Superannuation: Our magic pudding

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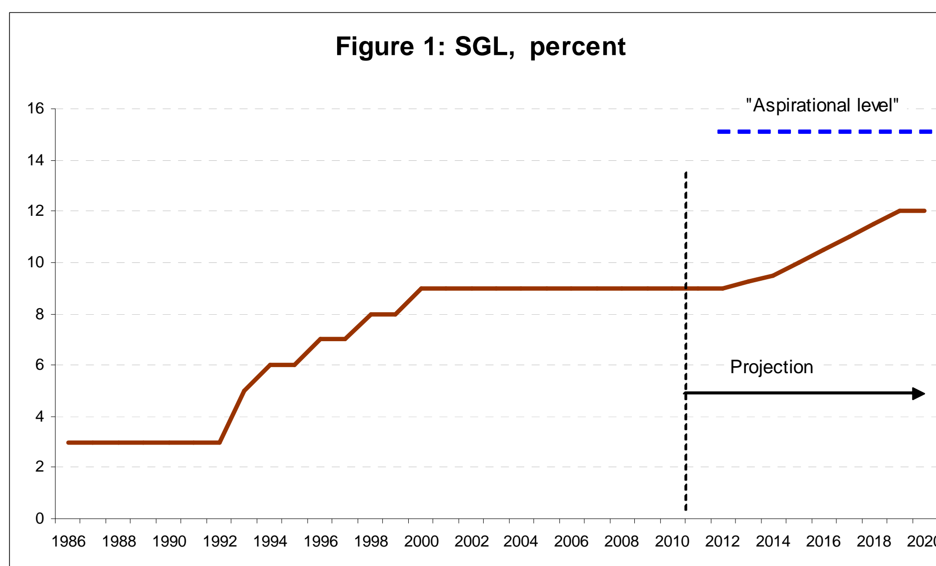
The more you eats the more you gets. Cut-an'-come-again is his name, an' cut, an' come again, is his nature. Me an' Sam has been eatin' away at this Puddin' for years, and there's not a mark on him.

Norman Lindsay *The Magic Pudding: The Adventures of Bunyip Bluegum*

Bunyip Bluegum's luck was to fall in with Bill Barnacle and Sam Sawnoff, keepers of the Magic Pudding. No matter how much they ate of the pudding, there was always more, ready to be eaten. Above all was its protean character – depending on diners' wishes it could be a steak-and-kidney pie, an apple-dumpling pudding, or even a Christmas plum pudding.

Compulsory superannuation is our real-life magic pudding. We keep drawing more from employers to finance superannuation, and even more magic is its capacity to serve so many purposes.



The superannuation guarantee levy (SGL) has gone from 3 percent at its inception in 1986 to 9 percent now, and it is government policy to lift it to 12 percent by 2020. There is pressure to lift it even further, to 15 percent: Paul Keating is one advocate for a higher rate, and the ACTU, on its website, says "it is now widely accepted that a 12-15% super levy is necessary to achieve a basic retirement income."[1]

1. ACTU "History of Super" http://www.actu.org.au/super/about/super_history.html

That assertion is challengeable; indeed, academics are on the lookout for passive voice statements of the form “it is widely accepted”. Who accepts that notion, with what evidence, and with whose interests in mind? I contend that with so many different life and workforce experiences, there is no formula determining adequacy. Nine percent would be quite adequate for many people – perhaps even more than adequate – while at the same time even fifteen percent could be inadequate, particularly if it is not accompanied with reform of fees.

But first, an examination of the economic function of compulsory superannuation, for, like the Magic Pudding, it seems to have provided many different courses.

Superannuation’s changing purpose

Superannuation in Australia dates from the mid-nineteenth century, when some large corporations and government departments started paying pensions to long-serving employees.

Although the need to bring pensions under common eligibility was an issue at the time of Federation (the Constitution specifically gives the Commonwealth powers over age pensions) it was not until 1908 that the Commonwealth introduced a universal age pension. This was, and remains, a defined benefit scheme (now linked at 25 percent of male average total earnings), but, apart from a brief period from 1973 to1975, it has always been means tested.

By the mid-twentieth century most public servants and some corporate employees were in defined benefit schemes, but others were left out.

By the 1970s public policy debates became concerned with long-term retirement incomes and the budgetary stress of the age pension. In the early 1990s the Commonwealth started to make long-term fiscal projections in its *Intergenerational Reports*. The latest (2010) Report projects age pension spending to rise from 2.7 percent of GDP in 2009-10 to 3.9 percent of GDP in 2049-50. (Interestingly, this proportion is significantly down from that calculated in the 2007 Report, which saw age pension spending rise to 4.4 percent of GDP in 2046-47.)

These concerns built up from 1970 onwards, and they arose from many quarters. Female wages were rising, leading to a higher opportunity cost of having children. Fertility was falling below the long term replacement rate of 2.3 children per woman; it has hovered around 1.8 children for the last 15 years. People were living longer. Immigration, while high in absolute numbers, was much lower as a percentage of the population and by 1980 the “young” immigrants of the 1950s were ageing. As a result the age dependency ratio was projected to rise.

In 1973 the Whitlam Government established the National Superannuation Committee of Inquiry, chaired by Keith Hancock. The inquiry reported in 1976, recommending a universal pension scheme with an earnings-related supplement, but this was not taken up; the Coalition, then in government, was to remain opposed to compulsory superannuation until 1996. [2]

By the early 1980s firms (and later public sector employers) were moving from defined benefit to defined contribution schemes, shifting actuarial and investment risk on to

2. National Superannuation Committee of Inquiry. Final Report. Part 1 (1976).

individuals. In many cases, including universities and government agencies, defined benefit schemes were grandfathered. By 2009 only 660 000 (mainly older) people had purely defined benefit accounts. This shift can be seen not only in the context of ageing, but also in the context of a changing economic structure towards more competitive markets, involving less security for workers or their employers.

The Commonwealth's early response to these emerging problems was to tighten the pension means tests, but it retained the defined benefit design of the age pension. The budgetary cost of age pensions, rather than provision of retirement income, was the main policy concern.

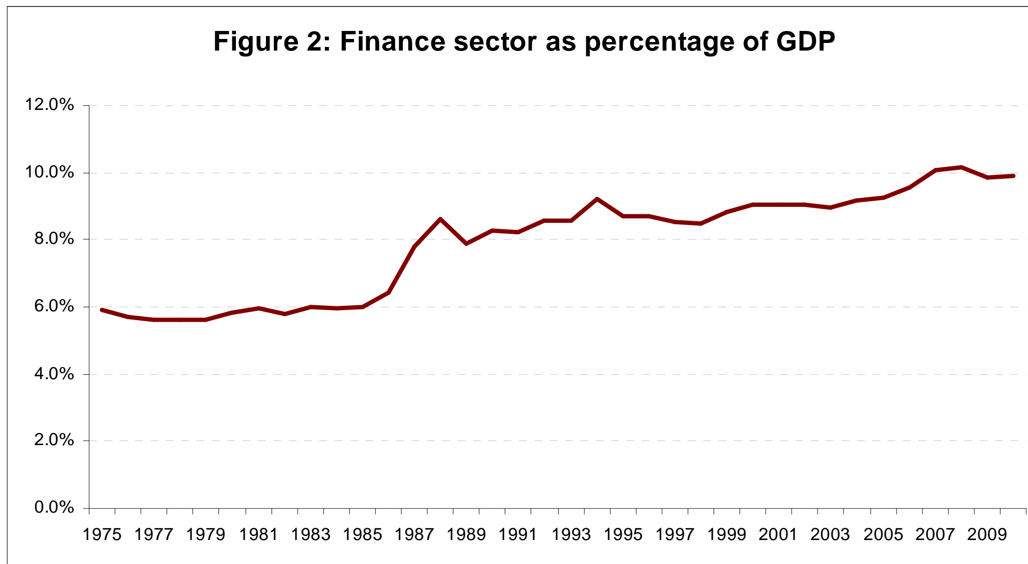
In fact, it was neither demographic pressure nor the problems of defined benefit pensions, which, brought the Commonwealth into compulsory superannuation for private sector employees. By 1986 the economy was in a positive feedback loop, with high inflation feeding into high wages as built into the Hawke Government's Accord which indexed wages to the CPI, which in turn fed into demand and high inflation. The pragmatic response, negotiated through the Conciliation and Arbitration Commission, was to award a six percent pay rise split between a three percent wage rise and three percent award-based superannuation. (Behavioral economists will note the use of the "money illusion" to make acceptable what was to become a real three percent cash wage cut.) Such a low level of contribution could never provide a useful retirement income; its purpose was to break inflation.

In 1992, however, the Commonwealth became committed to raising the rate to nine percent by 2003, and it has remained at that level until the recent decision to raise it to 12 percent by 2020.

Also, there have been extra inducements, such as co-contributions and generous tax breaks on retirement incomes introduced in the 2006-07 Budget and contribution tax rebates for low income earners introduced in the 2010-11 Budget.

Another consideration driving superannuation has been the need to mobilize savings. By the 1990s there was widespread concern at a low level of household saving. The Fitzgerald Report on saving was released in 1993 when savings were significantly higher than they are now. Some would say superannuation has partly arrested the decline; others would frame it differently, saying that superannuation has tended to displace other forms of household saving.

Yet another intention, made less explicit, was to boost the financial sector. The finance sector put on a huge growth spurt in the mid 1980s, and has continued to grow ever since, from 6 to 10 percent of GDP – a large increase in the nation's overheads. (See Figure 2.) While this spurt coincided with the introduction of compulsory superannuation, there were other contributing factors, in particular the Hawke Government's substantial de-regulation of the financial sector. Operating expenses of superannuation are now around $9 billion a year (an APRA figure that probably understates the industry's costs), suggesting that at least a quarter of the rise in the size of the sector is attributable to superannuation.



Both main political parties seem to have an affection for the financial sector. The Coalition's affection is stronger, as evidenced by its strong support for private health insurance, and, specifically in relation to superannuation, its cool response to the Cooper Review recommendations, particularly as they relate to financial adviser commissions.

Labor too is enchanted by the sector. With an exquisite sense of timing, just ten days after Lehman Brothers filed for bankruptcy in 2008, the Minister for Financial Services announced the establishment of The Australian Financial Centre Forum, a Government "initiative to position Australia as a leading financial services centre".[3] The Forum reported earlier this year, stating that Australia's superannuation system "has resulted in Australia having one of the largest and most sophisticated funds management sectors globally."[4] On release of the Forum's Report, the Johnson Report, the Minister said "Promoting Australia as a financial services hub has been one of the key priorities for our Government since coming to office.[5] Presumably the Government has in mind the economic successes of other financial services hubs, such as the UK and Iceland?

Now, in the 2010-11 Budget Papers, we find that the boost in superannuation, through increasing domestic saving, will help reduce our current account financing risks.[6]

So we see that compulsory superannuation has served many policy ends – breaking an inflationary feedback loop, boosting saving and investment, supporting the financial sector, reducing long-term fiscal pressure, protecting our current account, and, almost as an *obiter*

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3. Press release by Assistant Treasurer and Minister for Competition Policy and Consumer Affairs, 26 September 2008.

4. *Australia as a Financial Centre: Building on our Strengths* Report by the Australian Financial Centre Forum November 2009.

5. Minister for Financial Services, Superannuation and Corporate Law interview with Alex Symonds, SKY Business Friday, 15 January 2010.

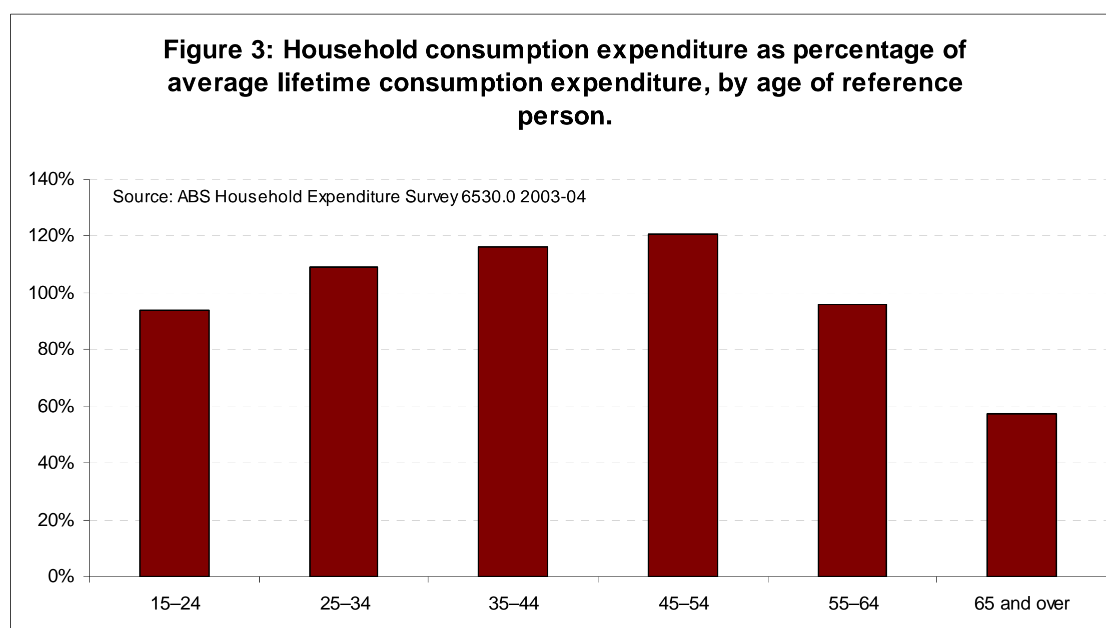
6. Budget Paper # 1, 2010-11, Page 4-21.

dicta, providing retirement incomes. With so many claimed benefits it is possible that policy makers see boosting superannuation as unquestionably desirable, and it is unlikely to have many critics. With such a large compulsory diversion of workers' income, however, it is useful to look more closely at what most would see as the purpose of superannuation.

A sole purpose test: Is it only about retirement income?

It is easy to define the purpose of superannuation in terms of providing retirement income. If, thanks to individual under-saving for retirement (well-researched by behavioral economists) and longer life expectancy, we can expect retirement incomes to be very low, then that is a worthwhile end.

But, almost by definition, retirement income comes at a cost to pre-retirement income – an opportunity cost. While there is no one objective standard of retirement income as a proportion of pre-retirement income (figures of 60 percent and 70 percent are used), it is reasonable to suggest that there comes a point where people make too great a transfer to their retirement income. In economic theory (and in common sense) there is an optimum distribution of lifetime income. When it drops precipitously in retirement it is sub-optimum, but it is also sub-optimum if it is too heavily skewed to our later years.



Our needs fall in retirement: the ABS household expenditure survey shows that our consumption expenditure in households with a reference person over 65 is only 57 percent of average lifetime consumption. (See Figure 3.) There are qualifications in interpreting this data. Being a snapshot, the older people surveyed by the ABS had lower lifetime earnings; older households are more often single households; consumption may be constrained because of inadequate savings. But, even among households in the highest income group, who may be assumed to be less financially constrained, there is the same fall in consumption. Also, these figures do not include mortgage re-payments.

The provision of retirement income is the usual way we see superannuation, but a more practical (and economically efficient) objective may be to optimize lifetime income (or, more strictly, consumption opportunities).

I have been studying superannuation in this context, and some years ago developed a spreadsheet model to look at the effects of different superannuation contribution rates, earnings, fees and other variables, such as co-contributions. My initial concern was the opportunity cost of fees, and it was easy to demonstrate the pernicious effects of percentage-based fees, but it has also been useful in terms of modelling policy changes. It is on the Web at: http://www.home.netspeed.com.au/mcau/academic/supermodelv5.xls; below is a snapshot of the main part of the user's screen.

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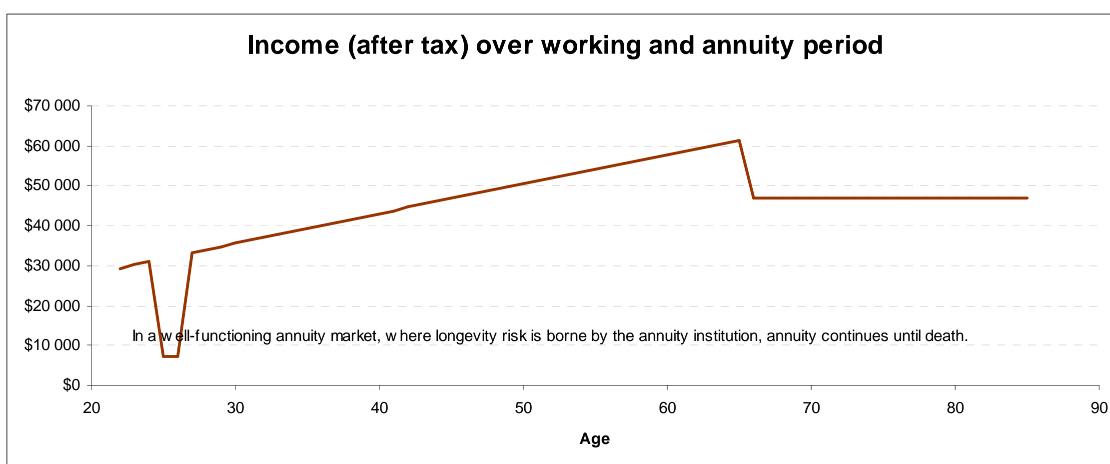
	A	B	C
1	**Superannuation model**		
2			
3		**Contributor inputs**	
4		Commencing age	22
5		Finishing age (60 to 70)	65
6		Commencing salary ($'000)	35
7		Final salary ($'000)	80
8			
9		Age of break from full time workforce	25
10		Years out of full time workforce	2
11		Fraction employed in those years	20%
12			
13		Lump sum contribution at age	40
14		Amount $'000	20
15		Check if contribution is tax deductible (e.g. salary sacrifice)	☐
16			
17		**Policy inputs**	
18		SGL rate	9.0%
19		Contribution tax	15.0%
20		Earning tax	15.0%
21		New $500 rebate	☑
22		Co-contribution	☑
23			
24		**Fees and earnings**	
25		Fund earning rate (real)	5.0%
26		Fees as % of accumulation (incl trails)	0.8%
27		Annual fixed fees	$0
28			
29		**Outputs**	
30		Accumulation at age 65 $'000	502
31		Years of life expectancy at age 65	20.1
32		Annuity income over 20 years, $'000	38
33			
34		Annuity income as % of lifetime average salary of $56 094	67%
35		Annuity income as % of final gross salary of $ 80 000	47%
36		Annuity income as % of final net salary of $ 61 250	61%
37		Annuity income as % of adult full time earnings	55%

The user can change all the white cells, including the tick boxes. In the case in the illustration, I model someone who graduates at age 22, works until retirement at age 65, with a salary rising in real terms from $35 000 to $80 000. She has two years on reduced pay, and also has the benefit of a small $20 000 inheritance (or other windfall) at age 40. Above all, she is in a reasonably low-cost fund, with fees at 0.8% of balance.

Her retirement accumulation will be $500 000, not a king's ransom, but adequate to provide an income of $38 000 over her expected 20 years of remaining life. I have assumed those reasonable fees continue into the retirement phase, and that there is a well-functioning annuity market. The quality of annuities is a policy issue I urge superannuation advocates to pursue, for at present fees are high, and commercial providers are making petulant claims about "longevity risk", while neglecting to acknowledge that this risk is hedged against their life insurance business, where longevity is a benefit. But that is an issue for a different forum.

The model has a graphical output, illustrated below for the individual in question.



For that individual, there may be a case for increasing her contribution to 12 percent: in that case her retirement income would rise to $47 000. If she were in a high-fee fund, she would certainly need 12 percent contributions and more, for if one plugs in a fee level of 2.0 percent into the model with a 12 percent contribution rate, her retirement income is only $32 000. That is *less* than her retirement income in a low-fee fund with only a 9 percent contribution rate.

Such modelling illustrates a risk in the government's policy of raising the SGL rate to 12 percent or even beyond: it could be entirely absorbed by fees. As a policy priority, I suggest that the government should make no commitment on raising the SGL rate until it has fees under control, through *MySuper* or some other mechanism.

The other finding to emerge from the model is that for many, by any reasonable criterion, a 9 percent contribution rate is reasonable, provided they are in a low-cost fund. Those with continuous employment up to age 65 do well out of the present scheme, particularly if their lifetime earnings are fairly flat – as may apply to tradespeople and certain professionals. By contrast, those who start on low incomes and move up through the ranks, such as lawyers who start as clerks making the coffee and retire as SCs, lack the benefit of early contributions, although co-contributions and the recently announced tax rebates are of significant help. (For

those who rise through the ranks, co-contributions and tax rebates are a publicly-financed windfall.) Those who take early breaks, for childbearing, study or other purposes, pay a high price, as do those with broken employment or who take early retirement. An inheritance of a gift from a parent is of tremendous help, particularly if it is made at an early age.

In terms of public policy, then, I am arguing against the “one size fits all” constraint built into lifting the SGL rate to 12 percent. For many, it will skew lifetime income away from the time when they most need it – in their middle ages from age 35 to 55 – to the time when they least need it. Some of the cost will be borne by their own children growing up in a cash-constrained household, and some will be borne by increased debt for people’s mortgages and, if they are hard pressed enough, for cars and other household items. Some will use credit cards to support sustained debt. Also, without a buffer of savings, people are vulnerable to contingencies, such as the need for emergency travel, or the need to take unpaid leave, and have to cover themselves with high-cost insurance policies for other contingencies because they have no capacity for self-insurance. In short, they become heavily dependent on the financial sector, putting money into the sector with superannuation and insurance, and taking money out in the form of loans.

The beneficiary of this churning is the financial sector. People are forced to cast aside Polonius’ common-sense advice, to “neither a borrower nor a lender be”: we become both, one by force of circumstance, the other by legislation.

Superannuation advocates argue that superannuation gives people an opportunity for gearing: funding of mortgages and car loans is at lending rates, while superannuation includes equities which earn a premium. This argument had its attraction up to 2008, when short-term and medium-term superannuation returns were very high, but it has lost its appeal since. For the argument to hold, the long-term equity premium would have to be high enough to cover both borrowing fees and superannuation fees, and to compensate for the low yield of cash and fixed interest in superannuation accounts, for only 50 percent of superannuation assets are in equities (with another 10 percent in property which may enjoy some premium).[7] A back-of-the-envelope calculation suggests that these fees come close to wiping out any equity premium.[8]

7. These are 2009 figures, from the APRA Annual Superannuation Bulletin 2010.

8. According to Elroy Dimson, Paul Marsh and Mike Staunton in *Triumph of the Optimists: 101 years of global investment returns* (Princeton 2002), the long term equity premium over bonds is 5.6 percent. If only half of superannuation is in equities then its weighted premium is 2.8 percent. If fees each way are 1.0 percent, the net premium reduces to 0.8 percent. This is before taking into account a possible conservative equity mix in superannuation and the fact that the work of Dimson et al covers the 100 years to 2000, just before the “tech wreck” and well before the Global Financial Crisis.

Conclusion

My purpose in this paper has been to send a warning to those who are enthusiastic about the rise in the SGL. We need to consider carefully the opportunity cost of that rise, and to bear in mind that those with a stake in the financial sector stand to benefit strongly from any rise.

Many people, perhaps even a majority of the workforce, will need contributions higher than 9 percent, but many do not. They (and their children) will bear a net cost of a skewed lifetime income.

There are policy solutions worthy of examination. Perhaps there could be an "opt out" of the 12 percent rate, dependent on evidence of a financial plan having been developed. Perhaps the rate could automatically fall back to 9 percent or even lower once people achieve a certain account balance judged actuarially to be adequate for their age. Perhaps mortgage repayments, up to a pre-determined sum, could be given priority over superannuation contributions. Perhaps the subsidies for low-income earners could be re-directed to supplementing the age pension, reducing the churning through the tax system and private accounts. Perhaps, in light of the inequities we have built into the taxation of superannuation (which I have not covered in this paper), we can even embark on fundamental re-design. Such options need consideration.

Above all, governments need to bear in mind the purpose of superannuation – to apply to their own policymakers a "sole purpose test". It is to provide retirement income, with the qualifications that it should not skew lifetime income and that it should be kept low cost. It should not be treated as a magic pudding.