

WE'VE GOT A FUND, SO WE'RE OK  
..... BUT ARE WE REALLY OK?

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04

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DEMOGRAPHY

## > WE'VE GOT A FUND, SO WE'RE OK ..... BUT ARE WE REALLY OK?

**Martin Lunnon looks at how countries finance their social security programmes**

Most countries have social security to pay benefits to individuals unable to provide for themselves. One thorny question is how to finance these programmes. This continuing issue faces many countries, from emerging nations to the most developed economies.

There are three options:

### Fully funded

A social security fund large enough to meet all liabilities accrued to date; a bit like an occupational pension plan.

### Partially funded

A smaller fund covering part of the benefits.

### Pay as you go

(PAYG) Contributions each year to cover benefit outgo.

Most countries operate some sort of fund, like the National Insurance Fund in the UK. But unlike occupational pensions, social security is usually only partially funded.

## PARTIAL FUNDING

Suppose a new social security programme sets out to pay full-rate benefits from day one. It will rarely be fully funded, unless established with a large initial payment from public funds. Partial funding can also arise because:

- > Contributions are set to maintain a fund large enough to pay five years' (say) of future benefits. A smaller fund is enough to provide liquidity or prevent the need for short-term alterations in contribution rates when benefit expenditure goes up or down.
- > An initial aspiration to full funding can change to partial funding in adverse conditions; where benefits cost more than expected, asset returns are poor, or expenses high.
- > On the other hand, partial funding can occur if PAYG contributions are set higher than needed to pay annual benefits over a number of years.

## ACTUARIES AND SOCIAL SECURITY ...

Social security actuaries in the UK and elsewhere investigate ways to counter the effects of changing demographics and economic outlook, usually within a partial funding framework.

*"ACTUARIES INVESTIGATE  
WAYS TO COUNTER THE  
EFFECTS OF CHANGE."*

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05

## IN A LARGE COUNTRY



The US Social Security Trust Fund is only partially funded. Social security contributions, at rates set in law, have exceeded benefit expenditure in recent years, so a fund has built up, which will continue to grow until the post World War II baby boom retires (around 2016). The fund will then run down, and is projected to run out of money by 2037<sup>1</sup>.

A lot of attention is paid to when the fund is projected to run out. However, many events could change this outcome. Comparatively small increases in contributions could make good the position, as could changes to benefits.

## IN A SMALL COUNTRY

A small island territory has a partially funded social security programme which is still fairly immature, but the population is living longer and aging, and is also highly sensitive to immigration. Contributions are at just the rate which will pay for benefits earned over an average working lifetime.

As in the first example, expenditure is projected to grow as the population ages and the fund matures, until it exceeds contribution income. Then the fund starts to run down, until it is exhausted. But how to explain this to people? Especially when they are paying adequate contribution rates, and they say: "we've got a fund, so we're OK".



## CLARITY OF PRESENTATION IS KEY

One approach for the explanation focuses on benefits earned in the past. Because of partial funding, the fund set aside to pay past service benefits will eventually run out. But there will be future contributions to make up the shortfall, and these could be greatly boosted by future immigration.

An alternative approach considers the whole fund. The liability to pay benefits will grow with the population, and the growth in earnings; the deficit from full funding will grow in line with investment returns; the net fund (liabilities less deficit) will be negative if population and earnings growth fall short of investment returns.

Under both approaches, the partial fund can run out under some scenarios – depending on the balance between demographic expansion and economic growth.

## OK, BUT KEEP UNDER REVIEW

Having a fund might feel like 'we're OK'. But what matters is how much is in the fund and the contribution levels. If the fund is not enough to pay for past accruals, future contributions have to subsidise the past as well as pay for the future. Not necessarily a problem. But the lower the funding, the greater the reliance on future contributions, and the more likely they are to have to rise.

The trick is to keep the position under regular actuarial review. That way, there is an early warning system in place in case liquidity is squeezed, or if threats arise to the long term affordability of social security for those who really need it.

<sup>1</sup> <http://www.socialsecurity.gov/OACT/TRSUM/index.html>