



Government
Actuary's
Department

Being the Government Actuary — the Long and Short of it

ACA Annual Conference

5th February 2016

Martin Clarke

Government Actuary

t: 020 7211 2620 | e: martin.clarke@gad.gov.uk



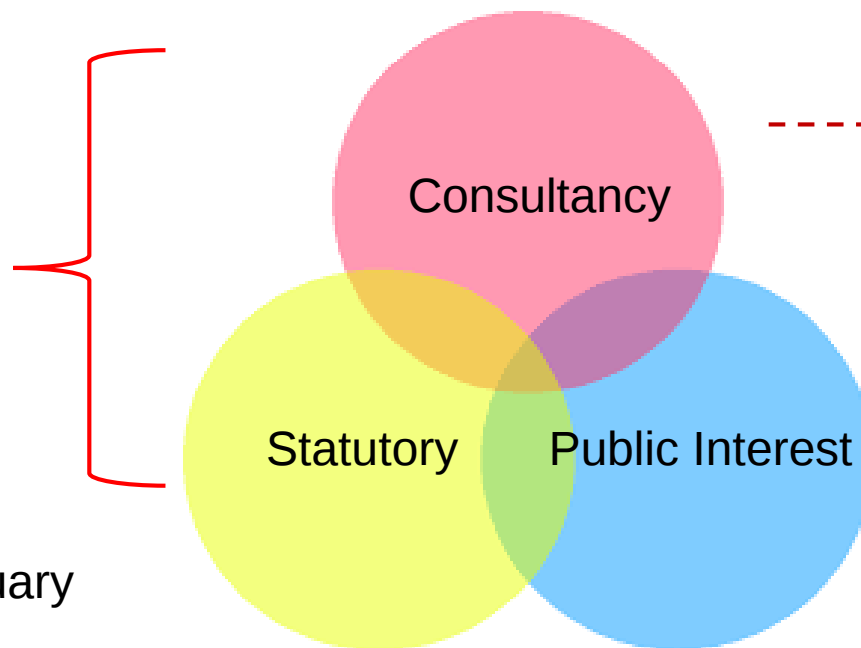
The role of GAD and the Government Actuary



HM Treasury



Government Actuary



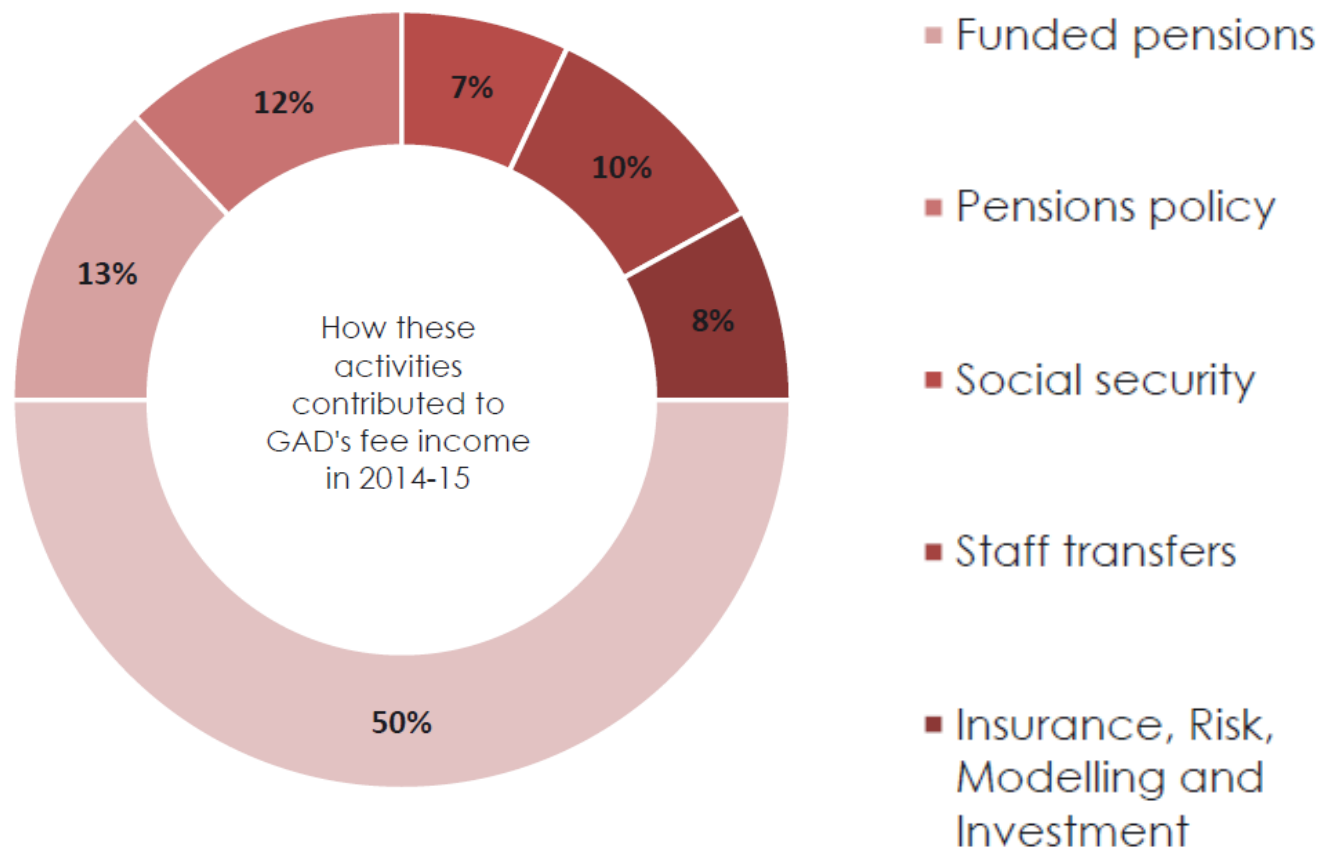
Government
Actuary's
Department

Client departments



GAD advises across the whole of Government

What does GAD do?





One question you won't find in an SA4 examination:

- Your client is the major UK-based diversified services conglomerate with operations spanning health, education and security
- It has been running a deficit for over 15 years but, under the current CEO and CFO, aspires to turn this into a surplus within the next five
- Its balance sheet is highly leveraged
- Most of its pensions arrangements are unfunded, the sponsor covenant reliant on a revenue stream, the magnitude of which it can influence
- It runs career average index-linked DB pension schemes for its employees
- It has other programmes involving major expenditure commitments, financed from revenues
- Given its size it prefers self-insurance over transferring risk to external providers

What advice do you give the governing body about how pensions are financed?



Compare and contrast: the audience for actuarial advice

Private sector scheme:

- Scheme trustees
- Scheme employer
- Duty of care and confidentiality
- Conflicts avoided

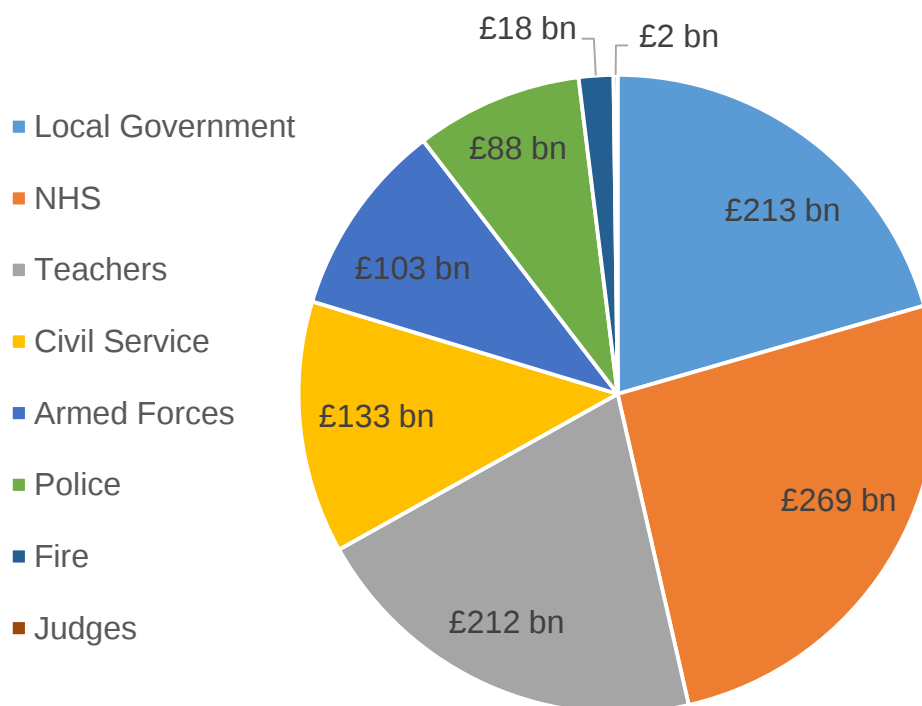
Public service scheme:

- Scheme manager (SoS)
- HMT manages finance
- Crown indivisibility
- Consultation with all parties



Public Service pension schemes are in aggregate comparable in size to the whole of private sector DB

Public Service Pension Schemes



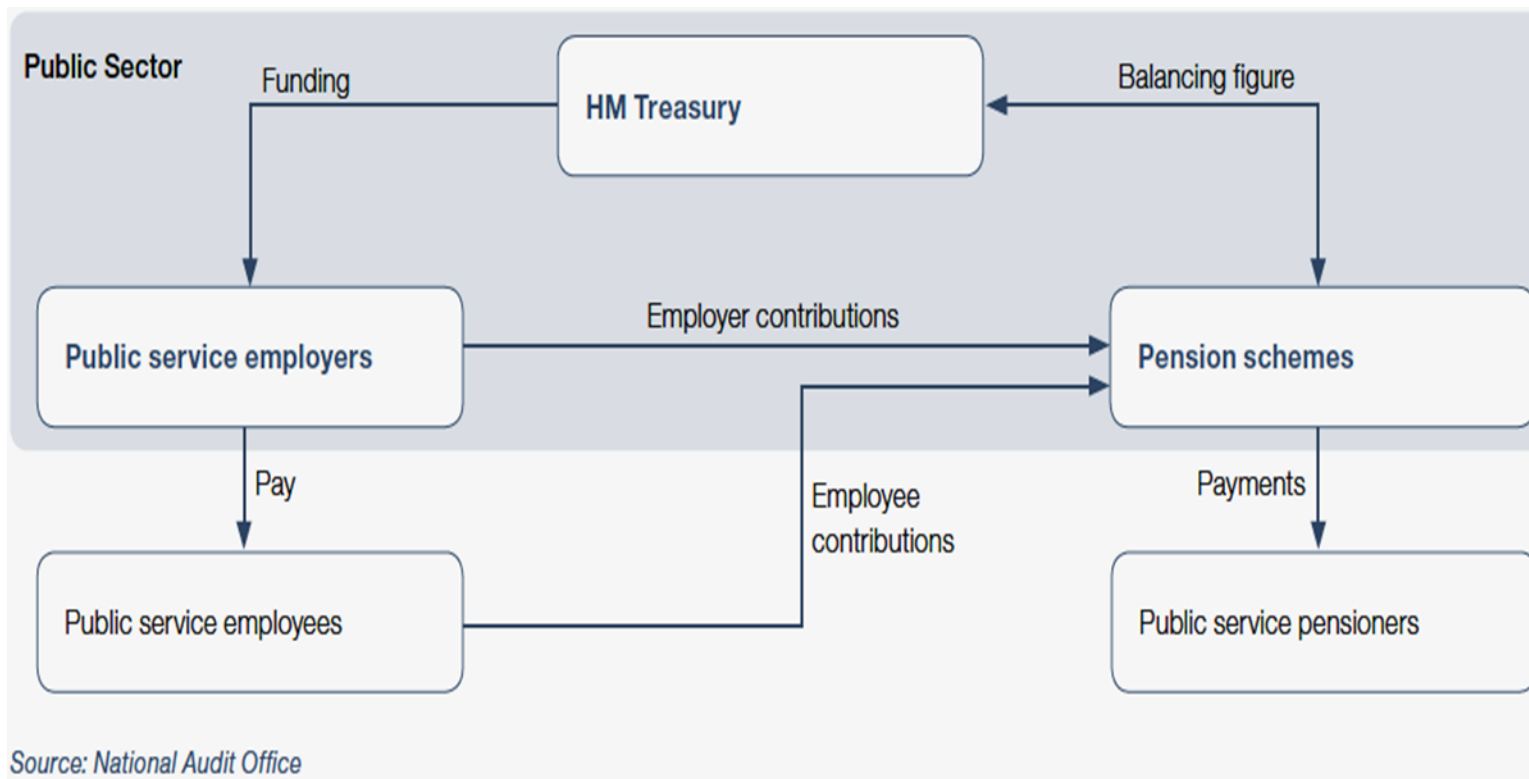
Membership:
13 million

Liabilities:
Over £1 trillion



Public Service Pension Scheme cashflows

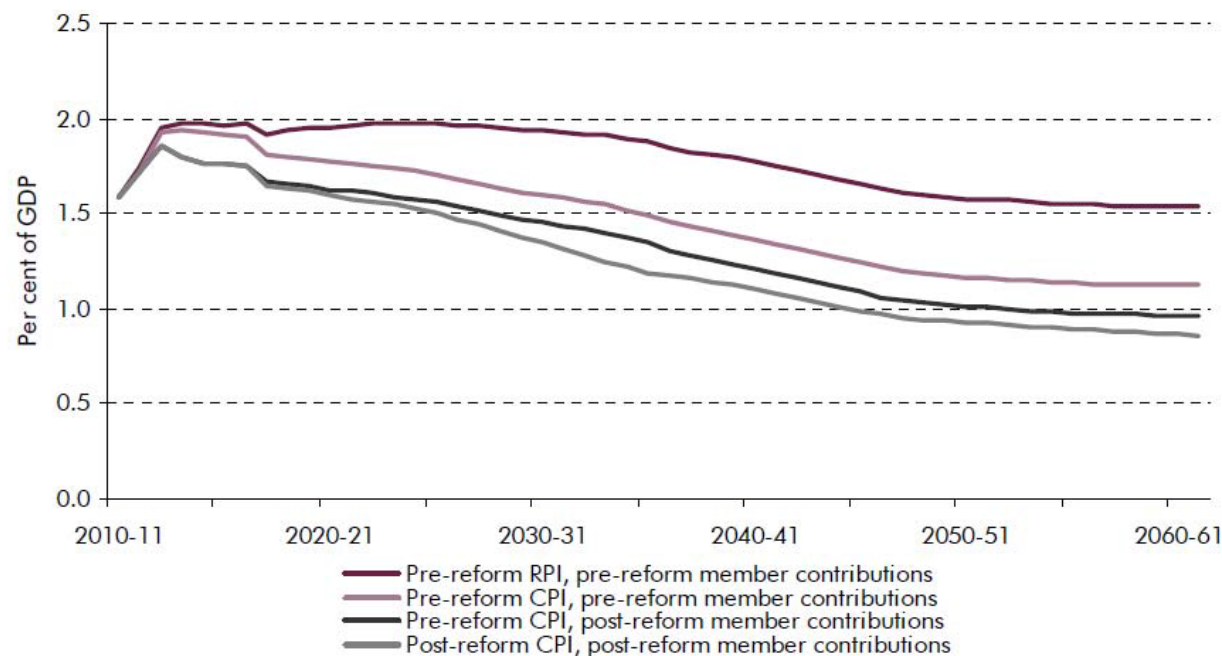
Payments and contributions





Long-term affordability of pensions more likely to be considered as a cash flow projection of GDP

Chart A.5: Effect of reforms on net expenditure



Source: OBR, GAD

Switch to CPI indexation generates increasing savings until CPI cohort stabilises

Increased employee contributions give a step change in savings

Hutton benefit reforms save a little more but transitional protection limits “short term” savings



Long-term affordability of pensions has to be seen as part of a much bigger picture

Table 3.6: Non-interest spending projections

	Per cent of GDP						
	Estimate ¹		FSR projection				
	2014-15	2019-20	2024-25	2034-35	2044-45	2054-55	2064-65
Health	7.3	6.2	6.5	7.1	7.6	7.9	8.0
Long-term care	1.1	1.2	1.4	1.7	1.9	2.1	2.2
Education	4.9	4.1	4.2	4.2	4.0	4.1	4.0
State pensions ²	5.5	5.1	5.4	6.2	6.8	7.0	7.3
Pensioner benefits	0.9	0.7	0.7	0.8	0.8	0.8	0.7
Public service pensions	2.1	2.0	2.0	1.7	1.5	1.2	1.1
Total age-related spending	21.9	19.4	20.2	21.7	22.7	23.2	23.3
Other welfare benefits	5.5	4.8	4.8	4.8	4.8	4.8	4.8
Other spending	11.5	9.4	9.4	9.5	9.5	9.6	9.6
Spending³	38.8	33.6	34.4	36.0	36.9	37.6	37.8

¹ Spending consistent with the March 2015 Economic and fiscal outlook.

² Includes many items in addition to the basic state pension and single-tier pension, such as pension credit, winter fuel payments, free TV licences and the Christmas bonus.

³ Excludes interest and dividends.

Public service pensions much smaller item than Health, Education or State pensions.

Health, Care and State pensions increase from 13.9% to 17.5% of GDP in 50 years' time.

Public service pensions reduce from 2.1% to 1.1% over the same period.



Financial management through annual budgets, four-yearly valuations and longer-term forecasting

Annual Supply Estimates

- Annually managed expenditure = pension cost for year
- Net cash requirement = benefits paid less contributions

Timing



Feb/Mar	Nov/Dec
Main estimate for following fiscal year	Supplementary estimate for current year

Actuarial Valuations

- Set employer contribution rates met through departmental budgets for public employers
- Review 'cost cap' – can affect scheme benefits and/or member contributions

Timing



- Every four years 2012, 2016...

OBR Cashflow Forecasting

- For Economic and Fiscal Outlook report
- Contributions to scheme and benefits paid out
- Short term – next 7 years

Timing



- Currently each Jan and Sep



Public Service pension liabilities appear in Whole of Government Accounts but not in National Accounts

	2011	2012	2013	2014
	£bn	£bn	£bn	£bn
Net public service pension liability	961	1,005	1,172	1,302
Government financing and borrowing	908	966	996	1,096
Deposits by banks	189	267	334	355
Trade and other payables	149	158	154	159
Provisions	107	113	131	142
Other liabilities	106	109	138	135
Total liabilities	2,420	2,618	2,925	3,189

Pension liabilities do not appear in National Accounts

National Accounts only show pensions income and expenditure

Government fiscal target of a surplus on public sector net borrowing by the end of 2019-20 does not include pensions liabilities

Whole of Government liabilities – 2011 – 2014

(Pension liabilities computed on an IAS19 basis as per annual pension scheme accounts)



SCAPE methodology - Superannuation Contributions Adjusted for Past Experience

- *SCAPE* fund is a notional fund with a notional rate of return set in line with the *SCAPE* discount rate.
- The *SCAPE* fund between valuations will:
 - Increase with income received by the plan (e.g. contributions, transfers in)
 - Decrease with benefits paid by the plan (e.g. pensions and lump sums)
 - Increase in line with notional investment returns.
- Future contribution rates are adjusted to:
 - Difference between actual and expected experience of demographic factors
 - Reflect changes in assessment of liabilities caused by revised assumptions



Choice of (*SCAPE*) discount rate to suit specific purpose of valuations

Consistent with private sector plans

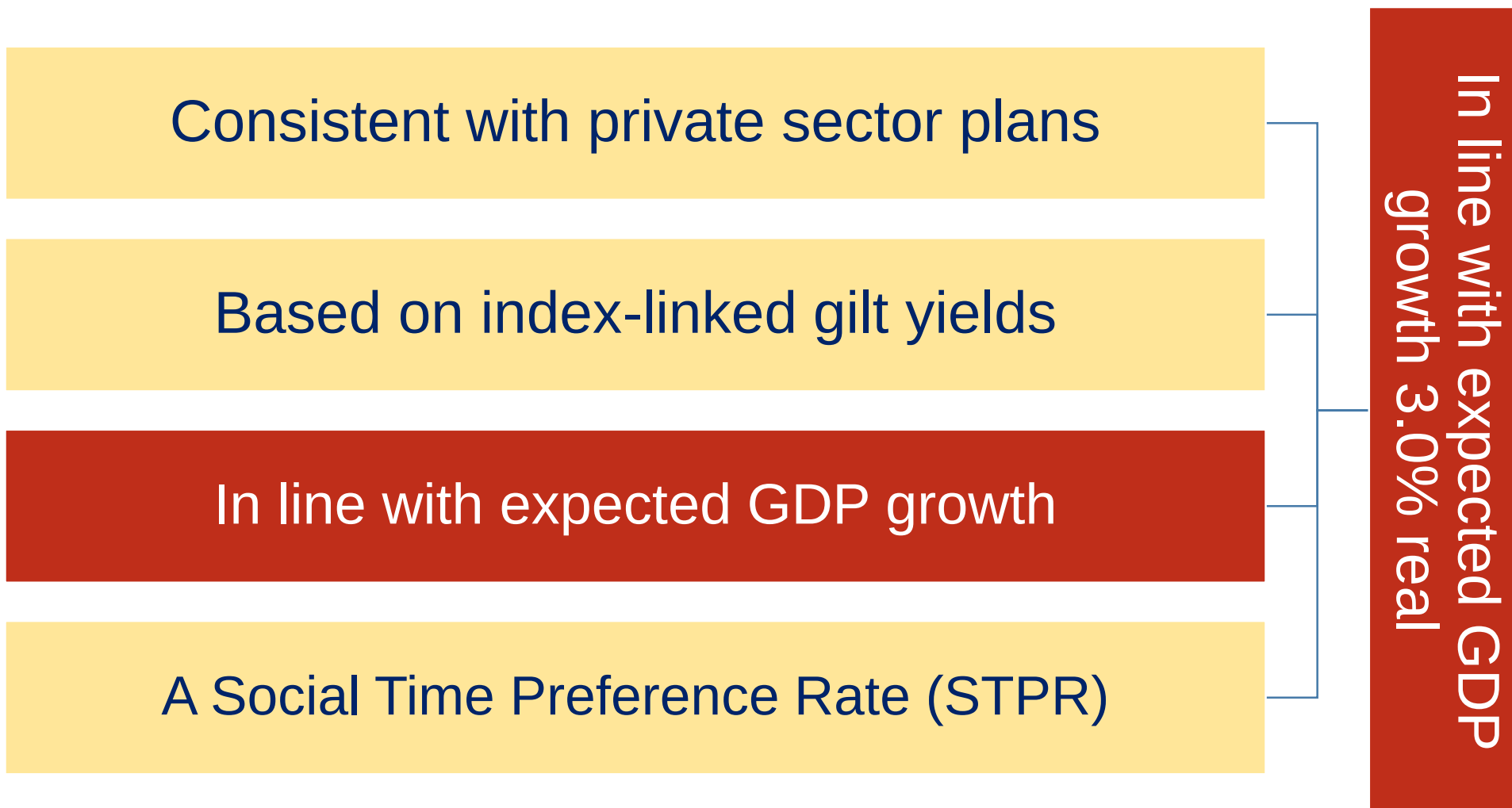
Based on index-linked gilt yields

In line with expected GDP growth

A Social Time Preference Rate (STPR)



A best estimate rate in line with expected GDP growth was chosen in 2011





DB pensions risk maps are different – but overlap



Public sector employees:

- No Covenant risk
- High demographic risk
- High political risks

Public sector employers:

- No Investment risk*
- Demographic risk
- Economic risks

Private sector employers:

- Investment risks
- High demographic risk
- Political risks

Private sector employees:

- Covenant risk
- Demographic risk
- Political risks



*Except Local Government schemes



Public Service pension reform has reduced risks to public finances, but the residual risks are still significant

- Linking NPA to SPA which in turn is linked to longevity provides some protection against demographic risks in PSPS
 - The charge cap mechanism provides (some) protection against “adverse” scheme experience
 - Switching to CPI as the inflation index for these schemes has reduced some of the long-term cost worries
- But failure to grow the economy in line with GDP forecasts over a long period would result in burdensome future costs
 - And underestimation of care/health and State pension costs will have a similar effect



What else is on the horizon for Public Service pensions?

- 2016 valuations - first test for cost cap mechanism
- State Pensions Age review due by 2017
- *SCAPE* rate review reaching its 5 year point
- Bedding-in new governance arrangements and tPR role
- LGPS consolidation of 89 funds into 6 “wealth funds”
- LGPS review of consistency, solvency and cost-efficiency with regard to valuations



Any questions?

