SGL Adequacy and Retirement: Longevity and Economic Impacts

John Piggott and John Evans

SGL adequacy and retirement: longevity and economic impacts

There is much debate on whether we have saved or will save enough to fund our retirement future. JOHN PIGGOTT and JOHN EVANS F Fin examine the argument from the perspective of an average couple and, contrary to perceptions, find that there is life after work.

Australia has a “universal” superannuation system which purports to capture most workers and to effectively transfer current wages to a retirement account that cannot be drawn in most circumstances until ceasing full time employment. This universal “SGL” system is supplemented by the “Age Pension” provided on an unfunded basis by the Australian Government and subject to means tests.

The current contribution rate is 9% of wages, all paid by the employer to a nominated superannuation fund. Member contributions are not required. The SGL system will for the majority of workers constitute their entire retirement savings and will be their biggest asset, followed by their home.

Factors that will affect the adequacy of the SGL to fund Australians’ retirement will include:

(i) their participation in the work force prior to retirement;
(ii) investment returns throughout the funding period and retirement;
(iii) expenses during the funding period;
(iv) the period they live after retirement;
(v) the cost of living in retirement;
(vi) continuation of the supplementary Age Pension.

The authors look at the adequacy of the SGL under some assumptions and in particular its adequacy to fund a comfortable retirement for a typical Australian couple.

LONGEVITY ISSUES

Based on the Australian Life Table 2000-2002, with allowance for mortality improvements based on the average of the last 100 years in Australia, we estimate that for a couple retiring in 2006 and consisting of a male aged 65 and a female aged 60, the male could expect to live on average for 18.7 years, the female could expect to live for 27.2 years and there is a 57% probability that one of them will still be alive at age 90. For a couple retiring in 2025 and consisting of a male aged 65 and a female aged 60, we estimate the male could expect to live on average for 20.0 years, the female could expect to live for 28.9 years and there is a 64% probability that one of them will still be alive at age 90.

For a couple retiring in 2045 and consisting of a male aged 65 and a female aged 60, we estimate the male could expect to live on average for 21.2 years, the female could expect to live for 30.5 years and there is a 71% probability that one of them will still be alive at age 90.
Similarly, for a single male retiree, if it is assumed the expenditure in retirement did not decrease then the single retiree would run out of superannuation assets after 18 years. The single retiree would then be faced with a reduction in income from $32,000 pa to $13,000 pa.

The financial well-being in retirement is also sensitive to the investment return; in the base case considered previously, we have assumed an arbitrary net return on assets of 5.75% pa both before and after retirement. If this was to reduce to say 5.25% pa, then the periods of financial well-being change to:

(i) 29 years for the married couple with an initial expenditure of $50,000 pa reducing by 0.5% pa, and
(ii) 16 years for the single male retiree with an initial expenditure of $32,000 pa reducing by 0.5% pa (see Graph 2).

Generally, it would seem that for a couple, each 0.5% pa reduction in expenditure ensures a further 8 years of financial well-being and each 0.5% pa reduction in the investment return reduces the period of financial well-being by around 6 years; to put this another way, each 0.5% pa of investment return is worth very approximately 0.5% pa greater expenditure.

CONCLUSION

It would appear that the current SGL contribution of 9% pa over 30 years is adequate to fund retirement for the typical couple only if they live a very modest and declining lifestyle after retirement. They need to reduce expenditure by around 40% upon retirement and then further reduce this by 0.5% pa thereafter. This reduction in expenditure could be avoided by greater investment returns of 0.5% pa.

If a couple earning AWE before retirement wished to live a comparable lifestyle after retirement, then the accumulated SGL assets, even with the Age Pension support, would be inadequate, and they would be highly likely to face a significant drop in income during their later years.

Single retirees face a harsher outcome, and for the typical retiree earning AWE before retirement, they would in all probability face a significant reduction in their income during retirement.

Notes

1 ASFA: How much do you need to spend to have a comfortable standard of living in retirement? 2004.
2 Household Expenditure Survey. The most recent survey was conducted in 1998 by ABS, and the formal data was released in 2002 with Catalogue No. 6544.0.30.001.

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These projections indicate that in the future, for the typical retiring couple, they can expect to need to fund their retirement for at least 30 years (See Graph 1).

**Cost of Living Issues**
The ASFA 2004 survey\(^1\) determined that for a “comfortable” lifestyle in retirement a couple needed to spend $46,297 pa and singles needed to spend $34,563 pa. These results are broadly supported by the 1998 Household Expenditure Survey:\(^2\)

<table>
<thead>
<tr>
<th>Age</th>
<th>Median expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>65–69</td>
<td>$43,279</td>
</tr>
<tr>
<td>70–74</td>
<td>$39,069</td>
</tr>
<tr>
<td>75+</td>
<td>$38,430</td>
</tr>
</tbody>
</table>

We consider that it is reasonable to assume the average expenditure in 2006 dollars for retired couples aged 65/60 is approximately $50,000 pa, and for retired singles, approximately $32,000 pa. It can also be seen from Table 1 that expenditure decreases as age increases; the average decrease from retirement is estimated at around 1.25% pa in the HES study, but this would include the effect of some couples still being in some sort of work in the 65–69 age group and a better estimate would be around 0.5% pa.

**SGL CONTRIBUTION CONSEQUENCES**
It is important to know how resilient is the SGL system of accumulation, and this is best determined by considering the period over which the SGL accumulated assets could provide the required level of income for the retirees. It is also important to take into account the Australian Age Pension as this is an integral part of the retirement system in Australia.

We have estimated that the SGL contributions for a couple participating in the workforce for 30 years with AWE earnings would accumulate to $588,000 (in 2006 dollars) with a real return of 5.75% pa, taxes at current rates and typical charges for an industry superannuation fund. To determine the adequacy of this amount we will assume that there is no capital “leakage” from this accumulation on retirement and that retirees would take out an allocated pension. The other assumption is that the current Age Pension remains as is, the couple will not have assets sufficient to affect the amount of the Age Pension, and their superannuation assets will be invested in a form that will allow them to obtain maximum Age Pension income. This income is subject only to the “Income Test” reductions based on their withdrawals from their superannuation fund of sufficient amount that together with the Age Pension give them their required total income.

The Age Pension contribution to the retired couple’s total income is not insignificant in our example, and by way of illustration, in their first year of retirement, around $7,000 would be provided by the Age Pension and $43,000 by drawdown from their superannuation fund.

We have estimated that assuming a 5.75% pa investment return net of costs, expenditure of $50,000 pa, decreasing by 0.5% pa, and current Age Pension rules, then the SGL accumulated assets of $588,000 would allow a couple retiring in 2006 to survive financially for almost 35 years, i.e. until age 100 for the male and 95 for the female.

The comparable survival period for a single male retiree with an expenditure of $32,000 pa initially, decreasing by 0.5% pa would be 27 years.

**SENSITIVITY ANALYSIS**
If it is assumed, however, that the expenditure required in retirement remains at $50,000 pa, then the couple would run out of funds after 27 years, i.e. around age 92(M)/87(F), and would be faced with a very significant reduction in income from $50,000 pa to the Age Pension of $22,000 pa.

It needs to be appreciated that the typical couple that accumulated the $588,000 of superannuation assets were earning a net combined income of around $84,000 pa before retirement, and thus a reduction to even $50,000 pa is a significant reduction; had they continued to withdraw $84,000 pa in retirement they would have exhausted their superannuation assets by approximately 10 years and would then need to live off the Age Pension of $22,000 pa.

**GRAPH 1**
PROBABILITY OF ONE OF A COUPLE ALIVE AT 90

**GRAPH 2**
PERIODS OF FINANCIAL WELL-BEING

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\(^1\) Australian Superannuation Foundation Association (ASFA)

\(^2\) Australian Bureau of Statistics

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