

MANAGING RISKS IN PUBLIC SERVICE PENSION SCHEMES: THOUGHTS ON MEASURES AND CONTROL MECHANISMS

In a series of reports picking out significant elements of the Whole of Government Accounts (WGA), the National Audit Office (NAO) has recently published an illuminating [paper on public service pensions](#). This is to be welcomed as, however one measures them, public service pension liabilities are very large. Whilst the annual cost of benefit outgo from public service pension schemes is around £38 billion a year, more than the departmental budget for the Ministry of Defence, the fact that these obligations continue each year for the foreseeable future amounts to an aggregate commitment that is valued at £1,493bn in the most recent WGA.



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Putting a value on pension liabilities

One of the questions posed at my interview for the post of Government Actuary concerned the setting of an appropriate discount rate to value future public service pension scheme liabilities. As an actuary with a private sector insurance background I might have been tempted to join with those commentators who consistently apply mark-to-market principles to this sort of question. The fact that I didn't may be one reason I was suitable for the position, but in reality the question is much deeper.

And the answer? Well, like so many things, it depends. It depends on the purpose of the calculation. And, as it is unlikely that Government will ever seek to accumulate sufficient assets to back its public service pension schemes promises, comparison of the liability valuation with a corresponding asset valuation is unlikely to be one of them.

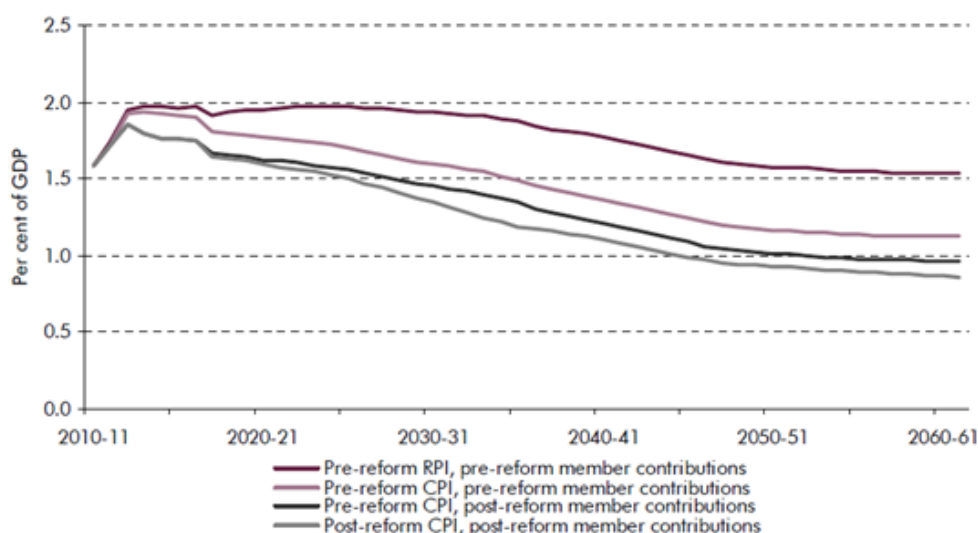
NAO's report makes some observations about how the risk to Government of its public service pension scheme liability is reflected and reported. Placing a single aggregated value on the future liabilities is helpful for context. For example, the WGA show that, on the basis of measurement, the pensions

liability is the largest provision that the Government makes and is over a quarter larger than the Government's net borrowings at £1,175 billion. These are relevant comparisons for context, but how important is that absolute value of the liabilities? And does it matter if this value fluctuates according to a market rate of discount?

For sure, the discount rate does not affect the year on year cash flows which represent the Government's pension promise to current and future public servants. These depend on the rules of the pension schemes from time to time which determine an individual's entitlement and the longevity of that individual aggregated many times over for the whole sub population of public servants. There are two implications of this.

First the affordability of public service pensions is dependent on the ability of the country to generate sufficient revenue income through future economic growth. In its Fiscal Sustainability Reports (FSRs), OBR tracks the forecast cash flows of the public service pension schemes (net of member contributions) as a share of GDP and in 2012 the OBR analysed the effect of the recent public service pension scheme reforms playing out:

Chart: Effect of reforms on net expenditure



Source: OBR, GAD

‘a single aggregated value [of] the future liabilities is helpful for context ... but how important is that absolute value?’

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Whilst clearly heavily dependent on the underlying assumptions, the 2012 projections show the share of GDP declining from just under 2% in 2015 down to just under 1% by 2060 and subsequent FSRs illustrate a similar trend.

Second, a capitalised number based on any discount rate, let alone one that is susceptible to day-to-day investment market movements, is unlikely to be able to encapsulate the totality of the risks to Government of public service pension schemes.



‘the analysis of risk requires a much more rounded approach than just a single balance sheet entry’

Thinking about the risks

So what are the main risks to the cost to GDP ratio projected by the OBR? Well, both the numerator and denominator are subject to the effect of future outcomes turning out different from the assumptions adopted - but the set of assumptions needed to project each part differ. The benefit cash flows in the numerator depend on assumptions about CPI inflation and the public service workforce (e.g. its size, wage growth and life expectancy). While the GDP denominator will be affected by assumptions on the size and earnings growth of the whole population.

The principal mechanism that Government has established to manage these pension risks and the resulting costs is the “cost cap mechanism” or “cost cap” for short. This involves a regular valuation of public service pension liabilities already accrued and cost of future accrual, and comparison with previous expectations, for the purpose of setting future contributions. These valuations are carried out at a stable discount rate known as the SCAPE rate which is linked to expected future GDP growth (with the advantage of changing infrequently). The first assessment of the schemes against their cost caps for all the public service pension schemes will be undertaken based on the valuations as at March 2016.

Although I am an advocate of the SCAPE rate mechanism, there are aspects that I feel are worth looking at again if the mechanism is reviewed.

First the pension scheme valuations and subsequent contribution setting and deficit recovery payments are based on a future look at costs discounted back to today’s value in a methodology that mimics that applied to private sector funded schemes. However, the implementation of the methodology only allows for direct control of some of the risks described above.

Second, and in relation to the setting of the SCAPE rate itself, Treasury uses a best estimate approach to determining the rate, with an equal chance that the eventual growth in GDP will be higher or lower than that underpinning the discount rate. To some this is an equal sharing of risk between generations but to others the dice are more loaded in favour of the current generation of taxpayers whose outcomes are perhaps more certain.

Conclusions

In summary I am pleased that NAO are shining a light on pensions risk in the context of the Government’s balance sheet. I believe, however, that the analysis of risk requires a much more rounded approach than just a single balance sheet entry. Such an approach is undertaken through the regular analysis of experience, the valuation cycle and the application of the cost cap mechanism. But inevitably there are modifications that might be considered, both to these processes and the choice of discount rate to generate the balance sheet entry.