The ageing population ‘problem’

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Some readers may be aware of the on-going debate about the future of pension provision in the UK. The Pensions Commission (established in 2002 to “keep under review the regime for UK private pensions and long-term savings”) published its recommendations in November 2005. In light of the Commission’s report, the Government’s proposals for future reform were outlined in a White Paper earlier this year.

The UK is not alone in its concerns over pension provision. Most of the developed world is having to consider how best to support older individuals in the presence of an ‘ageing population’: increasing life-expectancy (which means that people are spending more and more years in retirement) and lower birth rates. In 1900, on average a 65 year-old man in the UK could expect to live for another 10 years (11 years for a woman). Today, an average 65 year-old man can expect to live for 17 more years (and the average woman for nearly 20 years).

The theoretical framework

Pension saving is a classic economic problem of allocating scarce resources. There are two dimensions to this problem. First, think about the pension saving decision that faces a particular individual. Every year the individual wants to buy goods and services. Whilst working, he can pay for these using the money he earns. But what happens when he retires? He still needs to buy things but he does not earn any money to buy them with. What he will probably want to do is save some of the money he earns during his working life and use this to buy goods when he is retired. This is known as consumption smoothing. Every year of his life, the individual makes a decision – how much of what he earns will he spend this year and how much does he want to save to pay for things another year? This is the basic theory behind the lifecycle model in economics, which says that individuals take all present and future income, needs and costs into account when choosing current consumption.

To understand the second dimension of the resource allocation implicit in pensions, think about pension provision from the point of view of our society at one particular point in time. In any one year there are workers who earn money and non-workers (such as pensioners) who do not. In order for pensioners to buy things that year,
some of the resources of the workers need to be transferred to them. There are two main ways that this happens. First, workers pay taxes which are used to give money to pensioners through state pensions and means-tested benefits. Second, workers save some of their earnings because they want to put some money aside for when they retire. But they typically do not just put this money under the mattress. What they actually do is invest it by buying assets. These assets may be bought from pensioners (who now want to use the savings they put aside while they were working) and so workers transfer resources to pensioners by buying assets from them.

The ‘problem’ of an ageing population

So what is the ‘problem’ with an ageing population? In any year resources have to be transferred from workers to pensioners. The following equation shows in the simplest terms the relationship that must hold between the numbers of pensioners and workers and their incomes:

$$twL = bR$$

L is the number of workers and R is the number of retired people. w is the income of each worker and b is the income of each retired person, while t is the proportion of workers’ incomes transferred to pensioners.

As the population ages, the ratio of non-workers to workers (R/L) increases (assuming that retirement ages do not change sufficiently to offset the rise in life expectancy). In 2004, there were approximately 4 working age individuals (aged 20-64) for every 1 person aged 65 and over. By 2056 this ratio is predicted to fall to about 2:1.

The result of this is that one (or a combination) of the following must occur:

1. the incomes of retired people will have to fall relative to those of working age people (b/w falls),
2. The proportion of workers incomes transferred to pensioners (t) will have to rise,
3. People will have to retire later. This increases the number of workers and decreases the number of retired people (R/L falls).

Falling state support for pensioners

So which of these is the UK heading for? Figure 1 shows that currently 6.3% of national income is spent in the UK on state transfers to pensioners. The latest
Government projections suggest that under current policy, this would only rise to about 8.0% of national income by 2056 (option 2), implying that national income paid per pensioner will fall to just 80 per cent of its current level by 2056 (option 1).

**Figure 1: Projections of transfer payments to pensioners in the UK as a percentage of national income by benefit type.**

Notes: ‘Other pension benefits’ comprise winter fuel payments, over-75s’ TV licences, and Christmas bonus; ‘Housing-related benefits’ comprise housing benefit, council tax benefit in Great Britain, rate rebate in Northern Ireland and discretionary housing payments. Projections are based on those underlying HM Treasury's Long-Term Public Finance Report, 2005.


Why is this predicted to happen? Reforms to state pensions during the 1980s and 1990s made them less generous and in such a way that the amount of national income transferred per pensioner will fall each year. For example, in the early 1980s, the Basic State Pension changed from being indexed to earnings to being indexed to prices; this means that the level of the BSP declines each year relative to average earnings.

**Private pensions**

If pensioners are to avoid getting poorer relative to the rest of society, they will need more income from private sources. However, there are reasons to believe that private incomes may not grow fast enough to offset declining generosity of state support. The current government has balanced the objectives of minimising costs whilst ensuring pensioners have adequate incomes by targeting support on the poorest pensioners through the means-tested Pension Credit. This has been successful in reducing pensioner poverty whilst keeping down the costs to the
Exchequer. However, the means-tested nature of the Pension Credit means future problems are looming.

Income from the Pension Credit is tapered away at higher incomes. You lose 40p of Pension Credit income for every £1 of other income you have. This tapering produces disincentives to saving for the current working age population. Suppose you are of working age and are trying to decide how much of your income to spend this year and how much to save for your retirement. If you know you are not going to be eligible for the Pension Credit, saving £1 today will allow you to spend an extra £1 in retirement. But what happens if you know that you will be eligible for the Pension Credit when you retire? Saving £1 today gives you £1 of extra private income in retirement, but as a result you lose 40p of the Pension Credit income you would otherwise have got. So saving £1 today only gives you an extra 60p of income in retirement – saving your money now does not seem like such an appealing option.

The presence of the Pension Credit means you experience a (lifetime) income effect, which tends to increase your current consumption, and a substitution effect, which makes future consumption more expensive relative to current consumption and also tends to increase current consumption and hence reduce saving.

This disincentive effect is likely to affect an increasing number of people if current indexation of the Pension Credit continues. Currently about 40% of pensioner families qualify for Pension Credit, but this is predicted to rise to about 75% by 2050. If 75% of pensioners will be eligible for means-tested benefits, a lot of working age people face a disincentive to save. This seems at odds with encouraging greater private saving, and hence the current system of means-tested benefits to pensioners will probably not continue. However, no changes have yet been committed to and so considerable uncertainty still surrounds the incentives people face.

There is another reason to think that private pension incomes may not grow enough in the future to offset declining generosity of state support. The UK has traditionally had very extensive private pensions, which have bolstered relatively ungenerous state pensions. However, increasing life expectancy has made certain types of pensions more expensive for employers to provide and the stock market crash of 2001 produced huge deficits in many pension funds. As a result, coverage of generous employer pensions has fallen.

The Pensions Commission’s proposals
To avoid pensioners becoming poorer relative to the rest of the population, the Pensions Commission proposed 3 broad reforms, which include elements of both options 2 and 3 outlined earlier.

- Encourage higher private saving through a new low-cost pension scheme (the National Pension Saving Scheme, NPSS).
- Make the Basic State Pension more universal and flat-rate and index to earnings rather than prices (which will reduce the spread of eligibility for means-tested benefits).
- Offset some of the additional cost of higher state pensions by increasing the age at which individuals start to receive state pensions to 68 (it is currently 65 for men and 60 for women, though the female State Pension Age is already due to rise to 65 by 2020).

The future course of pensions policy in the UK remains to be seen, but doing nothing is not an option. As this article has shown, there are only three ways to support an ageing population: consume less during working life (save more or tax more), consume less during retirement, or work for longer. If we make no active choices about which margins to adjust, a choice will be made for us, and it may well be a choice we do not like.