Small Superannuation Funds – Actuarial Issues: Consequences for Taxation and Social Security Arrangements

Introduction

Certain actuarial principles underpin the financial operation of the main small superannuation fund arrangements:

- allocated pensions;
- market-linked pensions; and
- defined lifetime pensions.

The underlying actuarial principles give rise to certain expected outcomes. This brief note describes these expected outcomes, having regard to the tax and social security arrangements that apply to eligible superannuation products.

The note has been prepared at the request of the Treasury, in relation to the Senate Committee inquiry into the amendment of SIS Regulations. It has been prepared following hearings on 26 July 2004 in Melbourne. At that hearing, the Committee referred to apparent disagreement among the actuarial profession regarding the viability of defined pensions payable from small superannuation fund arrangements.

The actuarial principles and the consequences of those principles discussed in this note are not, to my knowledge, the subject of any disagreement among the actuarial profession.

This note is intended to be suitable for presentation to the Committee.

The conclusions are presented below. Quantitative results were derived from cameo analyses carried out for the Treasury. They are based on a married couple (male fund member aged 65 and female spouse aged 60).

Expected Outcomes – 'Residual Value'

In this context, residual value refers to money left in the fund on death.

- Market-linked pension: is designed in a way which ensures that money is moved out of the superannuation system (ie out of the special tax environment) after a set term. At the end of the term, the special tax treatment provided through the superannuation system ceases.
- Allocated pension: is designed in a way which allows for money to be moved out the superannuation system quickly (commutation), but ensures that most money (about 98%) is moved out of the special tax environment after about 30 years.

- <u>Defined lifetime pensions paid from small funds:</u> are designed in a way which means that, on average, about 20% of money in real terms will still be in the superannuation system after 30 years (beyond the end of the lifetime of the retiree in most cases).

Small funds that pay defined pensions hold risk reserves to support the risk they are carrying (ie the risk that they will run out of money). Risk reserves are not all expected to be used to make pension payments but may be called on if necessary.

It follows that there is an expectation that a (significant) part of the investment in a small fund defined pension will not be applied to the retirement income of the member (or spouse).

Market linked pensions and allocated pensions, on the other hand, are investment products. There is no risk that they will not be able to deliver what they promise and so small funds that pay allocated pensions and market linked pensions do not have to hold risk reserves. The result is that the majority of the money in these funds is expected to be applied to retirement income.

For all three products, there is some expected residual value. That is, there is a statistical expectation that some money will be in the fund on death. This situation arises because, in all three cases, some pensioners will die before either the money runs out or before the term of the pension has expired.

However, for both market-linked pensions and allocated pensions, it is expected that typically a little less than 95% of the initial investment in real terms will be applied to the retirement income of the member (or the couple). That is, the expected residual value for these products is perhaps a little over 5% of the initial investment.

For small funds paying defined lifetime pensions, however, about 75-80% of the initial investment is expected in real terms to be applied to retirement income. That is, the expected residual value for these products is about 3 to 5 times that for the other products. Almost 25% of the initial investment is expected to remain in the fund on death. Thus, for every $100,000 invested in a typical small fund defined pension, about $20,000 to $25,000 in real terms is expected not to be applied to the retirement income of the fund member or spouse.

Market linked pensions will qualify for the 50% asset test exemption for age pension purposes. This may be regarded as consistent with (among other things) the low expected residual value.

Allocated pensions, on the other hand, do not qualify for 50% asset test exemption, because they can be commuted at any time.

Expected Outcomes – Certainty of Payment

Allocated pensions and market linked pensions are designed in a way that means they can certainly deliver payments as promised. There is no risk that payments will not be able to be made in line with the set terms.

Defined pensions are, however, a risk product. The risks are difficult to manage. An actuary gave evidence to the hearing in Melbourne that (even) large commercial providers are having difficulty measuring and managing the risks associated with these products. Relevantly, the mortality and investment risks are greater for a small fund paying a defined pension than for a large commercial provider. Small funds cannot diversify mortality risk and tend not to try to match investments to liabilities.

Actuaries typically certify small fund defined pensions to a probability of at least 70% (although sometimes lower). That is, actuaries certify that there is at least a 70% probability that the pension will be delivered in line with the set terms. The assumptions and technical precision of this sort of statement are clearly debatable. However, the language is useful for descriptive purposes and to get a feel for the risks involved. A number of points follow:

- In order to be able to certify at a high probability, risk reserves must be maintained. Thus, if there is at least a 70% probability that the pension will be paid, then there is at least a 70% probability that there will be an effective residual value.
- On the other hand, it follows that there is a probability of, say, up to 30% that the pension will not be delivered. That is, although there is an expectation that there will be money left over (the risk reserves), there is a significant risk that the pension will not be payable on the set terms.
- A prudentially regulated commercial provider must guarantee payment on the set terms to a very high level of probability. (3 out of 10 pensions failing would not be acceptable.) This is achieved by a combination of risk pooling, attempting to match assets to liabilities, and potential access to other funds (eg shareholder funds). Risk pooling means that ‘releases’ from the short livers are applied to pay the pensions of the long livers and to provide a return on the capital provided by the risk takers (shareholders).
- In order for a small fund to ensure a comparably high probability of payment, a much smaller pension would be payable for the same initial investment (purchase price). The result would be an even greater effective residual value in the small fund.

Expected Outcomes - Age Pension Means Tests

In relation to the income test, the main points are:

- Small funds paying defined lifetime pensions defer income assessable for Age Pension purposes relative to market linked pensions.
- Small funds paying defined pensions are expected, overall, to deliver less assessable income in real terms for Age Pension purposes than market linked pensions.

This situation arises because:

- of the need to hold risk reserves for lifetime pensions. That is, since money is held in the fund that is not expected to be paid out before death, the expected drawdown is lower for a defined pension than for a market-linked pension; and

- more favourable treatment of the calculation of the return of purchase price deduction for a small fund lifetime pension relative to a market linked pension.

For allocated pensions, the picture is more complex. Although the expected drawdown is lower for a defined pension than an allocated pension, deductions (return of purchase price) may sometimes be higher for an allocated pension than for a defined pension where the lifetime pension is reversionary.

Finally, in relation to age pension asset tests, the main point is that the full allocated pension account balance is counted as an asset whereas market linked and lifetime pensions are only 50% assessed.

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