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Restoring a level playing field for defined benefits superannuation

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Since the late 1980s defined benefits superannuation has declined around the world. By June 2012 defined benefit balances in Australia stood at just 21 per cent of accumulation ones. Defined benefits will never recover its previous dominance here because it can only be offered by large and stable organisations: since 1992 Australia has had superannuation that is compulsory and (mostly) privately managed, and accumulation plans are the only viable ones for SMEs. Yet several policy measures have weakened defined benefits, especially in the private sector. Rescinding these measures would revitalise defined benefits. A byproduct would be a deeper market for privately-managed lifetime annuities.

1. Introduction and summary

Defined benefits superannuation calculates retirement benefits partly by reference to the salaries of plan members. Since the late 1980s it has declined around the world relative to defined contributions (accumulations) superannuation. By June 2012 defined benefit balances in Australia stood at just 21 per cent of accumulation ones. Indeed, the defined benefits alternative will never recover its previous dominance here. The main reason is that defined benefits can only be offered by large and stable organisations: since 1992 Australia has had superannuation that is compulsory and (mostly) privately managed, and accumulation plans are the only viable ones for small and medium sized enterprises which, collectively, are our main employers. By the same token, several policy measures since the late 1980s have weakened defined benefits, especially in the private sector. Rescinding these measures would revitalise defined benefits. A byproduct would be a deeper market for privately-managed lifetime annuities.

One adverse tilt of the playing field was the introduction in 1988 of 15 per cent taxes on superannuation fund earnings and employer contributions. Then the mid 1990s saw ownership of surpluses in defined benefit funds shifted from plan sponsors to all 'stakeholders' in the enterprise, including plan members. A trustee seeking to repay fund surplus to an employer became effectively obliged to use part of the surplus for the purpose of enhancing employee benefits. Moreover, after 1995, enterprises were no longer allowed to claim a refund of the 15 per cent tax on employer contributions when they drew down surpluses. These measures made defined benefits more expensive to operate. They also discouraged over-funding of a defined benefit plan, which serves the dual purpose of protecting members and buffering financial shocks to a business. Yet another tilt of the playing field during this period was compulsory vesting of employer-funded benefits accrued in defined benefit plans over and beyond the percentage of salary mandated by the Superannuation Guarantee. Most defined benefit plans have involved higher employer contributions than the prevailing compulsory rate of employer contributions.

Of course, no particular type of fund is unambiguously dominant. However, in the case of large and stable enterprises, defined benefits offer several appealing features that can be be shared by employers and long-serving employees. Defined benefit plans cross-subsidise long stayers at the expense of job switchers: long stayers enjoy better vesting of their benefits, and often also enjoy 'back-loading' whereby the benefit formula delivers a higher internal rate of return to them. Loyal and farsighted people therefore become more likely to self-select for job vacancies. Benefits that are strongly linked to final salaries motivate employees to strive for promotion, thereby becoming more productive. A maximum span for contributing to a defined benefit plan (typically 30 years) helps to motivate timely retirements on the part of elderly employees with declining productivity. Finally, risk-averse employees may accept substantially lower salaries in exchange for a retirement benefit promising a measure of income replacement for the duration of a household's retirement.

Defined benefits ease burdens on taxpayers. They are particularly suitable vehicles for providing private retirement benefits in the form of lifetime annuities, thereby lightening the burden of providing public longevity insurance. Current policy does little to discourage 'double dipping' whereby lump sum retirement benefits that have been accumulated in a tax-concessional environment end up being used for things such as extensions to a family home whose residents claim the Age Pension.

Defined benefits facilitate the sharing of investment risk across different cohorts of the population. Take the 'retirement risk zone' that spans the last few years of working life and the first several years of retirement. An accumulation fund member, accepting the conventional industry advice to maintain a high lifelong exposure to growth assets, runs the risk of events such as the Global Financial Crisis while traversing the retirement risk zone. She could end up scrimping and saving rather than making the most of the active period of retirement. Harmer (2009, p15) noted: "Age Pension applications in December 2008 were around 50 per cent higher than the number recorded in October of the same year." Retirees and taxpayers alike were the losers.

For these reasons we propose rolling back the policy changes late last century that tilted the playing field against defined benefits. As we have argued previously, in the context of defined contributions, workers could be allowed gradually to build up accounts taxed only in retirement and at the marginal income tax rate of the retired worker. This would gradually remove two tax disincentives from building up surpluses in defined benefit funds: the 15 per cent tax on employer contributions, and the 15 per cent tax on fund earnings. Surpluses could again become a tax-efficient source of financial slack to large enterprises, in this way promoting financial stability of the economy as a whole. The Superannuation Industry Supervision Act could be changed so as to confer on sponsors clear ownership of surpluses in defined benefit funds. Finally, a short stayer with an enterprise could be entitled to vesting of employer-financed benefits only up to the level where her benefit would have stood had she been in an accumulation fund paying the minimum compulsory employer contribution.

We would not envisage a big difference from these rollbacks in the short term. Rather, they would promote stronger and more numerous defined benefit plans in the long term, and could be seen as part of a long-term effort to promote lifetime private annuities in Australia.

2. Defined benefits in decline

Turner and Hughes (2008) are among the numerous commentators on the decline in defined benefits around the world. They take a detailed look at the experience of four countries: Canada, Ireland, the United Kingdom and the United States. In all four cases the declines date from the mid 1980s. The UK has shown the steepest decline. The US has not experienced much of a decline for collectively bargained workers.

Causing the decline is the usual list of suspects: increased job mobility, more women in the paid workforce (entailing less family attachment to particular employers), fewer workers in unions, lower interest rates (entailing higher defined benefit liabilities, especially for defined benefit plans offering pensions), and increased longevity.

Turner and Hughes emphasize that new regulations have also made life more difficult for sponsors of defined benefit plans. Compliance has become more expensive. The rise of the ‘stakeholder’ perspective on enterprises saw surpluses treated as being jointly owned by plan sponsors and beneficiaries rather than sponsors alone. Increasing concerns about tax expenditures saw limits on permissible overfunding. The time given a sponsor to amortize a deficit tended to shorten. Accounting rules changed. For example, there was a shift to mark-to-market principles for valuing corporate assets and liabilities. As a consequence, sponsors of defined benefits faced increased volatility in their earnings statements. This was at odds with the well-known preference, by managers and shareholders alike, for smooth earnings.

The decline of defined benefits in Australia followed a similar timetable to the declines in Canada, Ireland, the US and the UK. Moreover, the reasons were similar. The biggest difference was our introduction in 1988 of 15 per cent taxes on employer contributions and fund earnings.[ii] Accumulation plans can readily pass on the new taxes to members. By contrast, the short-term incidence of a tax on established defined benefit plans falls largely on plan sponsors. They naturally consider closing down plans to new members, and the legal and industrial consequences of shifting employees into new schemes, generally accumulation ones. Continued threats to the stability of our front-end superannuation taxes suggests that allowing new employees to join existing defined benefit plans looks increasingly courageous.

The Australian Prudential Regulation Authority (2007) says 82 per cent of members belonged to defined benefit plans in 1982/83. However, APRA's familiar tables only go back as far as 1995. Table 1 below summarises Table 16 in Australian Prudential Regulation Authority (2012):

TABLE 1: *Structure of Retirement Benefits, Australia*

	$ million				
	Actual assets by fund structure			Estimated assets by member benefit type	
Year (June)	Accumulation	Defined benefit	Hybrid	Accumulation	Defined benefit
1995	71,164	35,216	56,108		
2000	179,375	24,262	147,689		
2005	270,480	49,585	225,132		
2010	357,037	57,870	379,925	654,995	139,838

2012	340,721	63,630	513,080	758,958	158,473

Source: Australian Prudential Regulation Authority (2012)

Notes: Numbers in the right-hand column are estimates. Defined benefit assets include defined benefit members who may also have an accumulation component. Entities with 4 members or less are excluded.

The *Occupational Superannuation Standards Act* (1987), replaced by the *Superannuation Industry (Supervision) Act* (1993), raised the bar for the vesting of benefits arising from employer and employee contributions. This made defined benefits more expensive to operate, as short stayers no longer cross-subsidised other plan members to the same extent.

The mid 1990s saw further regulatory changes with adverse consequences for sponsors of defined benefit plans.[iii] One was the introduction of Maximum Deductible Contributions whereby tax deductions allowed for employer contributions were capped. Another involved a push by unions to ensure part of any repaid fund surplus was used to upgrade employee benefits, via the Industrial Relations Commission rather than the regular courts.[iv] The government chose not to not to intervene, instead allowing the new industrial case-law to stand. The SIS Act instituted new hurdles for employers seeking to repay fund surpluses to shareholders. In 1995 funds became legally ineligible for a rebate of the 15 per cent tax on employer contributions if they repaid fund surpluses to stakeholders, even though 1988's 15 per cent tax on fund earnings was already acting to discourage fund surpluses.

Stronger Super (Australian Treasury, 2010b) considered the sorry state of defined benefit funds. It noted the decline in defined benefits over the last three decades. It noted also that APRA had taken a 'rather "light touch" enforcement role' (p176), having concerned itself primarily with ensuring that minimum requisite benefits[v] are covered, rather than actual vested benefits. Yet minimum requisite benefits are typically less than actual vested benefits and are not reported to plan members.

The Super System Review (Australian Treasury 2010a), in line with an argument put to it by the Institute of Actuaries of Australia, noted: “the current focus in the SIS Act on solvency and minimum requisite benefits does not help trustees who undertake the process of negotiating higher employer contributions” (p177). Following the conventional view of Australia’s official family, however, the Review said without comment or explanation that “it is desirable that large surpluses not be created” (p177).

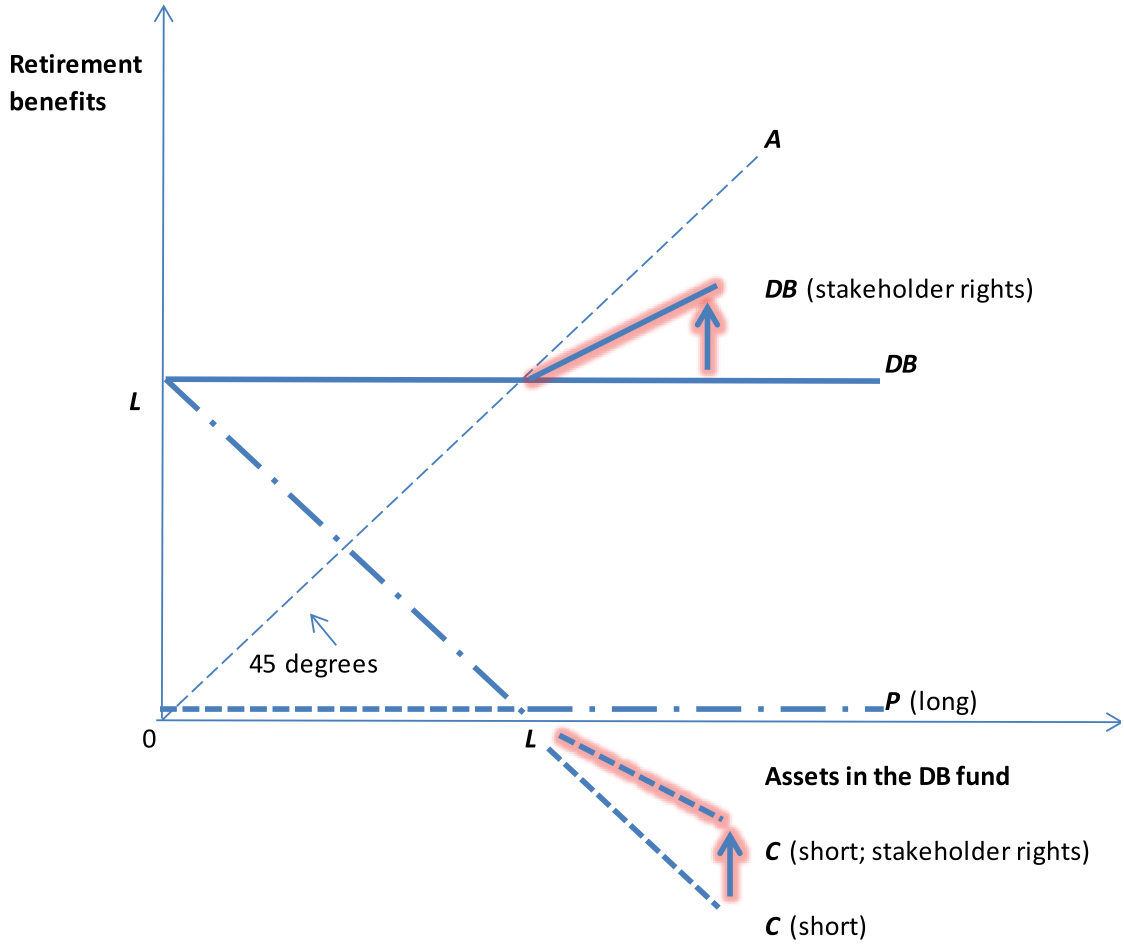
Stronger Super recommended that APRA issue a prudential standard that focused on the protection of vested benefits rather than minimum requisite benefits. The Review responded that it did “agree in principle” (p43). The Review recommended also that the SIS Act be amended so that a defined benefit fund which is technically insolvent yet not on track to restore solvency should be barred from accepting contributions stipulated by the Superannuation Guarantee. The Review responded: “The Government notes the recommendation” (p44).

3. Options analysis of ‘stakeholder’ defined benefits

A number of analytical contributions decompose the balance sheets of standard defined benefit funds into an exchange of options between members and the plan’s sponsor.[vi] Assets less liabilities constitute the surplus of the fund. The sponsor in effect grants members a put option on the risky assets underlying the scheme, insuring members against investment risk. The put is in the money whenever the surplus is negative. A run of low returns generally obliges the employer to make extra contributions.[vii] Members in effect grant the sponsor a call option on the surplus. The call is in the money whenever the surplus is positive, making the scheme cheaper to operate; a run of high returns on fund investments entitles the sponsor to a contributions holiday or a return of the scheme’s surplus.

‘Stakeholder’ defined benefits grant members a share of surpluses without removing downside protection. Retirement benefits become call options on the sponsor that are in the money whenever the surplus is positive. Plans modified in this way become more expensive to operate. Figure 1 refers.

FIGURE 1: *Options analysis of 'stakeholder' defined benefits*



In Figure 1 the horizontal axis measures the market value of the assets underlying the scheme. The vertical axis measures the present value ***L*** of retirement benefits owed to members of the scheme, also known as its projected benefit obligation. Retirement benefits are ordinarily unaffected by market fluctuations in asset values, hence the invariance (in principle) of the schedule ***DB*** with respect to assets in the DB fund. If the surplus is always maintained at zero, the call ***C*** and the put ***P*** will both have zero value.

Now consider 'stakeholder' defined benefits whereby members participate in surpluses. The sponsor is worse off. Members are better off, but without gaining one-for-one from rises in the prices of risky assets. The associated payoff profile is roughly analogous to that of a collar whereby investors go long in a risky underlying asset and a put, and short in an out-of-the-money call. Bateman (1997) investigates designs for accumulation funds with investment risk managed by collars. She found that such strategies are surprisingly conservative; expected lifetime returns are surprisingly low. That is, investors forego valuable upside if they pay for put protection partly by selling out-of-the-money calls.

4. Restoring a level playing field

We have previously argued, in the context of accumulations superannuation, for a new kind of superannuation account.[viii] It would co-exist alongside the familiar accounts paying lump sums to retirees. These new accounts would be reserved for the purchase of life annuities. Like existing accounts they would be subject to contribution limits. But these limits would initially be low, to protect the budget in the short term. Unlike existing accounts the new accounts would be tax free until retirement, at which point their annuity payments would be subject to the regular personal tax scale. Progressive back-end taxes would resolve the recent wrangles on how to get the right amount of progressivity into taxes on superannuation. Exposure to growth assets within the new accounts, once annuitised, would be capped at 50 per cent. This cap would cut your risk of paying hefty super taxes through the accumulation stage and then retiring on a meagre income in the wake of a market crash on the cusp of retirement. Superannuation contributors could open either or both types of account, paralleling recent initiatives in the United States and Canada.

These new accounts would also suit stakeholders in defined benefit plans. An expanding option not to pay taxes on employer contributions and fund earnings would encourage sponsors to overfund defined benefit plans. This would mitigate the credit risks increasingly faced by members of defined benefit plans in Australia. Defined benefit plans traditionally pay benefits in the form of an income stream, and people enjoying a stable private income stream for the duration of a retirement are less likely to qualify for an Age Pension at some point, so government outlays would fall: future budgets would be better off, admittedly at a cost to near-term budgets, which benefit from the current 15 per cent taxes on employer contributions and fund earnings.

The SIS Act could be amended so as to restore a limited measure of cross-subsidisation of defined benefit funds by short stayers. Specifically, employers could be granted the option of vesting employer contributions on behalf of new members who end up with less than 10 years' service at the amount the departing member would have received had his employer benefit been limited to the amount mandated by the Superannuation Guarantee over the relevant period.

Finally, we could roll back the mid-1990s measures designed to encourage 'stakeholder' defined benefits and discourage fund surpluses. The SIS Act could be amended so as to grant full ownership of surpluses to shareholders. Maximum Deductible Contributions could be increased.

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[ii] This policy drew inspiration from New Zealand, where there has historically been strong support for the notion that lower taxes on income from capital represent unacceptable 'tax concessions', even in the case of households with modest lifetime resources. However, there are signs New Zealand is reconsidering this philosophy.

[iii] See Trahair (1994) and Ferris (2006).

[iv] Trahair (1994) details three major cases.

[v] Minimum requisite benefits refer to minimum benefits arising from the Superannuation Guarantee (Ferris 2006).

[vi] See e.g. Blake (2000).

[vii] The qualification "generally" is necessary if only because Unisuper is, remarkably, not legally obliged to make additional contributions in the event of a shortfall (Ferris, 2006).

[viii] See Bateman and Kingston (2010a, 2010b).