Towards a Citizen's Pension: Interim Report December 2004

Appendix Three: Assumptions and alternative scenarios for savings analysis in Chapter 3

These appendices should be read together with the main report

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Appendix 3: Assumptions and alternative scenarios for savings analysis in Chapter 3

Charts 9 and 10 in Chapter 3 illustrate the proportion of pay that individuals with different levels of lifetime earnings would need to save in order to achieve a gross (before tax) replacement rate of two-thirds final salary on reaching age 65 in 2031. Charts 11 and 12 illustrate the means-testing trap (the proportion of private pension saving that replaces Pension Credit). The figures underlying these charts have been projected using the PPI Individual Model.

This appendix outlines the assumptions used in these Charts, and looks at the impact of varying some of these assumptions in Charts 9 and 10.

The Individual Model

The Individual Model (IM) is a model of pension income that simulates pension income for individuals and households reaching state pension age today and in the future[1]. The IM is described in Appendix 1. The same individuals and assumptions as outlined in Appendix 1 were used in the analysis in Chapter 3 of the main report.

Replacement rate

In addition, the examples in Chapter 3 of the main report assume that individuals have a target replacement rate of two-thirds of final salary. This is similar to the average replacement rate achieved by people reaching state pension age today[2].

Sensitivity analysis

Sensitivity analysis has been undertaken to look at the impact of varying two of the assumptions used in Charts 9 and 10, bringing them into line with assumptions used by the Pensions Commission to estimate the degree of under-saving:

- Increasing the pre-retirement real rate of return from 3% to 4%.
- Varying the target replacement rate by income group, so that lower income individuals have higher target replacement rates. These range from 80% for the lowest earners, to 60% for the highest earners (Table A3.1), as compared to 67% for all earnings used in Charts 9 and 10.

Table A3.1: Gross replacement rates consistent with those used by the Pensions Commission

	Women				
Decile	1	3	Median	7	9
Earnings at age 64	£9,000	£11,500	£14,500	£17,500	£30,000
Target replacement rate	80%	70%	70%	67%	60%
	Men				
Decile	1	3	Median	7	9
Earnings at age 64	£9,000	£13,000	£19,000	£26,000	£33,500
Target replacement rate	80%	70%	67%	60%	60%

[1] The IM has been developed as part of a 3-year research project funded by the Nuffield Foundation

[2] See for example, DWP (2002) *Simplicity, Security and Choice: Working and Saving for Retirement* Annex 3 and Pensions Commission (2004) *Pensions: Challenges and Choices* Table 4.3 (figures in this table are slightly higher than 67%, but are based on net replacement rates rather than gross. As people over state pension age have higher tax allowances, the required gross replacement rate is lower than the net replacement rate.

Using each of these assumptions, and then both of them together, shows a similar pattern of results to those seen in Charts 9 and 10 (Charts A3.1 to A3.6).

- A higher rate of return reduces the amount needed to be saved to reach a target income level. The largest reductions are for higher earners (Charts A3.1 and A3.2).
- Higher replacement rates for lower earners increase the amount they need to save, and lower replacement rates for higher earners reduce the amount they need to save (Charts A3.3 and A3.4).
- For lower earners the effect of a higher replacement rate more than offsets the reduction in saving implied by a higher rate of return. For higher earners, the effects reinforce each other, reducing the amount of saving needed (Charts A3.5 and A3.6).

Replacement rates at age 75

Charts 9 and 10, and the sensitivity analysis above, concentrate on income at the point of retirement (age 65). It is also important to consider what happens to income during retirement. Older pensioners tend to be poorer than younger pensioners, as private pension income falls relative to average earnings.

One way to look at the potential impact of a Citizen's Pension on how total (state and private) pension income changes during retirement, is to look at how much individuals need to save to provide a target 'replacement rate' of 50%[3] of final salary at age 75, rather than 67% at age 65 (Charts A3.7 and A3.8).

With a Citizen's Pension, less saving is required to reach a target replacement rate at older ages. This is because of an earnings uprated Citizen's Pension protects the relative value of state pension income during retirement.

[3] This lower replacement rate reflects the difference seen in the average income of recently retired single pensioners and single pensioners aged 75 and older, based on DWP (2004) *The Pensioners' Income Series 2002/3*

Chart A3.1

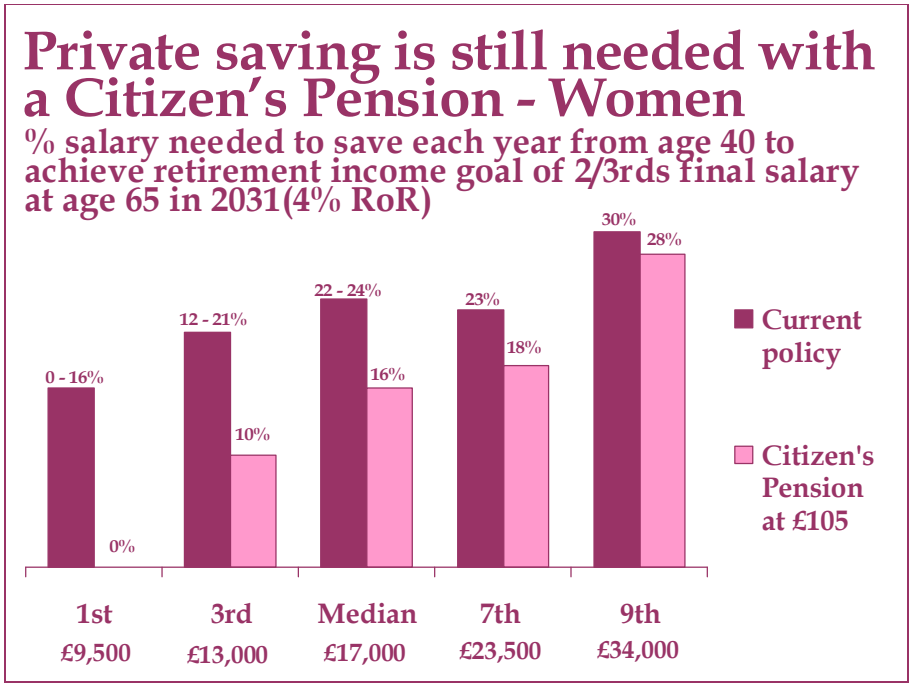

Chart A3.2

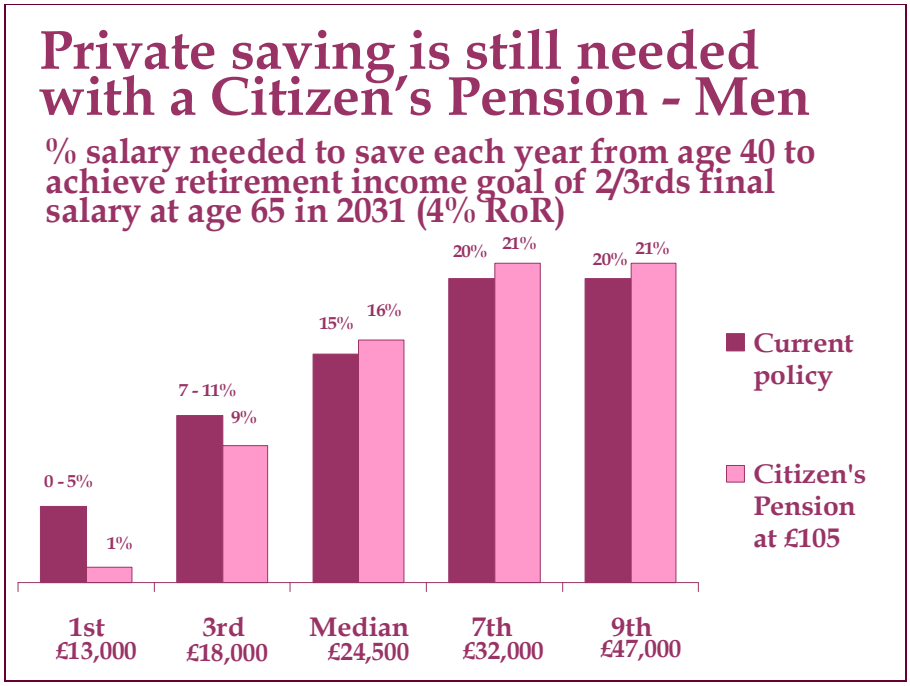

Chart A3.3

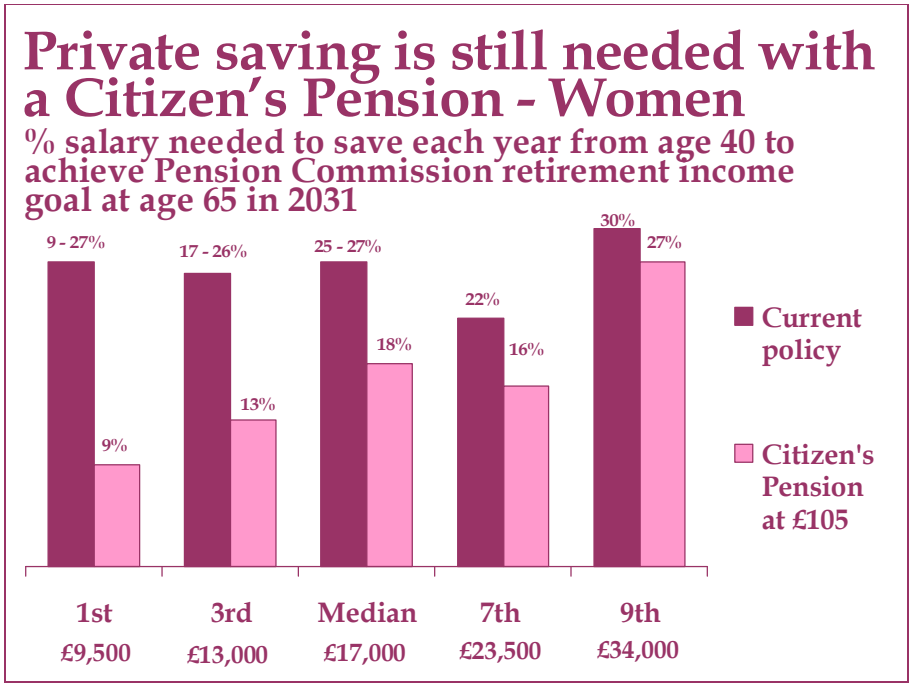

Chart A3.4

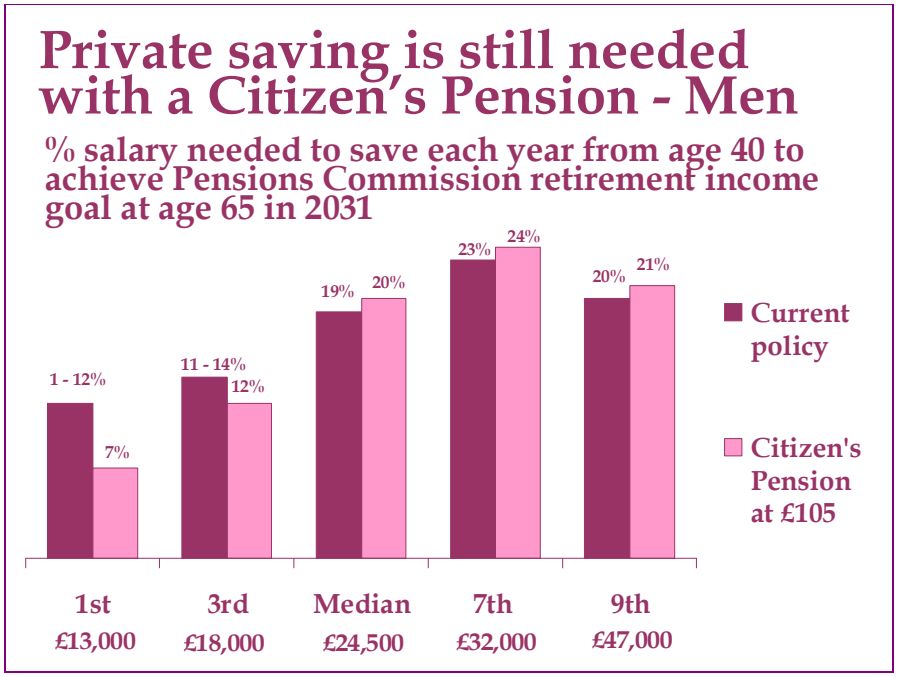

Chart A3.5

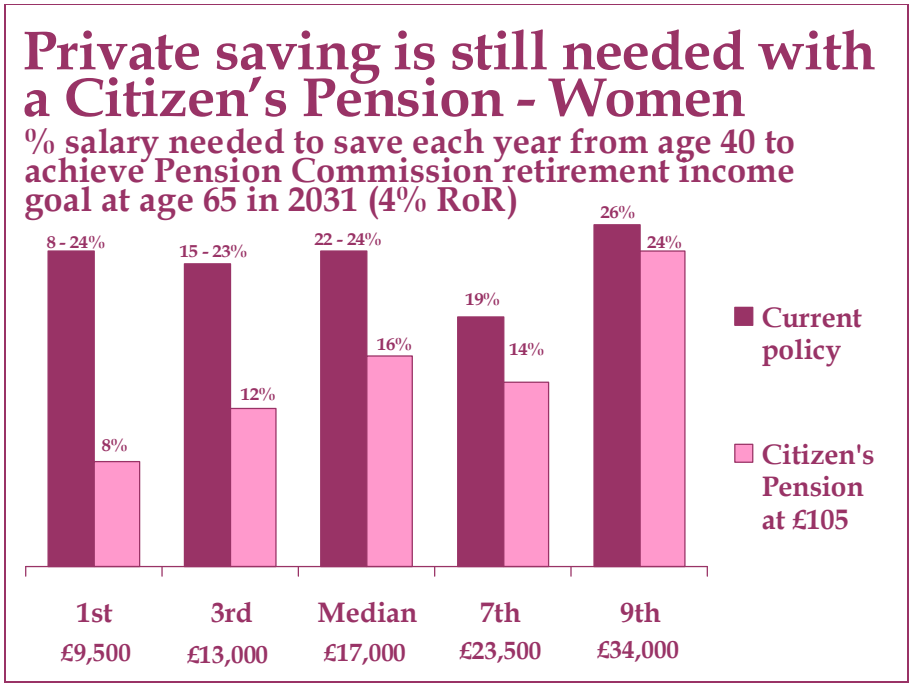

Chart A3.6

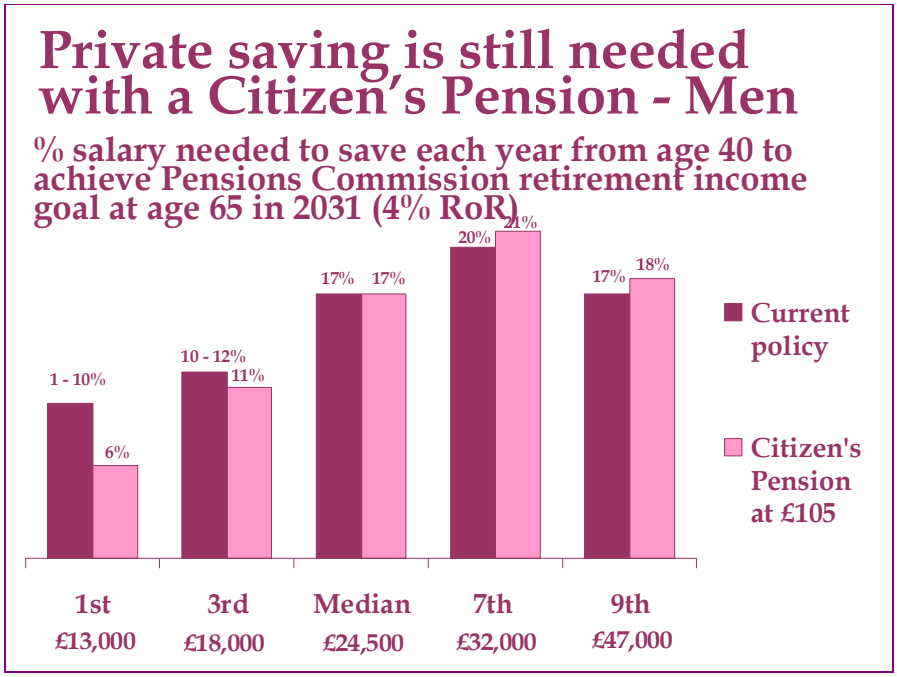

Chart A3.7

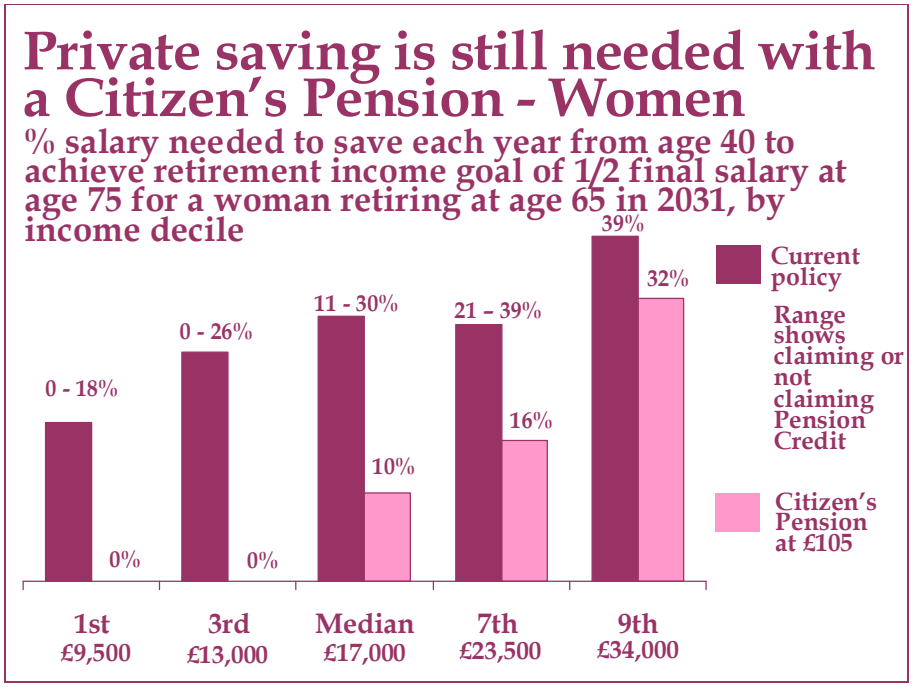

Chart A3.8