

The treatment of government controlled pension schemes in national accounts

By Jeff Golland

April 14, 2003, revised December 22, 2003

Proposal

Certain unfunded pension schemes operated by governments for their employees should be recorded as financial liabilities in national accounts. The proposed recording of the associated flows is shown in the attached table.

The problem

Many governments plan, monitor, and judge their fiscal policies using statistics from national accounts. At present, national accounts do not record financial liabilities for unfunded government-operated pension schemes. The impact on the government deficit¹ is simply the payment of pensions to retired employees, net of any current employee contributions, and no liability is recorded in government debt². However, if a government makes payments to private-sector pension funds on behalf of its employees, the impact on the government deficit would be different. The impact would be the accruing pension rights of its employees plus the interest on the extra borrowing by government needed to finance the pension contributions (which arise earlier than the pension payments), and government debt would be higher for the same reason.

This difference in accounting for the cost of different ways of providing public sector occupational pensions can lead to sub-optimal decision making in terms of economic efficiency.

The proposal for national accounts

Record, in national accounts' category AF6, a financial liability of government equal to the net present value of the accrued pension rights of its employees in unfunded pension schemes. This raises some difficult measurement issues, but they are resolved routinely by the managers of private sector funded pension schemes using well-known standard techniques that could be applied to unfunded schemes. The question of which discount rate to use, to calculate the net present value of the expected future payments, is listed in the section at the end on "issues to resolve".

Record financial transactions in F6 for all changes in the government's financial liability for pensions (AF6), with one exception (see below). This means that financial transactions would be recorded for:

- a) increases in accrued pension rights from employees' current work;
- b) increases in accrued pension rights bought by actual employees' contributions;

¹ The "deficit" here is shorthand for net lending / net borrowing (B9) in national accounts.

² The "debt" here is the sum of liabilities on the government balance sheet in national accounts

- c) increases in the net present value of accrued pension rights arising from the passage of time increasing the present value of future pension payments;
- d) increases/decreases in accrued pension rights from government changing the benefits associated with the scheme;
- e) increases/decreases in accrued pension rights from individual employees, or groups of employees, joining or leaving the scheme (in most cases there would be lump sum payments into or out of the scheme from/to other pension schemes);
- f) payments of pensions: these reduce the liabilities.

In each case an equivalent non-financial transaction would be recorded in government uses of D8 (adjustment for the change in the net equity of households in pension fund reserves). It might be that D8 would have to be split into D81 (for the existing definition of D8), and D82 (for the new imputed transactions relating to government's unfunded pension liabilities). The payment of pensions would be recorded as a negative figure in government uses of D8, as well as a positive figure in government uses of social benefits in D62.

The inclusion of transactions in D8, plus the existing transactions in D61 and D62, would mean that the government deficit increases when employees accrue pension rights (and there is no actual cash payment from the employee to buy these rights), but there would be no direct impact on the deficit when the pensions are paid.

The "one exception" referred to above would be that changes in the financial liability arising from revised actuarial assumptions would be recorded as other flows (the K series in national accounts), and not in D8 nor F6. This is because such changes would not be the result of government actions. They could also be large, and so would distort the government deficit figures in a way that would be unhelpful for economic analysis. The main actuarial assumptions affecting this would be the discount rate, the average life expectancy of the scheme members and their final salaries.

Note that changes in actuarial assumptions differ from changes in scheme benefits as a result of government decisions. The impact of these should affect government deficit in the year when the changes become a contractual obligation.

Transactions in F6 and D8 are recorded for the unwinding of the discount in the calculation of the net present value of future pension payments. This, in effect, is a substitute for the interest that government would have had to pay on the money it would have had to borrow to make actual contributions to a real pension fund (which arise earlier than the pension payments). A same entry would be recorded under property income (D44) and social contribution (supplement) (D61).

Annex II summarizes the proposed treatments.

Issues to resolve

Choice of pension schemes to include

Occupational pension schemes usually represent legal contractual obligations of government, and so are similar to other sorts of financial liabilities.

In many countries, government pensions for the general population are often at the discretion of the government of the day, rather than being a contractual obligation. In some cases, individuals who are not eligible for the old-age pension can be entitled to other forms of social assistance, so in any event the government pays. Such arrangements are not like financial liabilities.

Between those two types of pension arrangements (occupational pension schemes under legal contract on the one hand, and social assistance on the other) there is of course a large grey area. This paper does not discuss where to draw the line.

Discount rate

Under the proposal the balance sheet would record the net present value of the expected future pension payments. An appropriate discount rate needs to be chosen for this purpose. This could be based on:

- a) the yield on long term government bonds. This has the advantage of reflecting the governments' actual cost of borrowing and is close to the return that a real pension fund would obtain if a large part of its portfolio were invested (to reduce risk) in domestic-currency AAA bonds;
- b) the long-term yield of a portfolio of investments typical of a private sector pension fund;
- c) a theoretical figure calculated by economists based on social time preference rates and other factors³.

Consistency with other sorts of provisions

Pension obligations are just one type of provision that government would have to record in its accounts if it applied the generally accepted accounting practices (GAAP) adopted by private sector corporations. For example, government might in the past have accepted responsibility for injuries to certain groups of the population, but the precise amounts of compensation to be paid, and their timing, have not yet been determined. Under GAAP, a provision would be recorded for the net present value of the estimated amounts expected to be paid, but nothing is recorded in national accounts until actual payments are made.

If unfunded pension obligations are to be recorded in national accounts, a methodology would be needed to determine what other sorts of provision should be also be recorded. There is a complication for national accounts (compared with GAAP) in that for every financial liability recorded, in respect of a provision, a counterpart sector has to be identified to hold the asset. For pensions this is easy (it is households and possibly the rest of the world) but for other provisions recording an asset might not make sense. For example, government GAAP accounts might record a provision for the expected cost of clearing up some environmental damage for which government has accepted responsibility: but which sector holds the asset?

Unfunded private sector pension schemes

³ See page 97 of http://www.hm-treasury.gov.uk/media//05553/Green_Book_03.pdf

New national accounts' rules for government sector unfunded pension schemes would need to be consistent with those for similar schemes run by the private sector.

Should social contributions and benefits (D6) still be recorded ?

The proposal assumes that social contributions and benefits (D6) would still be recorded for the unfunded pension schemes for which financial liabilities were now recognised. Recording these D6 transactions is useful for economic analysis. The impact on government/household saving and deficits is corrected through D8 so it does not distort the balances. Another option would be to treat the pension transactions as purely financial, and not record D6 and D8.

Existing practices

A number of countries have adopted GAAP for producing government sector accounts. This requires making decisions on the treatment of unfunded pension schemes that answer some of the issues raised above. For such countries it would be helpful for the national accounts treatment to be able to use the same data sources and similar methodologies for measurement of pension transactions⁴.

⁴ The UK treatment of pension schemes in government accounts is explained in chapter 15 of <http://www.resource-accounting.gov.uk/current/frames.htm>

Annex I on treatment of pensions in UK

There are three broad types of pensions

a) The state old age pension.

This is paid at a flat rate, at age 65, to everybody who has paid National Insurance Contributions (NICs - essentially a tax on employment income) for a certain minimum number of years. There is no link with the total value of NICs paid. NICs are paid by employers as well as employees. They are classified as compulsory actual contributions.

These pensions are treated as social benefits in national accounts, with no financial liabilities recorded. They are recorded as being paid by the central government sector since there is no separate institutional unit that could be classified to the social security funds' sector.

Similarly, they are not recorded as liabilities in GAAP-based government accounts. This was decided by FRAB - an independent accounting board.

Some statistics on the size and scope of such schemes are here
<http://www.dwp.gov.uk/asd/asd1/workandpens/2002/Pensioners.pdf>

b) Public sector occupational pension schemes

Employers of civil servants, military personnel, teachers, medical staff, policemen, and some other public sector occupations, pay contributions to government in respect of the future pensions of their staff. The pensions are paid by government on a pay-as-you-go basis and are defined benefit schemes usually based on final year salary. There is no fund of assets. The contributions are calculated to be the amounts required to pay the future pensions assuming the contributions had been invested in a real fund of financial assets. Government departments make such contributions even though it is just a movement of cash within central government: this is to ensure the efficient allocation of resources by showing the full economic costs of departmental activity.

These schemes are treated as social contributions and benefits in national accounts, with no financial liabilities recorded.

The employer contributions for civil servants and military personnel are recorded as imputed contributions even though there are actual payments between parts of central government.

The schemes for teachers and medical staff record actual contributions and are referred to in tables as "notionally funded schemes". Central government funds increases in these pensions to compensate for inflation. These are recorded as, for example, a central government grant to local authorities (employers of teachers) in D73; part of the compensation of employment of teachers in D12; a social contributions by teachers in D612 and the payment of pensions to retired teachers in D623.

Details of the recording in national accounts can be found in tables 5.2.4S and 5.3.4S of http://www.statistics.gov.uk/downloads/theme_economy/BB_2002.pdf

In GAAP-based government accounts, contrary to national accounts, financial liabilities are recorded for the operators government units operating unfunded schemes. The employing departments record as expenditure the contributions they make to the schemes. The GAAP-based accounting for pensions follows Financial Reporting Standard 17 (FRS17) modified slightly for unfunded schemes as agreed by FRAB (an independent accounting board). FRS17 is the standard applied by private sector pension schemes.

The accounting standard is at

<http://www.asb.org.uk/publications/publication307.html>

Its application to unfunded schemes is described here

<http://www.hm-treasury.gov.uk/media/B0344/Press%20Notice%20of%204%20July%202002%20-%20FRAB%20Remit%20Extended.pdf>

Note that it is not just a question of recording the net present value of the pension liabilities “on balance sheet”. There are numerous (often non-cash) transactions that also have to be reported in the operating cost statement to reflect increases in liabilities (provisions) accruing from current employment, purchase of extra rights by employees, and the unwinding of the discount through the passage of time. The payment of pensions is a release of a provision and so has not net impact on the operating cost statement.

The discount rate is 3.5% real, and is based on long term government debt yields.

c) Private sector pension scheme

These are operated by financial corporations on behalf of various groups of public sector employees including some types of local government staff, and employees of most public corporations. There is an actual fund of financial assets that pays the pensions. The schemes are usually defined benefit. There is no direct government support for such pension schemes. The employers are liable for any shortfall between pension fund assets and liabilities, but can also share in any surplus (the coal industry is an example of government sharing the windfall with retired coal miners when the public corporation engaged in coal mining was closed down).

In national accounts these schemes are treated as the financial liabilities of private sector financial corporations, and the contributions are the expenditure of the public units who employ the insured staff.

Under FRS17, if the funded pension scheme is unique to an employer, and is defined benefit, the employer has to show the value of the pension fund surplus / deficit on its balance sheet.

Annex II: Proposed treatments of various pension schemes' related events in national accounts, with “dual recording” in D.6

Event	Proposed treatment in the government sector in national accounts						Balance sheet
	Non-financial transactions		Financial transactions		Other flows	Change in liabilities	
	Resources	Uses	Acquisition of assets	Acquisition of liabilities	Change in liabilities	Change in liabilities	
Government employees accrue pension rights in the scheme	Receipt of imputed social contribution (D612)	Compensation of employees in respect of imputed social contributions (D122). Change in pension liabilities (D8)		Pension liabilities increase (F6)		Pension liabilities increase (F6)	
Government employees make own contributions to the scheme*	Receipt of actual social contribution (D611)	Change in pension scheme liabilities (D8)	Cash receipt (F2)	Pension liabilities increase (F6)		Pension liabilities increase (F6)	
Receipt from new employee buying into the scheme, or payment to departing employee to acquire rights in another scheme **			Cash receipt or payment (F2)	Pension liabilities change (F6)		Pension liabilities (F6)	
Receipts in respect of a group of employees buying into the scheme, or payments in respect of a group of employees moving to another scheme **			Cash receipt or payment (F2)	Pension liabilities change (F6)		Pension liabilities (F6)	
Pension paid to retired employee		D.62 social benefit - D.8	Cash payment (F2)	Pension liabilities reduce (F6)		Pension liabilities reduce (F6)	
Passage of time (unwinding the discount on future liabilities)	Receipt of imputed social contribution (D612)	Property income payable to policy holders (D.44) Change in pension scheme liabilities (D8)		Pension liabilities increase (F6)		Pension liabilities increase (F6)	
Actuarial review changes estimated pension liabilities					Pension liabilities change (F6)	Pension liabilities change (F6)	
Government changes scheme benefits in respect of rights already accrued		Change in pension scheme liabilities (D8)		Pension liabilities increase (F6)		Pension liabilities increase (F6)	

“The scheme” – an unfunded occupational pension scheme for government employees

* - assumes that the payments / receipts equal the change in pension scheme liabilities. If not D611/F2 will differ from D8/F6 so will affect B9

** - assumes that the payments / receipts equal the change in pension scheme liabilities. If not D8 transactions need to be recorded for the difference.