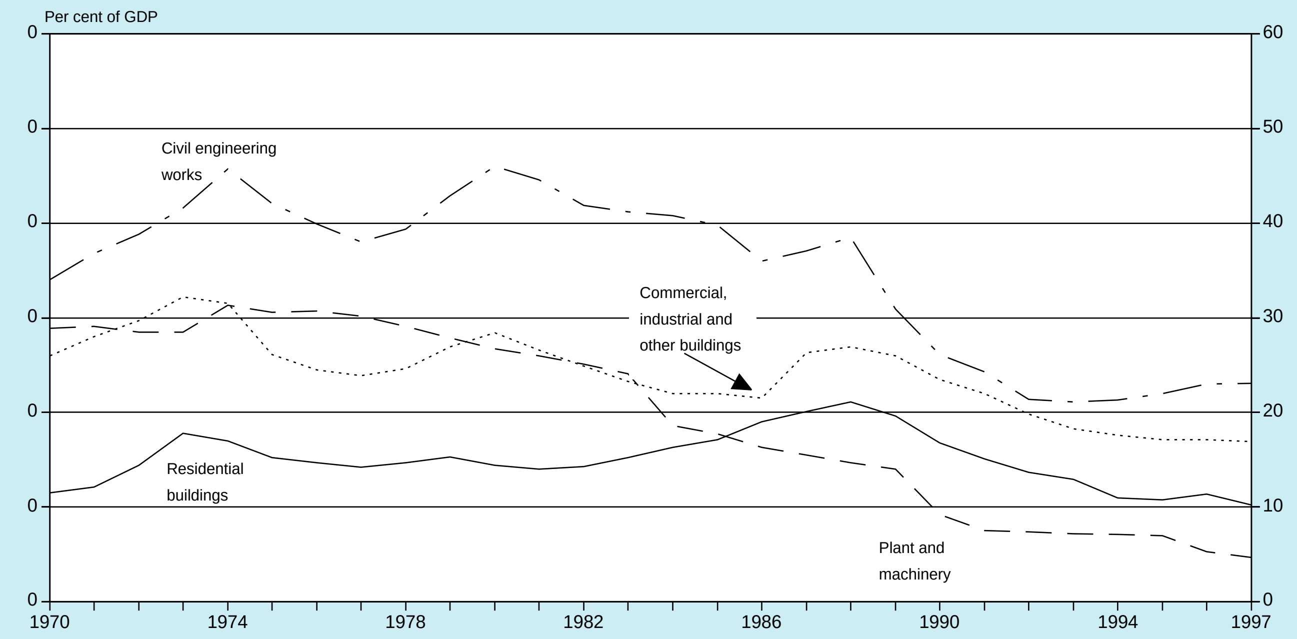
With external financial assets and liabilities virtually in balance, national net worth is very close to the sum of tangible and intangible non-financial assets.

Section 2 - Balance sheets and fiscal policy

The Government's central economic objective is high and stable levels of growth and employment. In the *Economic and Fiscal Strategy Report*, published in June 1998, the Government indicated that "economic stability - based on low inflation and sound public finances - is a key platform of the Government's economic policy". It also noted that "part of the UK's relatively poor growth performance can be attributed to macroeconomic instability".

A central theme of the Government's approach to macroeconomic policy is to promote greater transparency and openness. The Government has made major changes to both the monetary policy framework - giving the Bank of England's Monetary Policy Committee

Chart 3
Public Sector tangible assets



operational responsibility for setting interest rates - and the fiscal policy framework, including setting strict fiscal rules and the introduction of the Code for Fiscal Stability.

The fiscal policy framework

An important feature of the Government's approach to fiscal policy is making a clear distinction between current and capital spending[3,4]. This distinction is recognised in the two rules that govern fiscal policy:

- the **golden rule**: over the economic cycle, the Government will only borrow to invest and not to fund current expenditure; and

- the **sustainable investment rule**: net public debt as a proportion of GDP will be held over the economic cycle at a stable and prudent level.

Both of the fiscal rules are to be applied over the economic cycle, in recognition of the significant effect of cyclical fluctuations on the public finances[5]. They focus on the whole of the public sector, because the debts of any part of the public sector could ultimately fall on the taxpayer.

The golden rule recognises that worthwhile capital spending by government provides benefits for both current and future generations. It aims to match more closely over time the costs and benefits of public spending, so that taxpayers bear the cost of the public services they consume. It also aims to end the bias against investment that had been a feature of the previous framework, with investment being cut back because that offered an easier target for spending cuts than reducing current spending.

The sustainable investment rule recognises that borrowing for public investment must be constrained by the need to ensure that debt remains at prudent levels. The *Economic and Fiscal Strategy Report* noted that the Government believes that, other things being equal, it is desirable that net public sector debt should be reduced to below 40 per cent of GDP over the economic cycle.

The Code for Fiscal Stability has established the framework within which fiscal policy (including debt management policy) will operate. The Code was introduced to improve the conduct of fiscal policy and the management of the public finances, building on the openness, transparency and accountability that already characterises the framework for monetary policy. It was published in March 1998[6], and was given the force of law in the subsequent Finance Bill. In particular, the Code requires the Government to commit to:

- a set of commonsense principles of fiscal management;

- more transparent fiscal reporting; and

- use of best practice accounting methods.

How balance sheets can help fiscal policy

For many years, fiscal policy in the UK focused on questions of sustainability, with the primary indicators being public sector borrowing and debt. This approach concentrates on only one of the many different facets of fiscal policy, which acts upon the economy through both macroeconomic and microeconomic channels.

Even in the purely macroeconomic context, there is no single ideal measure of the fiscal stance which can capture all the mechanisms in play. At various times, we might look for indicators of:

- fiscal sustainability: would present tax and spending policies mean that public borrowing remains under control?

- the impact on the economy: changes in both the balance between tax and spending and the disposition of public sector assets and liabilities will have effects on the wider economy; and

- the intergenerational impact of fiscal policy: how will the net burden of tax and transfers borne by the current generation compare with that borne by future generations?

Balance sheet data provide useful information about the form in which the public sector holds its assets[7] and liabilities. Over time, we can look at not only the balance between assets and liabilities, but which particular assets and liabilities are changing.

Even when looking only at sustainability, balance sheets can provide a richer indicator than the more usual borrowing and debt figures, because they take account of changes in government assets as well as liabilities. For instance, the decline in the net public debt ratio for much of the 1980s was more than matched by a decline in the measured ratio of public sector assets to GDP, so that it was only in 1987 and 1988 that public sector net worth (including tangible assets) rose relative to GDP.

There is a close link between net worth and the golden rule. If a government borrows only to finance investment, then any new debt will be matched by an increase in government assets, leaving net worth broadly unchanged (as long as both net worth and the current balance are measured using reasonably consistent definitions of capital spending and depreciation).

Meeting the golden rule should therefore prevent large further falls in the level of public sector net worth (although not necessarily preventing a fall in the ratio of net worth to GDP). The sustainable investment rule places a constraint on the amount of investment that may be financed by borrowing, preventing an escalation of public debt that might cause difficulties (even if it was backed by a similar build up of public sector assets).

Some other countries already make use of balance sheet data more formally in their fiscal policy. For instance, New Zealand's Fiscal Responsibility Act includes an objective for net worth. To date, balance sheets have not played a large part in the UK fiscal policy framework. There are issues to be resolved concerning the measurement of assets and liabilities in the balance sheet; which items should be included in the balance sheet; and how to interpret the data. However, the UK Government has signalled its interest in looking at both sides of the public sector balance sheet[8], rather than just public sector debt.

In the meantime, the Government is looking at ways of developing the usefulness of the public sector balance sheet. The advent of Resource Accounting and Budgeting presents a major opportunity in this respect, with the first resource accounts being published for the financial year 1999-2000. The Treasury is working with the Office for National Statistics on how best to use the information from RAB, and whole of government accounts, to improve the quality of data for public sector and national balance sheets.

Should other things be included?

The balance sheet data published in the *Blue Book* cover existing assets and liabilities. So, for instance, the balance sheet does not take account of future liabilities faced by the Government, such as the effect of unfunded pension schemes. There is also a related question of how to deal with contingent liabilities and government guarantees, if at all, and how they might be valued.

Some have taken this argument to the full extent of wanting to include the discounted value of every future cash flow faced by the Government as a result of its current policies, even if many of the items on the balance sheet are quite uncertain[9]. Such a measure would include the existing measure of net worth as an "opening balance", but would also need to take into account future flows generated by present tax and spending policies.

Although the UK faces much less of a potential pension problem than other G7 countries, there is still a relevant argument that omitting this sort of information means that the balance sheet can only give a partial view of net worth. In principle, unfunded pensions could potentially impose a large burden on future generations, particularly in some developed countries[10]. It seems likely that the at the end of the 1980s,combined effect of unfunded public service pensions together with state pension schemes could still look large in relation to the present level of net worth and the annual balance on the current budget.

An attempt made by some to bridge the gap between the available data and more comprehensive measures is to include only estimates of "lumpy" items, where a significant stock of assets or liabilities is increasing or decreasing over time (North Sea oil revenues is a favourite example from the literature, although unfunded pension liabilities might be a more contemporary one). This would go some way towards improving the usefulness of reported net worth for fiscal policy purposes, but it is very much a compromise solution with its own problems. For instance, such a balance sheet might not properly reflect the effects of a policy change that happened to have offsetting effects on a lumpy, on-balance sheet item and a non-lumpy, off-balance sheet item - if, say, there were offsetting changes in (on balance sheet) pension provision and (off balance sheet) future tax liabilities.

Table 4 Public sector net worth and the current balance

£ billion	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Change in PSNW	**5**	**48**	**71**	**9**	**-42**	**-24**	**-67**	**-67**	**-6**	**-28**	**-4**	**-19**
Current balance	-4	-2	8	11	8	-4	-26	-37	-35	-28	-25	-8
Other	9	50	64	-2	-50	-20	-41	-30	29	-1	21	-11

Source: ONS

At present, there is perhaps a greater argument for including unfunded pensions on a "past service" basis[11] in the balance sheet than for a fully comprehensive measure which includes all future payments and contributions. Unfunded pension liabilities on this basis share some characteristics with financial liabilities which are included in the balance sheet, such as government securities, insofar as there is a promise to meet pension rights that have already been earned.

The close link between the public sector balance sheet and the current balance means that the same definition should in principle be used for both the stock and the flow. The same conceptual problems affect both, and the difficulty of deciding what to include in the balance sheet is not avoided by focusing only on the current balance. So although the discussion here is framed in terms of balance sheets, the implication of choosing a very wide measure of net worth would be that the current balance should also include changes in discounted future spending and receipts. The present definition of the current budget for the purposes of the golden rule corresponds very closely to that set out in the national accounts[12], with the added advantage of making comparisons of international positions easier.

Measurement and valuation issues

The present balance sheet data are not particularly robust, especially those for tangible assets. Movements in net worth do not always correspond closely to the sort of policy influences that we would want a fiscal indicator to show.

In principle, the main influence on public sector net worth should be the balance on the public sector's current budget - the difference between current receipts and expenditure. A surplus on current budget means that a government is financing current spending from current receipts and is adding to net worth, rather than by borrowing which would increase government liabilities and reduce net worth. The current budget is not affected by government borrowing to finance investment and there should be little or no effect on net worth, as the addition to the stock of public sector assets offsets the extra liability.

However, It does not take a very close look at the data (especially that for public sector tangible assets) to realise that there have been very large movements since the mid 1980s. Some of these, but by no means all, reflect specific policies which affect the composition of the balance sheet:

- privatisation reduces the stock of tangible assets, with in principle an offsetting reduction in the stock of financial liabilities;
- council house sales reduce the stock of residential buildings, and again in theory this should be offset by an improved net financial position.

Nevertheless, other changes in public sector balance sheets, and net worth in particular, correspond less closely to any change in fiscal policy. Table 4 compares the changes in public sector net worth over the last 10 years with the public sector current balance, which measures the extent to which the public sector borrows to finance current spending. We would expect the current balance to account for a significant part of changes in net worth, if both were measured consistently.

Some other possible influences on net worth include:

- the stock of gilts is recorded at market value, so that a fall in long-term interest rates has the effect of increasing government liabilities and reducing public sector net worth;
- asset valuation is not always straightforward where there is no market price: for example, a major component of the value of roads is the market value of the land on which they are built, which can introduce some quite strong relative price movements into the asset data;
- asset revaluations in line with inflation will affect net worth, but are not picked up in the current balance as presently defined; and
- privatisations may have had an effect on net worth insofar as the balance sheet valuation of the underlying assets was different from the privatisation proceeds that the government received.

Much of the non-financial asset data is constructed using the perpetual inventory method, which requires assumptions about the average life of each class of asset, or by using capitalised rateable values which rely on very infrequent valuations with interpolation between benchmarks using representative price indices. Neither method is likely to provide a particularly reliable guide to the current asset position of the public sector - Bryant (1987) suggested estimates for the reliability of balance sheet data as plus or minus 10-20 per cent for central government and public non-financial corporations; and plus or minus 20 per cent for local government[13]. In some cases, these sorts of differences may reflect inappropriate rates of asset depreciation over the past. At other times, however, the differences reflect the underlying basis of valuation used in the balance sheet, relative to what might be consistent with other fiscal indicators.

In short, there is a need to refine the public sector balance sheet data before it becomes robust enough to play a more significant role in the fiscal policy framework. The ONS agrees that there is a need for a fundamental re-examination of both the methodology and the data used to compile not only public sector but also private sector non-financial balance sheets. The method of compilation described in Bryant (1987) made adequate use of the data then available, and produced estimates whose precision met the needs of the time. Since then, however, some benchmarks have become outdated, some assumptions have ceased to be applicable, and some data sources have become unavailable or less timely. The ONS has therefore started a project to produce non-financial balance sheets which are sufficiently robust to play a significant role in the fiscal policy framework.

Section 3 - Meeting the needs of fiscal policy

The principal requirement for fiscal policy purposes is a measure of the balance sheet that provides a reliable guide to the balance between public sector assets and liabilities; that relates well and in a systematic way to the other fiscal indicators; and that moves in line with known influences on the public finances. The concept of public sector net worth relates very closely to the golden rule and the public sector's surplus on current budget, so it is desirable that the current budget and the balance sheet should be measured in as consistent a way as possible.

The discussion above highlights how some of the influences on the balance sheet differ from those that affect the current budget. Some of these reflect the different bases for the two, and in particular the backward-looking nature of conventional balance sheets. Others, however, reflect aspects of the balance sheet valuation that would not be desirable in a fiscal policy indicator - for instance, we would not expect to make policy changes as a result of significant changes in public sector net worth due to changes in long-term interest rates.

This does not mean to say that the balance sheet must be measured in such a way that it only changes in line with the public sector's surplus on current account. Looking at the balance sheet requires policymakers to address questions such as what should be the ultimate aim of fiscal policy and how to take account of changes in relative asset prices in setting fiscal policy.

Publishing and monitoring balance sheet data are only the first stages of bringing balance sheets into the fiscal framework. Over the next few years, there will be the chance of significant improvements in the data quality - although it seems likely that there will still remain quite a long lag before data become available.

Resource accounting and budgeting[14] will meet some of the short-term need for more robust data for central government departments. The Chartered Institute of Public Finance and Accountancy (CIPFA) now also produce analyses of local government balance sheets which seem likely to provide a valuable short-term improvement in the data for local authorities. Some work remains to be done before it is quite settled how all of this data is brought together into a form covering the whole of the public sector[15]. However, this offers scope for a significant improvement in the balance sheet data and how they relate to the main fiscal indicators.

In the meantime the Office for National Statistics' project to improve non-financial balance sheets is well under way, and over the next 18 months to two years, will be concentrating on:

- a complete overhaul of the system for both public and private sectors. This will involve substitution of data for estimation techniques, updating of benchmarks and discussions with data suppliers to try and acquire more timely data;

- improving data from central government stemming from the move to resource accounting and budgeting;

- improving data for local government assets, with the help of DETR and CIPFA; and

- incorporating new asset classes, as set down in the European System of Accounts, into the balance sheets. For public sector, the main implications concern the addition of computer software, and dual-use military assets.

The aim will be to produce greatly improved estimates by the middle of 1999, and to move towards quarterly as well as annual results. Interim results will be produced in *Economic Trends* this year based on an improved version of the old methodology. ONS will be producing articles in *Economic Trends* explaining in detail the new methodology adopted.

As well as pursuing these improvements, the next stage will be to consider how balance sheets might best fit into the fiscal framework in the next century. What changes to the present definitions could provide more appropriate fiscal indicators? How far could, or should, we make progress towards the forward-looking, comprehensive net worth measures? What can be said about the desirable, or prudent, or optimal levels of public sector net worth? These are issues that will need to be addressed as balance sheets start to move into the fiscal policy framework. The Treasury would welcome views on these issues.

Footnotes

1 *The compilation of the non-financial balance sheet data is described in Bryant (1987). The latest financial balance sheet data were published in ONS (1998).*

2 *The way in which the public sector balance sheet is built up from separate balance sheets for central government, local government and public non-financial corporations means that central government's holdings of local government and public non-financial corporation debt appears as an asset in the balance sheet, cancelling out much of the LG and Public NFC debt shown on the liability side.*

3 *For example, see HM Treasury (1998b).*

4 *Capital spending is measured according to definitions that correspond very closely to those of the System of National Accounts (SNA93), and the European System of Accounts (ESA95).*

5 *Treasury estimates of the effect of the cycle were set out in Virley and Hurst (1995), which suggests that a 1 per cent increase in output relative to trend would reduce government borrowing by around 3/4 per cent of GDP by the second year.*

6 *HM Treasury (1998a)*

7 *Under ESA95, the definition of non-financial assets has been widened a little to include some additional tangible assets, such as dual-use military assets (eg military hospitals) and some intangible assets such as computer software and artistic originals.*

8 *The July 1997 Financial Statement and Budget Report included for the first time information on public sector net worth; and a Treasury discussion paper (HM Treasury (1997)) was published last year looking at the issues in more detail.*

9 *See Buiter (1985) for instance.*

10 *The IMF and the OECD have been amongst those drawing attention to the potential problems: see IMF(1996) and OECD (1995).*

11 *A measure that reflects years of service and contributions already provided. This would typically be seen as an entitlement already earned, although the actual liability will depend on factors such as length of employment, final salary and life expectancy. However, there are reputable actuarial techniques for valuing the extent of such pension liabilities in this way.*

12 *The surplus on current budget is equivalent to the corresponding national accounts concept except that all capital taxes are counted as current receipts. See HM Treasury (1998b) for further discussion.*

13 *There are also some potential further issues raised by the new category of "valuables" recognised under ESA95, which could be very relevant to the public sector because of museums and galleries.*

14 *Resource accounting and budgeting (see HM Treasury (1994) and (1995)) will move central government departmental accounts onto an accruals basis in line with the reporting practices of the private sector and much of the rest of the public sector. Resource accounting should also deliver better quality estimates of central government assets and depreciation over time.*

15 *A scoping study on producing whole of government accounts, HM Treasury (1998c), recommended that the Government should proceed with work on the development of whole of government accounts, with the ultimate aim of a full set of audited accounts based on UK GAAP for the whole public sector alongside improved but unaudited national accounts based on statistical principles.*

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setting out a public sector balance sheet framework. improving the management of risk across the governmentâ€™s contingent liabilities and publishing the â€˜Government as insurer of last resortâ€™ report. unlocking value from intellectual property and other intangible assets in the public sector. retiring the use of the Private Finance Initiative and its successor Private Finance 2 on new projects. improving transparency around major asset sales and publishing guidance.Â While this report marks the conclusion of the Review, the governmentâ€™s focus on improving balance sheet management will continue. Future work is highlighted in the report. Balance Sheet Review publications include: Government as insurer of last resort - HM Treasury, March 2020. The balance sheets of utilities, banks, insurance companies, brokerage and investment banking firms and other specialized businesses are significantly different in account presentation from those generally discussed in investment literature. In these instances, the investor will have to make allowances and/or defer to the experts. Lastly, there is little standardization of account nomenclature. For example, even the balance sheet has such alternative names as a "statement of financial position" and "statement of condition." Balance sheet accounts suffer from this same pheno Knowing your public balance sheet Effective balance sheet management Accruals-based financial statements Infrastructure and public property Financial investments and liquid financial assets Working capital Financial liabilities Public sector pensions Other long-term liabilities Balance sheet risks Negative equity Manage your public balance sheet before it manages you. 4 6 6 9 11 14 16 19 21 23 24 25. Better Government Series Policy Insight | Managing the Public Balance Sheet. 3. Knowing your public balance sheet.Â At Â£1.5tn or 80% of GDP, net public sector pension obligations owed by the UK public sector to current and former employees are substantial.