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Superannuation tax concessions and the age pension: a principled approach to savings taxation

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Abstract

This paper discusses the tax and transfer treatment of private superannuation retirement saving and the public means tested age pension in Australia. Superannuation savings benefit from concessional treatment in Australia's tax system by comparison with other forms of saving, measured against an income or consumption tax benchmark. In the drawdown phase, the age pension means test offsets this generous treatment for those in the middle but not at the top end of the distribution. However, it does so in a way that generates disincentives for work in retirement and, perversely, for saving, before and during retirement. We canvass a range of principled approaches that would provide support for saving across the life course while being more neutral and fair in both savings and drawdown phases. We conclude that a more coherent retirement tax and transfer system can be achieved by reducing tax concessions and making the age pension means test less harsh. In the long term, the tax and transfer treatment of retirement savings should be aligned with the treatment of savings in general.

Keywords: Income tax, consumption tax, superannuation, retirement incomes, age pension, means test, tax expenditures

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1. Introduction

The aim of this paper is to discuss Australia's tax and transfer system as it applies to retirement saving. We examine the tax treatment of superannuation retirement savings compared to the taxation of other forms of saving, and the settings for the public age pension in the transfer system, including the age pension means test and the seniors and pensioners tax offset and the interaction with superannuation savings.

Through our combined tax and transfer system, by delivering both tax concessions and public spending, the Australian Government provides very substantial support to retirees. In this, it is not dissimilar to other comparable developed country governments, including the United States government, which has been described in an old but kind of true joke as "an insurance company with an army". Australia's retirement income system is sometimes described as a "three pillar" system (e.g. Henry et al 2008, 2009a) combining

- the means tested and publicly funded Age Pension;
- compulsory private savings of employees in superannuation funds through the Superannuation Guarantee (currently at a level of 9.5 per cent); and
- voluntary private savings in superannuation funds supported by taxation concessions and government subsidies for low income earners.

A fourth "pillar", possibly "crumbling" in Australia but crucial for living standards and security of retirees is home ownership (Yates and Bradbury 2010). The current system for retirees, whether reliant on private superannuation or the age pension, or both, assumes that most people will be living in their own home in retirement.

The issue is whether we achieve this necessary public support for the elderly in the most efficient, cost-effective and fair manner for society as a whole. To properly address this question, we suggest it is necessary to examine both the tax and transfer systems for retirement. Reform of superannuation and pension tax/transfer settings is necessary for equity and efficiency reasons and also because of the fiscal cost in the context of an ageing population, although this fiscal cost is itself contested.

The Re:think Tax Discussion Paper (Treasury 2015d) addresses the tax treatment of savings and has sought submissions in general and specifically on retirement incomes. Five

¹ M Grunwald, 5 Myths about the Budget, http://www.politico.com/agenda/story/2015/10/myths-about-the-federal-budget-000291 (22 October 2015)

years ago, the *Henry Review* of the tax and transfer system (Henry et al 2009a, b) included a detailed review of retirement savings and age pension settings, subject to the constraint that it could not propose taxation of draw down benefits, made substantial recommendations which have not, in general, been implemented. We discuss in this Working Paper the *Henry Review* recommendations and some of the reform proposals and submissions made to *Re:think* Discussion Paper. We note that these submissions and even the *Henry* proposals are incrementalist in nature and generally are not grounded in tax principles for saving over the life course as a whole.

We propose applying a more neutral approach in the tax system, in the savings phase, and in the transfer and tax systems, in the pension (or draw down) phase for superannuation or age pension eligibility. Attention should be paid to the net incentive to save for retirement over the life course, taking into account both taxes and transfers. Both economic efficiency and fairness would be enhanced by removing distortions in the tax and transfer system. A more neutral approach to savings may aim, in time, to remove the different tax treatment of superannuation compared to other forms of savings. We do some simple numerical modelling of different options for retirement savings taxation and the age pension means test to illustrate the overall effect and fiscal cost of these different options.

Different benchmarks may be applied to taxation of savings (see further Ingles 2015b). A comprehensive income tax benchmark assumes that contributions to saving are taxed at the individual marginal rate at the time contributed; earnings are taxed at the individual's marginal rate; and drawdown of capital and earnings on retirement are exempt (Tax contributions, Tax earnings, Exempt payouts or **TEE**). Alternatively, a pure expenditure or consumption tax benchmark could be applied either on a cash flow basis (Exempt contributions, Exempt earnings, Tax payouts or **EET**), or as an earnings tax (Tax contributions, Exempt earnings, Exempt payouts or **TEE**). The cash flow and earnings tax approaches produce the same present value outcome when tax rates are broadly proportional but would have different effects in a progressive system.

In general, capital is taxed surprisingly little in our income tax relative to a comprehensive income tax benchmark, so that overall, Australia's income tax is really a hybrid income-consumption tax. Australia's superannuation tax regime is a hybrid system that for many people applies a low tax on contributions (t), a low tax on earning (t) and a full exemption

(E) on payouts $(\mathbf{ttE})^2$. As noted above, the pension means test has a fairly large exempt area and then applies quite a high effective tax on income or assets (outside the home) at the drawdown phase.

Australia's income tax is formally based on an individual tax unit and superannuation contributions are made and subject to tax rules on an individual basis. However, various features of the retirement savings tax and transfer system establish a couple or married unit, including payment rates and means testing for the age pension; the seniors and pensioners tax offset (SAPTO) in the income tax; and the rules for spouses and dependents in the superannuation savings regime. Much household saving (especially, joint ownership of the family home), like much household consumption, occurs jointly or benefits the joint unit. However, employee based superannuation and other savings are usually held on an individual basis and it should not be assumed that income or consumption sharing happens on an equal basis in all households. Divorce or separation adds further complexity; on separation, couples may split superannuation accounts, or may agree to divide up assets so that one spouse "gets the home" while the other "gets the superannuation". The different units applicable in different aspects of the retirement tax and transfer system complicate it; further, the joint unit may increase disincentives for individuals to work.

2. The superannuation regime

The Australian superannuation retirement system sets a framework for a combination of compulsory and voluntary savings with various mandates and tax concessions, while the age pension combines a base level of funding with a means test. The superannuation guarantee for employees was 9.5 per cent from 1 July 2014. Under the current law it remains frozen at this rate for 6 years and then increases to 10 per cent from 1 July 2021 and in steps to 12 per cent from 1 July 2025.

The purposes of the retirement savings system are currently under debate; a key question is whether the public age pension is only intended to establish a residual safety net or to supplement retirement income that is privately saved during the life course (Henry 2008: section 1). The Treasury states that the age pension is designed to provide a "basic standard of living" by income support to older Australians who need it, "while encouraging pensioners to maximise their overall incomes through superannuation and private savings"

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² For low income earners the tax of 15 per cent on contributions and earnings is not low relative to their normal income tax, which is zero up to \$18,200 pa. Payouts may not be fully exempt on death.

(Treasury 2015c, p. 65). We suggest that the policy goal for Australia's retirement tax-transfer system combines both public and private provision, recognising that the majority of wage earners – especially women - are unlikely to be able to fully self-fund their retirement through the superannuation system. The goal is both to supplement private saving to establish an adequate income in retirement and to maintain a sufficient age pension to provide an adequate income in retirement for those who cannot save enough.

The tax treatment of superannuation in Australia is summarised in *Re:think* (Treasury 2015d, Box 4.3) extracted below as Table 1. The basic treatment can be summarised as: contributions to a superannuation fund are deductible but taxed at 15 per cent in the fund; earnings are taxed in the fund at 15 per cent and payouts are exempt. However, the taxation treatment is more complex at all stages because of caps, age and dependent limits on payout, investment structures within superannuation funds (including capital gains and access to franked dividends), and tax planning approaches when in the drawdown phase. A tax-free superannuation payout can be received as a lump sum or pension from age 60 or earlier in some cases.

Table 1: Tax treatment of superannuation savings: accumulation funds

Contributions	Earnings	Benefits
Pre-tax contributions:	Taxed at 15%.	60 and over: tax-free
taxed at 15%; for high-income earners 30% up to an annual cap	Earnings on assets supporting income	Between preservation age and age 60:
(currently \$30,000 for people aged under 50	streams (i.e. pensions) are tax-free.	Lump sums are tax-free up to \$185,000 and
and \$35,000 for people aged 50 and over).	CGT: if asset is sold during accumulation	taxed at a maximum of 15% thereafter.
The government effectively refunds the 15% tax for people with	phase, effectively taxed at 10%; if sold while supporting an income stream, tax-free.	Income streams are taxed at marginal rates less a 15% offset.
income under \$37,000 up to an amount of \$500		Below preservation age:
(until 2017).		Lump sums are taxed at a maximum of 20%.
Post-tax contributions: no additional tax if below an annual cap (currently \$180,000).		Income streams are taxed at marginal rates.

Source: Re:think (Treasury 2015d) Box 4.3.

3. The age pension

The age pension is a means tested income support payment for people who meet age and residency eligibility requirements. Pension rates are indexed to average wages. The pension eligibility age is 65, and is scheduled to increase to 67 effective 2023. In 2013-14, about 70 per cent of eligible people (aged 65 or over) received either a full or part age pension. The proportion receiving a full rate pension is about 60 per cent of that group, or about 42 per cent of the total number of eligible people. Age pensioners (whether full or part pensioners) are also eligible for a range of other valuable government concessions including a health care card and transport concessions. The Government announced in the 2014-15 Budget that the eligibility age would be increased further to reach 70 by 1 July 2035 (Treasury 2014b), a move described by some commentators as "over the top" (Podger 2015).

The pension payment rates are set out in Table 2, compared to the levels of retirement income established by the Association of Superannuation Funds of Australia (ASFA) for a "modest" or "comfortable" lifestyle, for home owners.³ It can be seen that the pension provides a "modest" lifestyle for most pensioners, since the large majority of this group are homeowners. Renters do not do as well.

The ASFA Retirement Standard benchmarks the annual budget needed by Australians to fund either a comfortable or modest standard of living in the post-work years. It is updated quarterly to reflect inflation, and provides detailed budgets of what singles and couples need to spend to support their chosen lifestyle. ASFA is currently preparing an evaluation of the benchmark for singles and couples who do not own their home.

Table 2: Pension payment rates; ASFA estimated incomes (homeowners)

Age pension rates per fortnight	Single	Couple each	Couple combined	Couple each separated due to ill health
Maximum basic rate	\$782.20	\$589.60	\$1,179.20	\$782.20
Maximum Pension Supplement	\$63.90	\$48.20 \$96.40		\$63.90
Energy Supplement	\$14.10	\$10.60	\$21.20	\$14.10
TOTAL per fortnight	\$860.20	\$648.40	\$1,296.80	\$860.20
Age pension Equivalent annual income	\$22,365.20	\$16,858.40	\$33,716.80	\$22,365.20
ASFA modest lifestyle	\$23,438		\$33,799	
ASFA comfortable lifestyle	\$42,569		\$58,444	

Source: March Quarter 2015 (national), <u>www.humanservices.gov.au</u>; ASFA, https://www.superannuation.asn.au/resources/retirement-standard.

The age pension has almost always been means-tested in Australia, although the design of the means test has changed over time. Currently, the age pension is subject to an income test and an asset test. Conceptually, we can think of the age pension with its income and assets tests as:

- a universal payment; plus
- a special income tax with a 50 per cent tax rate above a low threshold and up to the pension cut out point; plus
- a lump sum tax beyond the cutouts, plus
- a wealth tax (the asset test), which operates as an alternative minimum tax.

Whichever test (income or asset test) gives the lower pension rate is applied. The structure of the means test for the age pension levies quite a high tax on income or assets of pensioners or part-pensioners, above a base threshold, potentially discouraging both work whilst in receipt of the pension and (earlier) lifetime saving.

3.1. Income test

The income test applies at a 50 per cent rate above a tax-free threshold. Fortnightly income from wages, and deemed income from financial assets, are combined and once over the threshold, the amount of pension is reduced by 50 cents for every dollar. The deemed income is added to any income the person has from other sources such as income from employment. This total income is then used to work out how much pension, benefit or allowance can be paid to the person under the income test.

Table 3: Income test thresholds and tapers

	Sin	gle	Couple (c	ombined)
Fortnightly income	up to \$162	over \$162	up to \$288	over \$288
Equivalent to annual income	\$3,952		\$7,488	
Reduction in payment			none – full payment	50 cents for each dollar over \$288(combined)

Source: <u>www.humanservices.gov.au</u> (2015). An additional disregard applies to earned income under the Work Bonus.

The income test incorporates deeming for the full range of financial assets. Financial assets for the purpose of deeming are defined as:

- bank, building society and credit union accounts
- cash
- term deposits
- cheque accounts
- friendly society bonds
- managed investments
- assets held in superannuation and rollover funds held if you are of Age Pension age
- listed shares and securities
- superannuation based income streams (effective 1 January 2015)
- loans and debentures
- shares in unlisted public companies
- Gold, silver or platinum bullion.

As recommended by the Henry Review (Treasury 2009a,b), in the 2013-14 Budget deeming was extended to superannuation-based income streams.⁴

Effective 1 July 2015, income from financial assets is deemed at a rate of 1.75 per cent up to the following thresholds and then at a rate of 3.25 per cent for financial investments above these thresholds:

- \$48,600 of a single person's total financial investments;
- \$80,600 of a couple's total financial investments if at least one member of the couple is receiving a pension;
- \$40,300 of each member of a couple if neither is receiving a pension, in relation to each member's share of jointly owned financial investments.

The deeming rate is adjusted on a regular basis, with general movements in interest rates. If the actual income received from investments exceeds the deemed income, the extra income is not counted in assessing entitlement to the pension. These deeming rates are quite conservative, and reflect interest rates available in financial institutions.⁵ However as explained below the conservatism of the deeming rates is more than offset by the harshness of the implicit deeming rate under the assets test.

3.2. Seniors and Pensioners Tax Offset (SAPTO)

Under normal principles, the age pension is assessable in the personal income tax and subject to the progressive income tax rate structure. However, the Seniors and Pensioners Tax Offset (SAPTO) raises the personal income tax threshold from \$18,200 to over \$32,000 per year for singles and \$58,000 per year for couples. A couple is tested on combined income for SAPTO eligibility and it is transferable between members of a couple. The tax-

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⁴ This was legislated effective 1 January 2015 following the 2013-14 Budget which proposed in its superannuation reforms, extending the normal deeming rules to new superannuation account-based income streams, so that all financial assets are assessed under the same deeming rules. Account-based income streams held by pensioners and allowees prior to 1 January 2015 will continue to be assessed under the existing rules unless they choose to change products or buy new products from 1 January 2015. Source: www.dhs.gov.au.

Deeming exemptions are granted to financial investments under special circumstances including where a financial investment has failed; some superannuation investments where funds are fully preserved or inaccessible; and an account which only contains funds paid to participants for a funded package of support through, the National Disability Insurance Scheme. If an investment is given an exemption, then the assessable income is the return you actually earn from the investment, not the deemed amount. Exemptions are not granted because of poor investment performance, such as shares producing negative returns, or companies or funds in short term difficulties. Deeming exemptions do not alter the assessable asset value of an investment.

free areas for singles are thus some \$10,000 higher and for couples \$15,000 higher than the full age pension.

The SAPTO has a taper rate of 12.5 cents per \$1. It ensures that full-rate pensioners do not pay income tax on their pension and for a substantial tax free area above the pension but above the threshold, the SAPTO interacts with the normal personal income tax scale to produce increased effective marginal tax rates for pensioners with extra income, quite apart from any impact of the income test. The SAPTO is estimated in the Tax Expenditure Statement to cost \$730 million in 2015-16 (Treasury 2015a, item A31).

Table 4: SAPTO thresholds for 2014/2015

Category	Full pension rate	Full Offset Income Threshold	Shade-Out Income Threshold	Maximum Tax Offset Available
Single	\$22,365.20	\$32,279	\$50,119	\$2,230
Couple (each) ⁶	\$16,858.40	\$28,974	\$41,790	\$1,602
Couple (combined)	\$33,716.80	\$57,948	\$83,580	\$3,204*
Couple (each, living apart due to illness)	\$22,365.20	\$31,279	\$47,599	\$2,040

Source: <u>www.ato.gov.au</u>; <u>http://www.superguide.com.au/smsfs/%E2%80%98no-tax%E2%80%99-in-retirement-because-you-sato-2</u>

3.3. Effective marginal tax rates and work disincentives for pensioners

The pension income test generates high and variable effective marginal tax rates⁷ for single pensioners and pensioner couples, in the order of 75 per cent over wide ranges of income. Since 2009, age pensioners are eligible for a Work Bonus that disregards half of the first \$500 earned each fortnight in the age pension income test. The EMTRs are illustrated in Figure 1 (for singles) and Figure 2 (for couples) over a range that crosses average full time weekly earnings. For couples, the EMTR is a consequence of the different payment rates

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⁶ If combined income of the couple is less than combined SAPTO threshold, then each member of a couple is tested separately; this also determines whether the unused portion (if any) of spouse's SAPTO can be transferred. The combined effect of the SAPTO and LITO is that, at maximum tax offset eligibility, no tax is payable. The SAPTO reduces by 12.5 cents for each \$1 of taxable income above the Full Offset Income Threshold up to the Cut-Out Income Threshold (officially known as the 'Shade-out threshold').

⁷ The effective marginal tax rate (EMTR) is the amount lost in pension and tax as an additional dollar of income is earned.

and taper thresholds; the work disincentive on the margin would be felt by the lower or secondary income earner, if both members of the couple earn income.

The pension income test combines with phase out of the SAPTO and the work bonus (described as a "new policy" in in the charts) to produce high EMTRs on assessable income which includes deemed income from financial assets. In 2012, full time average weekly earnings were \$1,080; it can be seen from Figures 1 and 2 that once this level of income is reached, the EMTRs drop to reasonable levels (approximately 40 per cent), so the higher EMTRs apply to a range from one day to 4 days work at average full time earnings, where pensioners are most likely to sit. The EMTR for age pensioners varies according to whether the income is earned from work, or is from investments, as the former attracts the Work Bonus. For investment income the effective EMTR threshold is lower as is the pension cut-out point so that the 'hump' in the graph shifts to the left.

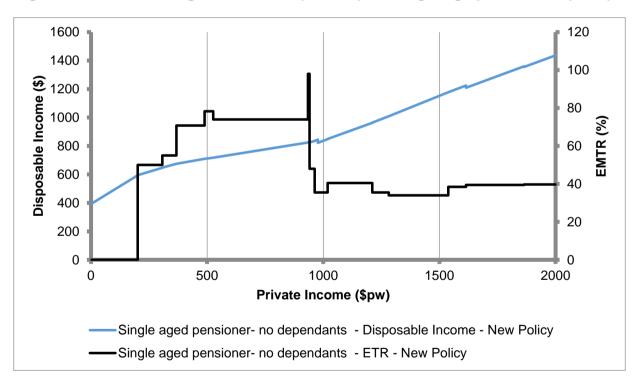


Figure 1: Effective marginal tax rates (EMTRs) for single age pensioners (2012)

Source: NATSEM modelling using STINMOD (2012). The "new policy" referred to is the exemption of part of earned income of pensioners under the Work Bonus; it is assumed there are no dependants.

⁸ ABS, 6302.0, http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/6302.0main+features3Nov%202012

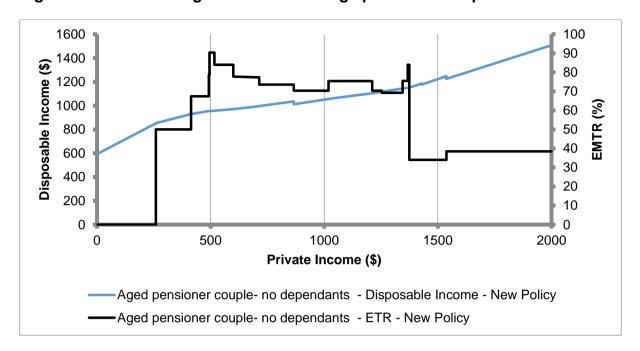


Figure 2: Effective marginal tax rates for age pensioner couples 2012

Source: NATSEM (STINMOD modelling) (2012).

Various experts have argued that a major disadvantage of a means tested age pension is that it encourages "inefficient and undesirable individual behaviour in terms of the labour market from the economy's perspective" (e.g. Knox 1995, p. 108). This may have the effect that individuals choose to retire early and may act as a disincentive for many pensioners to accept part-time work or full-time work. Kudrna and Woodland (2008) find that means test removal would increase labour force participation.

A comparison with New Zealand provides a natural experiment by which we can judge the impact of the age pension means test. New Zealand has a relatively high universal basic pension which is taxed "from the first dollar" in the personal income tax, so that a net pension is paid. The NZ universal pension is taxed at a marginal tax rate of 10.5 per cent or 17.5 per cent. This compares to Australia's marginal tax rate of 50 per cent over the deemed income threshold (as a result of withdrawal), illustrated in Table 3 above.

The experiment is not perfect. NZ has a higher base payment relative to incomes, which might tend to reduce participation. It may also be relevant that there is no access to KiwiSaver before age 65. On the other hand Australia has higher private superannuation, which might have the same effect. These two complications are, however, offsetting.

Guest (2013). The average tax rate on the universal pension (NZS) is 12 to 13 per cent; this reduces the single pension to 32 per cent of AWOTE and the couple rate to 49 per cent. This compares with 25 per cent

New Zealand has significantly higher workforce participation rates among mature-aged workers aged between 55 and 69 than does Australia. Labour force participation among men aged 65 to 69 is 33 per cent in Australia but is 15 percentage points higher in NZ, at 47 per cent. Among women the corresponding figures are 20 per cent in Australia and 34 per cent in NZ, a difference of 14 percentage points. The Australian figures are very close to the OECD averages, but the NZ figures show there is considerable room for increase. These are shown in the table below.

Table 5: Mature age labour force participation (per cent) Australia and New Zealand and percentage point differences (2012)

Age	55-59 % work	60-64 % work	65-69 % work	
Australian men	80.3	63.1	32.6	
NZ men	87.8	78.8	47.3	
(NZ participation is greater)	7.5	15.7	14.7	
Australian women	66.1	45.1	19.5	
NZ women	80.5	66.9	33.6	
(NZ participation is greater)	14.4	21.8	14.1	
Australia total	73.1	54.0	26.0	
NZ total	84.0	72.7	40.3	
(NZ participation is greater)	10.9	18.7	14.3	

Source: Author calculations from OECD labour force statistics 2012 http://stats.oecd.org/

Labour force participation of older workers is rising in Australia,¹¹ but it is rising at least as fast in New Zealand. While we cannot be sure that all these differences are due to the universal pension system in New Zealand, it seems likely that this is a major cause. Indeed

and 38 per cent in Australia. Tax rates from https://www.msd.govt.nz/what-we-can-do/seniorcitizens/entitlements/nz-superannuation/payments.html.

¹¹ This appears to be associated with the ageing of the baby boomers, who are better educated and in less arduous jobs than earlier cohorts: Chomik and Piggott 2012b, p. 350.

on the figures calculated earlier it might be inferred that the effective tax rates under the pension means test are so high as to induce "Laffer curve"-type effects, whereby revenue actually increases if tax rates are eased. 12 Increased labour force participation of pensioners has the potential to materially lower the net cost of reform of the age pension means test as discussed below.

Chomik and Piggott (2012a) find that if Australia had the same mature-age participation as New Zealand, GDP in 2012 would have been 4 per cent higher. On current figures this adds \$66 billion to GDP and \$22 billion to tax revenues; more than the \$15 billion cost of means test abolition. On these numbers and if labour force participation were to rise to New Zealand levels, abolition of the income test would be a self-funding policy. As they explain:

"Keeping all else equal, ageing would result in a five percentage fall in total participation rates by 2050. If instead Australia were to achieve the higher matureage participation rates seen in New Zealand, the fall would be only two percentage points" (Chomik and Piggott 2012a, exec summary).

Mature age labour force participation rose sharply in NZ following a rise in the eligibility age for NZ super from 60 to 65, and this had particular impact because "The state provided pension is not means tested (age is the only criteria) which means that one can keep earning and receive the full pension. What is more there is no reliance on mandated private savings that can be relied upon from an earlier age, as is the case with superannuation in Australia" (Chomik and Piggott 2012a, p. 3-4). This is reflected in the much higher mature age participation shown for the 55 to 59 and 60 to 64 age groups in New Zealand, in Table 5 above.

Overall, the structural incentives in the pension means test to withdraw from the workforce in Australia are substantial. In this context, specific policies to raise mature-age participation have had little success. Policies have included reduced taxes for those 65 and over (notably by the SAPTO), a pension bonus for those continuing to work (until 2009), which was replaced with eased income testing of earnings in the Work Bonus. 13 and the ability to

¹² The Laffer curve and supply-side economics inspired Reaganomics and the US Tax Cut of 1981. The main effect was to blow out the budget. However, there is some evidence that revenue is maximised at marginal income tax rates around 55 per cent (with the optimal tax rate being lower), which is consistent with the view that effective marginal tax rates in the pension system are too high. Optimal tax rates for the aged may be less, not more, than those for people of prime workforce age (Mirrlees et al 2011).

¹³ The pension bonus scheme for those who deferred taking the age pension ceased from 20 September 2009 and was replaced by a work bonus in which only half of the first \$500 of employment income each fortnight

combine work and superannuation drawdown through 'transition to retirement' pensions (which we suggest have become a favoured tax planning device).

3.4. The asset test

As noted above, the pension means test is an income test (including deeming for financial assets), combined with an alternative asset test. The asset test can be understood as an annual wealth tax for pensioners.

Under the current asset test, single and combined couple pension rates are reduced by \$1.50 per fortnight (\$39 a year) for every \$1000 of additional assets above the allowable assets cut-out threshold. The Government has recently enacted a legislative change to substantially tighten the asset test effective from 1 January 2017, while raising the threshold at which this asset test applies (see further below). As shown in Table 6, the asset test applies over a threshold of \$205,500 for single homeowners and \$291,500 for couple homeowners.

Table 6: Current assets test thresholds and cut-out for full and part pensions

	Homeowners full pension assets must be less than		Non-homeowners full pension assets must be less than		Homeo part pension be less	assets must	Non-homeowners part pension assets must be less than	
	Current	2017	Current	2017	Current 2017		Current	2017
Single	\$205,500	\$250,000	\$354,500	\$450,000	\$779,000	\$547,000	\$928,000	\$747,000
Couple	\$291,500	\$375,000	\$440,500	\$575,000	\$1,156,000	\$823,000	\$1,305,500	\$1,000,000

Source: DHS, http://www.humanservices.gov.au/customer/enablers/assets/.

The budget reforms, effective 1 January 2017, double the asset test taper rates and raise the allowable asset cut-out thresholds. The asset test taper doubles from \$1.50 per fortnight (\$39 per year) per \$1,000, to \$3 per fortnight (\$78 per year) per \$1,000. This delivers benefits at the low end but result in high tax rates for those with more savings. The allowable asset threshold will rise to \$250,000 for single homeowners and to \$375,000 for couple homeowners, while pensioners who do not own their own home benefit from an increase in their threshold to \$200,000 more than homeowner pensioners (and face much

is included in the age pension income test for those over pension age. Disregarding half the first \$500 per fortnight employment income is in addition to the normal allowable income threshold.

higher living costs). The change, overall, reduces the asset cut-out threshold at which the pension ceases; for example a homeowner couple will see their pension cease at assets of \$823,000 compared to over \$1.1 million currently.

3.5. The effect of the asset test

Assets, or wealth, can be taxed either applying an annual wealth tax on the value of assets, or by deeming (or imputing) income, or a rate of return, from wealth. Under the current pension means test, those with substantial assets are more likely to be assessed under the asset test than the income test (because the test that produces the lower pension rate is applied). Effective tax rates on investment income can be much higher (over 100 per cent) under the asset test than the income test.

Under current asset test rules, the wealth tax rate on assets computes to be 3.9 per cent on wealth above the assets threshold. When this asset test is combined with the 50 per cent pension income test taper, this is equivalent to a deemed rate of return of 7.8 per cent. The asset test taper to commence on 1 January 2017 doubles the rate of the wealth tax on pensioners while simultaneously narrowing the tax base because it increases the tax-free asset cut-out threshold. A taper rate of \$3 per fortnight per \$1,000 implies a wealth tax rate of 7.8 per cent (per year) on wealth above the new cut-out thresholds. If we were to apply a deeming approach to all assets, when the new asset test is combined with the 50 per cent pension income test taper, this is equivalent to a deemed rate of return of 15.6 per cent.

It is much more realistic to assume a real return to savings of at most 6 per cent in the current environment, given historical returns from growth assets. Indeed, currently, real returns of considerably less than 6 per cent are expected on many investments including superannuation. However, if we assume a 6 per cent real rate of return, a result of the new asset test is that income from savings is taxed at an effective marginal rate of 130 per cent (7.8 divided by 6). Alternatively a 3 per cent real rate of return implies a marginal tax rate of 260 per cent.

Table 7 below sets out the after-tax return and effective marginal tax rate on pensioner's savings, based on two alternative assumptions – that pensioners' savings can earn either 3 per cent or 6 per cent in real terms. The Table shows that the new asset test taper generates a very high marginal rate on wealth (accumulated savings). The last four columns of Table 7 show how the effective marginal tax rate on savings below and above the cut-out thresholds. Above the cut-out thresholds, the EMTR on investment income

would be 130 per cent on a 6 per cent rate of return. On a 3 per cent real return assumption it computes to be 260 per cent. Even below the cut-out threshold, on a 3 per cent real return, the effective tax rate will exceed the whole of the real return. The asset test may thus encourage dis-saving among some pensioners.¹⁴

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¹⁴ There are rules in the pension system designed to discourage the giving away of assets e.g. to children.

Table 7: Effective tax rates under new pension asset test at 6% and 3% real returns

Pension asset test (1 Jan 2017)	Cut-outs (asset level at which pension ceases)	Pension max	Income outs (6% or 3 returns)	3% real	Net inco gain (lo compar pensior outs	ss) \$	Net inc gain (lo compa pensio outs*	oss) %	Effective marginal rate on savings From zerout-out-	al tax s ero to	Effective marginal rate on savings	al tax
	\$ asset value	\$pa	\$	ра	\$pa dif	ference	% net	income	% tax	rate	% tax	rate
Real return			6%	3%	6%	3%	6%	3%	6%	3%	6%	3%
Single homeowner	547,000	20,437	32,820	16,410	12,383	(4,027)	38	(25)*	62	125	130	260
Single non- homeowner	747,000	23,775	44,820	22,410	21,045	(1,365)	47	(6)*	53	106	130	260
Couple homeowner	823,000	33,717	49,380	24,690	15,663	(9,027)	32	(37)*	68	137	130	260
Couple non-homeowner	1,023,000	38,537	61,380	30,690	22,843	(7,847)	37	(26)*	63	126	130	260

Source: Author calculations.

^{*}At 3%, this is normally negative under the new policy; consequently, pensioners must draw down on their capital or savings to maintain their current standard of living.

4. Fiscal cost and distribution of superannuation concessions and age pension

It is useful to compare the tax expenditure estimates for superannuation tax concessions with the expenditure outlay estimates for the age pension, while acknowledging that these two measures of fiscal cost are not equivalent, as discussed below.

Australian Government spending on the age pension (which the budget documents describe as "income support for seniors") is estimated at \$42 billion in 2014-15, \$44 billion in 2015-16 and \$46 billion in 2016-17, projected to rise to 48 billion in 2017-18 and \$50 billion in 2018-19 (Treasury 2015b, Paper 1, Statement 6 Table 9.1; this is nearly one third of total social security and welfare payments which make up 35 per cent of federal government spending.

Treasury estimates the revenue foregone from superannuation tax concessions relative to a benchmark of a realisation-based comprehensive income tax (in general terms) in its annual Tax Expenditure Statement. The cost is estimated to be \$33 billion in 2014-15, projected to rise to \$38 billion in 2015-16; \$45 billion in 2016-17 and \$50 billion in 2017-18, almost matching the age pension tax expenditure estimates for that year (Treasury 2015a and 2015b). Superannuation tax concessions, estimated against this benchmark, are the largest tax expenditures (besides home ownership). The rising cost of superannuation tax concessions of over 12 per cent each year reflects the impact of the compounding of member balances and the phasing in (currently suspended) of higher rates of the superannuation guarantee; on these assumptions, the estimated fiscal cost of these tax concessions is growing faster than the cost of the age pension.

The bulk of the superannuation tax expenditures relate to two items – concessional taxation of superannuation entity earnings (\$16 billion) and concessional taxation of employer contributions (\$17 billion). These concessions reflect the impact of taxing superannuation contributions and earnings at a flat rate of 15 per cent (and 30 per cent on earnings over \$300,000), combined with a zero tax rate in the pension phase, rather than at marginal income tax rates for individual members. Both items are growing strongly; the latter in relation to nominal wage growth and the former compounding in relation to the total sums invested in super. Superannuation assets, currently around \$2 trillion, have been estimated to reach almost \$9 trillion in 2041 (Rothman and Tellis 2008).

The benchmark for superannuation tax concessions in the Tax Expenditure Statement could be an expenditure tax benchmark, which would fully exempt the return to saving, rather than the comprehensive realisation income tax benchmark that is generally adopted. The Treasury presents "experimental estimates" of revenue foregone from superannuation tax concessions using an expenditure tax benchmark, on a TEE (post-paid) basis (Treasury 2014a, Appendix A). It estimated a fiscal cost of about \$12 billion per annum in 2013-14 (netting off the positive tax expenditures in low taxation of contributions, against the negative tax expenditures in taxing earnings). It did not repeat these estimates for 2014-15 The main point is that superannuation tax expenditures even estimated against this benchmark are very large and are heavily skewed to high income earners, while the expenditure tax benchmark itself, while it might be conceptually defensible, inherently favours those who can save more – again - high income earners.

Another criticism made of the Treasury's tax expenditure estimates is that the revenue raised from ending a tax concession would not be as great as estimated because of behavioural changes of individuals in relation to saving. Presumably, it is not implied that this would have any effect on the mandated Superannuation Guarantee. The criticism implies that voluntary savings outside the superannuation guarantee would cease, or perhaps that savings currently in superannuation would shift to other tax-subsidised forms of saving. For example, voluntary superannuation saving could shift towards even greater capital investment in home ownership (although wealthy Australians already invest heavily in the home) or to negatively geared rental properties or Australian equities (again, already the focus of significant investment by high income earners).

To address such criticisms Treasury have provided estimates of *revenue gain* from repeal of the tax expenditure. These estimates relate to the two principal components of the super tax concessions: contributions and earnings. For concessional taxation of contributions the revenue gain estimate is \$16.45 billion as opposed to revenue foregone of \$17.35 billion, a reduction of \$1.1 billion or 7 per cent. For concessional taxation of earnings the revenue gain in 2015-16 is estimated at \$13.7 billion, compared with revenue foregone of \$16.15 billion, a reduction of \$2.5 billion or 15 per cent.

Table 8: Superannuation tax expenditures revenue foregone or revenue gain (income tax benchmark).

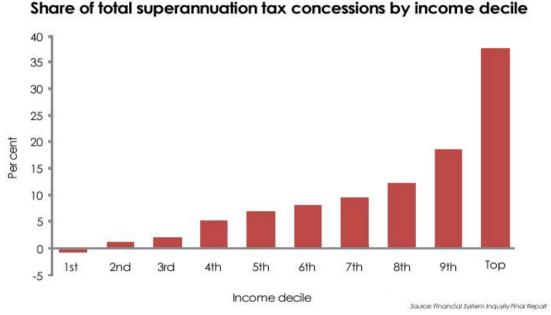
Year	Tax expenditure (revenue foregone) \$b	Tax expenditure (revenue gain) \$b	Per cent annual increase % (a)
2014-15	29.7	27.30	12.1
2015-16	33.50	30.15	8.9
2016-17	39.70	35.40	18.5
2017-18	45.85	40.55	15.5

Source: Treasury 2015. Per cent increase (a) is based on the tax expenditure estimates, starting from a tax expenditure estimated at \$26.5 billion in 2012-13.

4.1. Distribution of superannuation tax concessions

It is widely recognised that the superannuation tax concessions are highly regressive (e.g. Murray 2014). The Australian Superannuation Funds Association (ASFA) estimates that the top 20.4 per cent of wage earners receive 49 per cent of employer contributions but a higher percentage of the total tax benefits (ASFA 2012, Table 2.1). Voluntary contributions are highly skewed towards high income earners, who have available income to save in superannuation. The chart in Figure 3, from the Financial System Inquiry (Murray 2014), illustrates the regressivity of the tax concessions on super contributions.

Figure 3: Distribution of tax concessions on superannuation 2011-12



the Australian Tax Office.

Source: Murray (2014 Chart 6 p 138). Treasury calculations based on 2011-12 data from

The regressivity of superannuation taxes derives from the flat rate of 15 per cent, replacing the progressive income tax scale on most contributions and on investment income, with the latter being tax free in the draw down phase. High income earners who would otherwise pay up to 47 per cent on their income (including the Medicare Levy but not the temporary budget deficit levy) benefit most, even at the higher 30 per cent tax on contributions from those earning over \$300,000 per annum.¹⁵

The superannuation tax regime disadvantages low income earners who would normally pay no income tax up to the threshold of \$18,200 (increased by the low income tax offset, or LITO, where applicable). The Low Income Superannuation Contribution (LISC) essentially refunds the 15 per cent contributions tax for earners with income up to a threshold of \$37,000.¹⁶ The LISC applies until 30 June 2017 when it will be abolished.

It is generally appropriate to consider progressivity or fairness over the tax-transfer system as a whole. This requires that tax treatment of retirement savings be treated in a coherent

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¹⁵ From 1 July 2012, a 30 per cent contributions tax applies for individuals whose income is \$300,000 or more (including before-tax superannuation contributions): Div. 293 of the Income Tax Assessment Act 1997.

¹⁶ See ATO, https://www.ato.gov.au/Individuals/Super/In-detail/Growing/Low-income-super-contribution/;

way against a benchmark, such as expenditure/consumption taxation or comprehensive income taxation. The current superannuation concessions are skewed to high income earners against any benchmark of savings taxation.

4.2. Projections of government spending on age-related pensions

Australia spends relatively little on the age pension relative to other countries and, like other countries, age pension expenditure has been rising but at a relatively slow rate. OECD statistics indicate that the age pension has varied from about 3 per cent of GDP in 1980 to 3.4 per cent of GDP in 2012.¹⁷ New Zealand spent 4.9 per cent of GDP on the age pension in 2012, while the US spent 6 per cent of GDP and the UK spent 4.8 per cent in 2011. Slightly different statistics are used in the Intergenerational Report (IGR) (Treasury 2015c, p. 69) which projects that under policy applicable at the start of 2015, expenditure on agerelated pensions will rise from 2.9 per cent of GDP in 2014-15 to 3.6 per cent of GDP in 2054-55. In the previous IGR (Treasury 2010), the government provided a graphed projection of the rise in cost of the age pension, as set out below; this was not repeated in 2015. The 2010 IGR projected that age pension expenditure will grow from 2.7 per cent of GDP in 2014-15 to almost 4 per cent in 2049-50, despite much larger superannuation balances as the superannuation guarantee matures.

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¹⁷ OECD, Social Expenditure Database, available from https://stats.oecd.org/Index.aspx?DataSetCode=SOCX_AGG_.

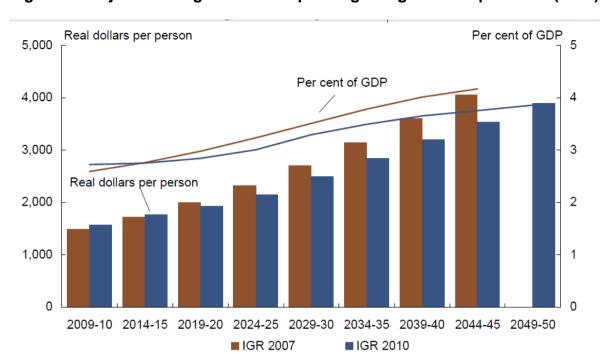


Figure 4: Projections of government spending on age-related pensions (2010)

Source: Treasury (2010) Chart 4.13 p.63.

The design of the age pension means test is important for long-term fiscal sustainability, in terms of disincentives for work and ensuring people use their assets but also save appropriately. In Australia the age dependency ratio is currently 20 per cent; it is projected to rise to 36 per cent by 2050. As explained by Chomik and Piggott, "offsetting the declines in total labour force participation would require some of the additional older people to remain part of the labour force too" (2012a, p. 1).

It seems clear that the superannuation system will not displace the age pension, in spite of the massive increase in superannuation savings in Australia over the last 30 years that is projected to continue. Even when the Superannuation Guarantee is fully mature, it is projected that almost 40 per cent of the elderly will receive a full pension and another 40 per cent will receive a part pension (although this projection depends on various modelled assumptions). The Henry Review estimated that the percentage of people who receive no pension will grow to 22 per cent, only a slight increase on 18 per cent currently (Henry 2008, Chart 6.1). This outcome may be modified by the legislated asset test changes enacted this year and effective 2017, but only slightly.

We do not have similar long-range projections for superannuation tax expenditures but, given current growth rates, they could imply a total cost for retirement income support (tax

plus pension) of 10 per cent of GDP by 2050. As shown above, the age pension means test is not suited to fully recoup the cost of superannuation tax concessions because for high income earners the value of the latter exceeds the maximum pension, and because the effective marginal tax rates on income and on assets that it imposes are already high. Raising those rates will further affect incentives to work and save.

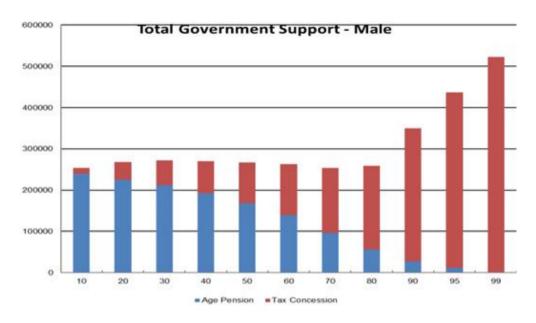
4.3. Combined cost and distribution of superannuation tax concessions and age pension

The cost of superannuation tax expenditures is disputed by Mercer (2012a) and Clare (2015), who argue that the tax expenditures measure does not take account of pension savings over the longer term. The implication is that the tax concessions pay for themselves in pension savings. Savings on the cost of the age pension will be constrained by the coverage of the Superannuation Guarantee (low wage and casual earners and self-employed are excluded, while part-time workers generate far less in superannuation savings) and forecasts of increased savings usually depend on the Superannuation Guarantee being increased to 12 per cent from 9.5 per cent. Savings will also be affected by the generosity of the pension means test and opportunities to take and run down lump sums ('double dipping').

The regressivity of the superannuation tax concessions is also disputed, on the basis that a better measure must take into account the combined effect of the age pension. Knox (2010, 302-11) argues that the superannuation concessions are offset by withdrawal of age pension under the means test. Knox finds that total government assistance for retirement income is relatively flat across income classes, with only a slight peak for higher income earners.

Estimates of overall progressivity using the Treasury model also indicate that government assistance (combining superannuation and the age pension) is relatively flat across most of the income distribution (Rothman 2009, Treasury 2012). However, Figure 3 below (reproduced from Treasury 2012) indicates that even on this measure, the jump in assistance for the top 10 per cent of the income distribution is quite marked. While total average assistance for all other income groups is around \$265,000, at the 90 percentile of male earners it jumps to \$350,000; for the 95 percentile to \$425,000 and for the 99 percentile to \$515,000.

Figure 5: Treasury estimate of distribution of "total government support" (superannuation tax concessions and age pension) (male)



Source: Treasury (2012) Figure 2.

This analysis of total assistance is based on a number of assumptions, including how individuals invest their lump sum and what returns they get. Knox (2010), for example, attributes only part of the tax benefit from the 15 per cent superannuation fund tax rate to individuals, on the grounds that they would not pay much tax on investments outside of super. He also disregards the tax exemption of fund earnings during the draw down phase on the grounds that the elderly do not pay much tax; but this is partly because they have access to tax-free superannuation. The net benefits to individuals depend on how much they 'double dip' in the system, for example by using concessionally taxed superannuation to pay off their (tax-exempt) house mortgage, because the house is not an assessable asset in the pension asset test.

4.4. Gender inequities

The above Treasury chart is about males (the Treasury did not present an analysis for females). It obscures the severe but increasingly recognised gender inequities in superannuation as well as the higher reliance on the age pension of women (Austen et al 2015, Kelly et al 2002). Women comprise 55.6 per cent of age pension recipients compared to 44 per cent male and 60 per cent of women pensioners receive the maximum pension compared to 57 percent of men (DSS 2012). It is well established that the link between the superannuation guarantee and paid work, the proposed abolition of the LISC, and the

skewed benefits of the superannuation tax concessions for earnings and pay out all benefit men significantly more than women.

While women's superannuation balances are growing, the average superannuation balance for men at \$82,615 is currently almost double that of women at \$44,866, while 34.6 per cent of women have nil superannuation (compared to 26.1 per cent of men) (Clare 2015, p. 8). Women are a particularly vulnerable group in terms of superannuation because they are more likely than men to work part-time or part-year; they are more likely to have interrupted careers, and even when they work full time their earnings are lower than men's. It has been estimated that the average female superannuation assets will still be only 70 per cent of the average male assets by 2030 (Kelly et al 2002, 231). Most women of retirement age have no superannuation. Moreover, women will represent two-thirds of the population in the over-85 age group, a group where superannuation assets are likely to be diminished (Kelly et al 2002, 233). Women would be helped by higher Superannuation Guarantee, reinstatement of the LISC and payment of superannuation on paid parental leave. However, women will remain heavily dependent on the age pension for many decades to come.

4.5. Incentives to save and double dipping

A central feature and arguably the great success of Australia's superannuation system is mandated savings for workers through the Superannuation Guarantee. In a system of mandated savings, it would seem to be unnecessary to have concessional tax treatment of those savings. In a post-paid expenditure tax model (EET), those savings and earnings in the fund would be exempt, but payments would be taxable. In a pre-paid system where payouts are exempt, and savings are mandated, it would be consistent to fully tax contributions to superannuation at individual marginal rates (TEE).

What of voluntary savings? For tax incentives to result in increased net savings there must be a rise in voluntary private savings greater than the cost to public savings inherent in the tax breaks. The growth in Self-Managed Superannuation Funds (SMSFs) is strong evidence that individuals do respond to generous tax concessions for saving. However, the question is whether those individuals would have instead saved in other forms (which may also be concessionally taxed). Evidence from studies internationally suggests that these concessions do not change savings behaviour. As Marriot (2010, 203) notes:

"[M]ost studies conclude that tax incentives affect the allocation of household portfolios, but the effect on the amount saved is less clear ... Typically research finds that only a small amount of retirement savings are 'new' savings and the policies are an expensive form of encouraging saving ... tax incentives are successful in increasing levels of savings through the tax-preferred vehicle, but this does not necessarily result in increased levels in overall savings".

Chetty et al (2014), based on evidence from Denmark, have arrived at a similar conclusion:

"We estimate that each \$1 of government expenditure on subsidies increases total saving by only 1 cent. In contrast, policies that raise retirement contributions if individuals take no action - such as automatic employer contributions to retirement accounts - increase wealth accumulation substantially. We estimate that approximately 15% of individuals are "active savers" who respond to tax subsidies primarily by shifting assets across accounts."

Even our mandatory savings regime can be got around by compensating private behaviours prior to retirement. For example, people may take out loans and/or use up superannuation savings prior to going on the pension. While in retirement, they may invest savings into exempt assets such as owner-occupied housing or pay off debt.

Such potential 'double dipping' is facilitated by the fact that the preservation age (the age at which superannuation can be accessed), at 55 rising to 60, is considerably lower than the pension age, which will rise in stages from 65 to 67. This could partly be addressed by raising the preservation age. However, there may be difficulties in doing this, as many older people have legitimate reasons for retiring in advance of the pension age (see, e.g. Productivity Commission 2015). People can circumvent the preservation threshold by borrowing monies and paying them back out of superannuation savings once they reach the preservation age. Kelly (2012, p. 2) provides evidence that this is occurring, with rising rates of debt among older people:

"People approaching 65 have sharply increased their debt levels. Their average mortgage balance and other property debt has more than doubled since 2002 and credit card debt is up 70 per cent. ... At best, all [the superannuation guarantee] has achieved is to make some savings compulsory instead of voluntary and quarantine these savings until retirement age. Overall these enforced savings ... have been largely offset by similar if not larger private borrowings."

In a later paper Kelly notes that "all of the money that has been accumulated in superannuation by Australians (\$1,674 billion in March 2012) has been matched by a similar amount of debt (\$1,627 billion). He concludes that two decades after the superannuation guarantee was introduced, "superannuation savings minus household debt effectively equals zero" (Kelly 2013, 27). Other studies also find that there is a substantial offset between household savings and debt, although some find that the extent to which compulsory superannuation is offset is much less than 100 per cent; in one study the offset is 30 per cent (cited in Kelly 2013, 20).

Kelly found that households whose inhabitants were aged 50-54 and were not retired had a debt-to-superannuation ratio of 91 per cent, and even those aged 60-64 had a ratio of 42 per cent (Kelly 2012, 4). He argues that the government "is effectively funding a \$30 billion per annum tax concession that will do little if anything to relieve pressure on the cost of providing the age pension to retirees and the impact on the public purse" (Kelly 2012 p203).

An alternative response to double dipping would be to require compulsory income streams in retirement (see, e.g. Kelly 2012, 2013). However, compulsion raises some difficult issues and Australians are attached to their access to lump sums; half of all retirement benefits are taken in this form. Compulsory annuitisation raises difficult questions of equity between the long-lived (that is, the well-off) and those with shorter life expectancies. The age pension means test can make annuities very unattractive. A potentially good option in this regard is Murray's (2014) proposal that a superannuation pension option be the default option for those at the point of retirement. There has also been consideration of "collective pensions" in the UK context, allowing for enhanced annuities in retirement backed by growth assets (Ingles 2015a).

¹⁸ In 2011-12 \$35 billion was taken in lump sums and the same amount in pensions (APRA).

¹⁹ One problem is that annuity returns are very low. One possible solution is that those in pension phase continue to have underlying investments in growth assets, such as equities. See the discussion of 'collective pensions' in Ingles 2015a.

5. Modelling a coherent approach to taxing savings

In this part, we describe and present simple modelling for five different approaches to taxing retirement savings. As observed by the Henry Tax Review (2009a,b) and others, Australia's current income tax (including the tax treatment of superannuation) is a hybrid income-consumption tax system. In this context, tax concessions for superannuation have been defended as creating an expenditure tax regime for long term retirement saving. Yet, as discussed above, the Australian system is highly concessional even measured against an expenditure tax (TEE) benchmark by some \$12 billion in 2013-14 (Treasury 2014).

Moreover, simply applying an expenditure tax approach to one category of savings, such as superannuation, may not make the overall system more efficient or consistent with that benchmark. This reflects the general problem of the 'second best'; if the system is distorted in one area, then removing a similar distortion in another area does not necessarily give rise to an improvement in allocative efficiency overall. The tax treatment for retirement savings interacts with the age pension means test in the transfer system. The combined effect is to vitiate the supposed neutral treatment of retirement savings. It is pointless to pursue a theoretically perfect tax treatment of retirement savings (e.g. EET) if this will be comprehensively undermined by a pension means test that does the exact opposite. Depending on the form in which savings are held, the pensions means test produces high and variable effective tax rates, so that the net incentive for retirement saving is only effective if the means test is circumvented. The interaction does not affect the top quintile of the distribution (20 per cent of the population who will not need to rely on the age pension), nor does it affect those in the bottom one to two quintiles who have nil or very little superannuation and rely on the age pension. It affects the "big middle" of taxpayers and savers. This point is amplified when one considers Treasury projections showing that the majority of retirees will continue to be impacted in one way or another by the age pension means test.

5.1. Different approaches to taxing savings

At one end of the spectrum of approaches to tax savings, is the comprehensive income tax (TTE) approach. At the other end is the cash-flow post-paid expenditure tax (EET). The expenditure tax exempts the return to savings; that is, there is effectively no tax on investment income under the EET. This is usually argued by economists to be efficient, although it is also generally considered to be less redistributive than an income tax approach. An expenditure tax of type EET and an income tax (or "pre-paid" expenditure tax)

that exempts capital income and gains (**TEE**) are approximately equivalent,²⁰ since the present value of tax on drawdowns is the same as the tax that would otherwise be paid on earnings assuming that tax rates are the same at the time of saving and spending. In the middle, an option is the rate of return allowance (**RRA**) proposed by the Mirrlees Committee (2011) and a cash flow variant of this such as the "Z-tax" suggested in Ingles (2015b).

Comprehensive income taxation (CIT)

A comprehensive income tax may be levied on retirement savings in the form TTE or ETT. From a savings neutrality perspective, the CIT is generally perceived as having the disadvantage, compared to the expenditure tax, of discriminating against savings and particularly long-term savings. This is because it alters the terms of trade between present and future consumption, in favour of the former, to a marked extent if measured over any long period of time.

There are other issues with implementing a comprehensive income tax in practice. For example, there are numerous complexities in taxing capital gains and business income. It can be difficult to ensure that only the real return to capital is taxed, particularly under conditions of inflation; Australia used to index the cost base for capital gains tax but ceased in 1999. Even a relatively low 2.5 per cent rate of inflation, which is the middle of the Reserve Bank's target band, has a large impact on returns to capital over time.

However, the CIT does raise a lot of revenue compared to an expenditure tax. This potentially allows for much lighter means testing in the age pension than might otherwise be feasible. In particular it allows for a consistent treatment of savings before and after retirement if combined with no means testing and a simple tax clawback mechanism.

Expenditure Tax (EET)

An expenditure tax can be levied in the form EET or TEE. Under EET, contributions and earnings are exempt and only payouts are taxed at marginal rates. Under the latter, contributions are fully taxed, earnings are exempt and payouts are exempt. With a linear tax rate, the present value of tax is the same under either option but the timing is different, with revenues being reaped later under EET. If tax rates on payouts are lower than tax rates

²⁰ Some experts consider that the EET differs from the TEE in taxing economic rents – i.e., returns in excess of the risk-free rate

applicable to earnings, then EET may be more concessional than TEE, but this is consistent with lifetime tax averaging.

The expenditure tax (in the form of EET) has the important feature of intertemporal neutrality – that is, it does not discriminate against savers in the way that the income tax does. However, even if this option were accepted as ideal, there are two significant issues with a proposal to move to an EET regime from current policy settings. First, it would involve a possible difficult transition from the current system, with revenues being deferred for long periods. Second, the intertemporal neutrality achieved is vitiated by the treatment of savings under the age pension means test, so that a theoretically ideal tax system becomes nothing of the sort when viewed through the prism of the tax/transfer system as a whole.

One way to have a completely intertemporally neutral tax/transfer system is to have an EET model for superannuation and a universal pension (with no means test). Pensioners with private savings would be subject to a special tax rate which more or less maintained the same tax rates in retirement as they faced when contributing to superannuation; similarity of tax rates is essential to the intertemporal neutrality condition. This could be achieved by adjustments to the SAPTO or a special income tax rate scale for pensioners.

The overall fiscal cost of the system will vary depending on the approach taken. However, we could potentially tax all savings on a cash flow expenditure tax basis (EET) and potentially raise as much revenue as under the current income tax. This is because the EET taxes some economic rents, and these may comprise around a third the total returns to savings. This allows the EET to raise as much as current taxes on capital income – Ingles 2015b. This analysis assumes that the EET is comprehensive, which itself would be a big difference from the current system. For example, it would include owner occupied housing.

A reform involving transition to EET may now be too difficult in the superannuation arena, as Australia has gone so far down the track of a ttE system. In any event, a long transition may be required; for example, a new regime could apply to new entrants and/or new savings, leaving current treatments to run on and phase out with time.

Pre-paid Expenditure tax (TEE)

The expenditure tax as TEE approximates the EET result. The transition to TEE from our current regime would be much simpler as it involves only

- Full taxation of contributions
- No taxation of fund earnings

No taxation of payouts

However, the TEE does not have all of the advantages of EET, being

- Consistent taxation of funded and unfunded benefits
- Lifetime averaging of tax rates
- Fairer treatment of lucky or unlucky investors.

We conclude from this that of the two options EET is a better long-term goal, but TEE might be a pragmatic approach which entails much less transitional difficulty. However, this approach means that the incoming generation of superannuation savers will pay more tax than those retiring now, who have benefited from the excessively generous current system.²¹

King and Maddock (2015, p. 48), consistently with research findings on savings incentives, conclude that "with compulsory contributions there is no particular reason to provide taxation incentives on superannuation *at all*", and suggest a TEE system as being consistent with how we tax the other major capital asset owned by households, owner-occupied housing. They advocate including the home in the pension means test, which is a logical if the tax/transfer treatment of superannuation and housing are to be equivalised. However, we note that these authors argue for a general exemption of capital income from the tax base.²² If taken to its logical conclusion, this argument also suggests a universal (means-test free) pension. We do not address this in detail here, but do not support the suggestion that TEE is appropriate as the general treatment of all capital incomes.

RRA Rate-of-Return Allowance

The RRA was the general approach to savings preferred by the Mirrlees Committee (2011). The tax base of the RRA is economic rents – that is, yields in excess of a risk-free rate. The approach is rarely used in practice (Norway, for example, applies this approach to a limited extent). The RRA system explicitly targets economic rents by taxing income normally but providing a percentage allowance for the risk-free return, usually set at or

²¹ There will be gainers and losers from TEE, as investment earnings in super funds become non-taxable. Transition to TEE might contemplate some on-going taxation of 'old' funds.

²² This is on the grounds of horizontal equity between savers and spenders – the usual double taxation of savings argument (see Ingles 2015b).

around the long-term bond rate. This rate is then applied to the asset acquisition cost and returns below the normal rate are not taxed.

The RRA is quite a complicated tax as it takes the existing system of capital income taxation and tacks on the RRA adjustment. For assets such as interest-bearing accounts where no super-normal returns can be earned, an earnings tax (TEE) is equivalent (Mirrlees et al 2011, 330). For retirement saving, the Mirrlees Committee suggested maintaining the EET system as it existed in the UK, on the basis that this is economically equivalent to the RRA (however, we suggest that this is not the case; see Ingles (2015b) and modelling below).

There are administrative complexities in the RRA system including record-keeping requirements, the relative complexity or unfamiliarity of the calculations required and the treatment of returns below the "normal" rate of return. On the other hand, Mirrlees et al argued that "one of the attractions of the RRA is that the transition to it is likely to be easier, both technically and politically, than the transition that would be required to move us to a cash flow consumption tax" (2011, 333).

Z-Tax cash-flow tax

Ingles (2015b) proposes an alternative form of cash-flow taxation which he terms the "Z-tax" and which is less costly than the EET and – like the RRA - brings revenue forward. On the Z-tax model, retirement savings accounts would be nominally of the EET type. Instead of allowing a tax offset for the contributor in respect of tax on contributions to the account (as required by EET), a tax credit could be attached to the retirement saving account, calculated as the tax paid on the savings. This would operate rather like franking credits do in Australia's current corporate-shareholder dividend imputation system.

The retirement savings credit would be indexed each year according to the type of ZT adopted. In the ZT-RRA, the interest rate used would be related to the nominal government bond rate (e.g. interest on the 10-year bond is approximately 2.7 per cent). The tax credit would also be adjusted each year according to net contributions of savings to the account. Ultimately, it would be an offset to tax payable when payouts are made from the savings

account.²³ This system can be characterised as **TEt**, with the small t depending on the uplift factor adopted.

The Z-tax parameters are flexible. If the indexation rate for the tax credit were to be only the inflation rate, the tax becomes a form of indexed income tax which provides for lifetime income averaging and indefinite rollover and deferral of capital gains. Thus, the treatment of capital income is similar to an indexed income tax in the short term but moves closer to an expenditure tax, the longer savings are held. Alternatively, if the indexation rate on the tax credit were raised to be similar to average real return on superannuation savings the tax base becomes similar to EET, except that there is a tax on returns above the normal rate and a subsidy on returns that fall below the normal rate.

In general, there would be deemed realisation on death (which is a notable omission from our current capital gains tax regime). The accounts are reconciled on death; there may be some net tax liability at this time (this is also a desirable feature of EET accounts) or else a refund of excess credits.

The ZT-RRA falls on pure profits and thus has a base very similar to the RRA.²⁴ However the advantage of tax deferral makes it slightly more generous than the RRA.

Transition to a ZT would involve:

Immediate full taxation of contributions, this tax to be paid by superannuation funds;

- A retrospective tax offset of, say, 35 per cent to be given to existing accounts, to be carried forward at the chosen uplift rate;
- cease taxing fund earnings;
- New contributions to attract additional tax credits, calculated as if the saving were deductible (i.e., equal to the tax paid by funds) and added to the prior tax rebate

-

The offset would be paid in proportion to its share of grossed up total assets in the account – i.e., inclusive of the tax credit, which is treated akin to the franking tax credit for dividend distributions. In the modelling for a saver on AWOTE in year 1 the gross contribution is \$7,296 but tax is paid (by the fund) of \$2,554 (35%) leaving a net contribution of \$4,743. A tax credit of \$2554 is put in the account. The net contributions accumulate free of tax at 4% real, creating a lump sum of \$589,318 in year 41. The tax credits accumulate at the ZT rate (being say 1.5% real in the case of the ZT-RRA) and amount to \$185,301 in year 41. We gross up the lump sum and tax credit (total \$774,619) and apply tax of 35% (assuming full drawdown) = \$271,116. We deduct the tax credit leaving tax payable \$85,816; net lump sum = \$503,502. For annual payouts, the same maths applies but in proportion. Alternatively a simplified system can be applied which does not employ grossing up.

²⁴ The difference is that the RRA measures pure profits on an annual basis and the ZT-RRA on a lifetime basis. This latter basis is somewhat more generous.

 On payout, the tax rebates are added to the cash payout on a proportional basis and tax is applied to the grossed up sum, with the tax rebate netted out.

The ZT could also apply to savings outside of superannuation, including owner-occupied housing. Note that the various forms of ZT allow flexibility for governments of different political views to take differing views on how heavily to tax savings, between the extremes of uplift factors of inflation only, or uplift of the full expected return on assets (which amounts to nil tax on asset returns). Only this last option is fully intertemporally neutral, but deviations from full neutrality are likely to be far less costly that the current hybrid ET/IT (Ingles 2015b).

5.2. Modelling options for taxation of savings

We model six options including the five options described in section 5.1, for a single individual only, compared to the current system. The six options comprise some that would tax the return to savings more heavily than the current system (including a pre-paid expenditure tax) and some that tax only on draw-down or payout (cash-flow options).

The six options modelled are:

- 1. **CIT** (Comprehensive Income Tax, indexed)
- 2. **RRA** (Rate of return allowance, uplift factor of 1.5 per cent being the real risk-free bond rate)
- 3. **TEE** (pre-paid expenditure tax)
- 4. Current System (current superannuation tax concessions; pension means test)
- 5. **ZT** (Z-tax, cash-flow tax RRA version, uplift factor of 1.5 per cent real)
- 6. **EET** (expenditure tax, only payouts taxed).

We make a large number of simplifying assumptions. We assume a single individual who earns a fraction or multiple of Average Weekly Ordinary Time Earnings (AWOTE). AWOTE is about \$77,000 and wage inflation is assumed at 1.5 per cent per year. Income in our simple model is subject to a flat (linear) income tax rate of 35 per cent above a threshold set at and indexed to one third of AWOTE, being approximately \$26,000 in 2015.

²⁵ Results for couples can be modelled but are more difficult to interpret as the outcomes depend on whether one or both of the partners work and the income split between the partners. If partners in a couple earn equally then the outcomes for singles can be approximately doubled, with a discount for the fact that the couple rate of pension is less than the single rate.

²⁶ Latest statistics in ABS, http://www.abs.gov.au/ausstats/abs@.nsf/mf/6302.0/ (August 2015).

As we are interested in the tax treatment of lifecourse saving, we model the results in 40 years' time, i.e. in 2055. All variables are real, i.e. final incomes in 2055 are in 2015 dollars. We also assume a 6 per cent real annuity value of savings, being (say) 3 per cent real yield plus 3 per cent annual drawdown. This might need to be a DIY annuity as it is difficult to buy an annuity backed by risk assets. We emphasise that the model is illustrative only, as these assumptions are not realistic. For example a wage earner on AWOTE is unlikely to be at this level for a full working life. The model also does not include voluntary savings; however, we know that in aggregate these are substantial. Nonetheless the assumptions allow easy comparisons across these six options.

In the first four options, which are tax pre-paid systems, a means test is applied to the pension. We apply a deeming approach to all income and assets and assume a 6 per cent real deemed rate of return. We assume a flat (linear) means test with a 35 per cent rate and no tax-free threshold and we assume income tax does not cut in until means testing is finished. A high income tax rate could apply above the means test cutout, say at a 50 per cent rate; however, this does not affect the income ranges included in the modelling.

The last two options are cash-flow taxes (ZT and EET). These would operate with a tax claw-back mechanism, as the payout or end benefits are taxed. We assume a retirement tax rate of 35 per cent, with a threshold equal to the pension. Thus, all private income is taxed. Our projections do not take us into higher income zones where tax would exceed 35 per cent. The tax claw-back options are similar to the 35 per cent means test options, but with the crucial difference that they do not involve double taxation of savings (i.e. under initial tax and then means test). There is a trade-off here. The double tax systems are more redistributive than the cash-flow tax options, but are also more distorting of savings and investment decisions.

5.3. Net lump sums

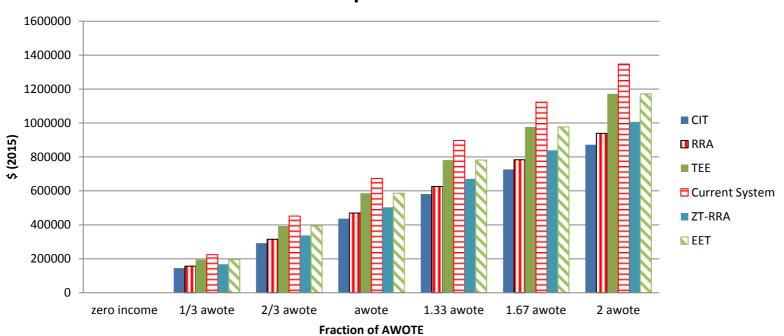
Figure 6 shows that the comprehensive income taxation (CIT) option (left bar) would tax retirement savings most heavily, leaving the lowest net lump sum after tax. It also clearly illustrates how generous the current system (central red horizontal stripes bar) is in respect of retirement saving, even when compared to TEE or EET expenditure tax options. The

options of **RRA** and **ZT-RRA** are more generous than the CIT but not manifestly so.²⁷ It shows that TEE (green sold bar, third from left) and EET (solid orange bar, second from right) are identical in terms of lump sums, as predicted by theory, and are very generous to savers but not so much as the current tax treatment. The expenditure tax options would have a greater fiscal cost, except in the context of a reasonably tight means test on the pension. However, the combination of TEE and a moderate linear means test might be a sensible option.

 $^{^{27}}$ And not so if they apply more generally than does the current IT - e.g., to include housing

Figure 6: Modelled net lump sums in 2055 (after taxes) (2015 \$)





5.4. Modelled retirement income and earnings replacement rates

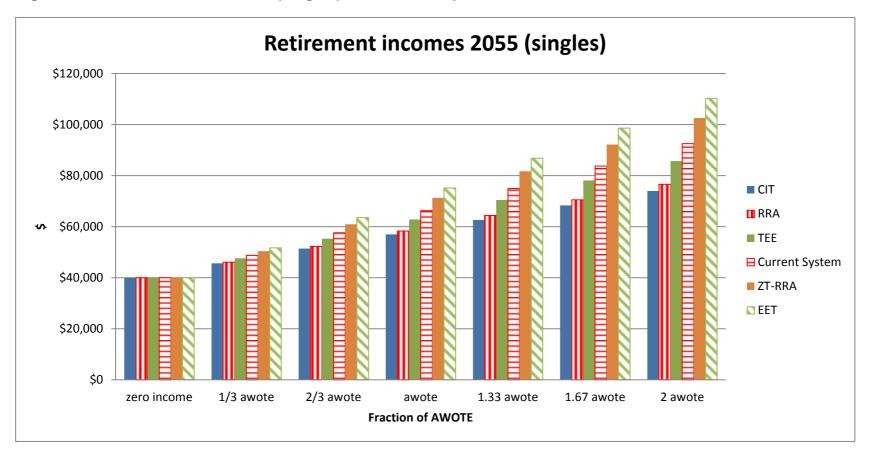
We illustrate the retirement income in 2055, and earnings replacement rates, for our six options in Figures 7 and 8 below. The most redistributive options are those showing the lowest benefit at high incomes. All the systems modelled are highly redistributive even in the presence of a linear means test with a modest taper: that is, the redistribution inherent in the transfer system dominates all the tax system options modelled. The Figures show that even the cash flow options (ZT and EET) are highly redistributive. However, the cash-flow tax options are more generous to savers and their benefits become more pronounced at higher incomes.

For example the CIT with pension means test is highly redistributive. It is lower cost than other options and this money is theoretically available to increase the base rate of pension (this is the basis for the Ingles and Denniss (2014) National Superannuation option, partly modelled on the New Zealand approach). However, the CIT 'double taxes' savings and so is not neutral from an efficiency perspective; it is also very far from the current tax treatment of most forms of savings apart from bank accounts and so may be implausible from a reform perspective, particularly given how far the current superannuation tax system departs from it.

There is a significant re-ordering of the different options in Figures 7 and 8 below, compared to Figure 6 above which presents the net lump sum result. In Figure 6, it is clear that the current system²⁸ (red horizontal stripe bar) is by far the most generous to savers. This is not shown in the two Figures below for two reasons. First, results are not modelled for the highest income earners or for voluntary saving. Second, the pension means test, which is included in the Figures below, brings the current system back into line with other systems.

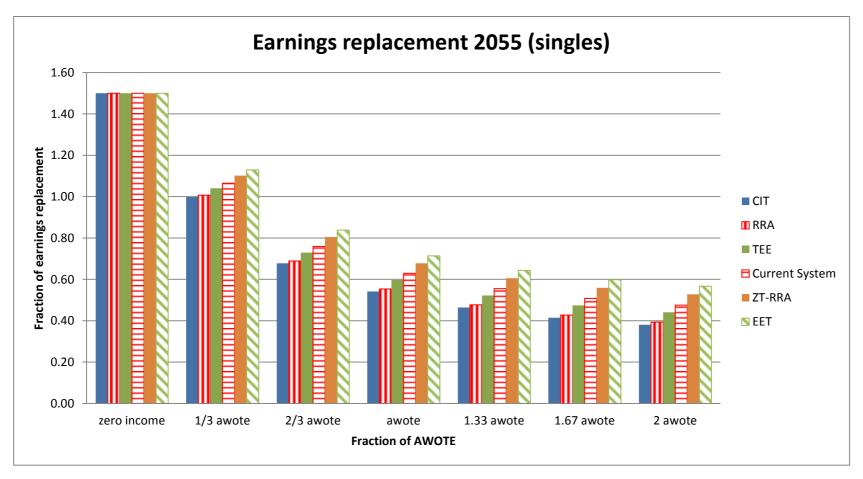
²⁸ The "current system" is not an exact model, as it includes the stylised features described in the text, notably the linear pension means test

Figure 7: Retirement income 2055 (singles), tax/transfer options



The line of zero redistribution would be a ray through the origin.

Figure 8: Earnings replacement rates 2055 (singles), six tax/transfer options



The line of zero redistribution would be a horizontal line at an ERR of approximately one-half.

6. Reform options for superannuation and age pension means tests

In this section, we briefly canvass a range of potential reform options that have been proposed in past and the current review processes, in respect of both superannuation taxation and the means test.

6.1. Henry Tax Review

The Henry Tax Review (2009a,b) examined the retirement incomes system and was clearly attracted to the EET approach to retirement savings, but was constrained by the Review's terms of reference which did not allow them to consider a tax on payouts.

In respect of superannuation, the Review proposed (Henry 2009a) the flat rate tax on contributions to superannuation should be modified. Contributions would be treated as income in the hands of the individual and be taxed at marginal income tax rates less a flat-rate refundable tax offset of 20 per cent, which would also replace the LISC and spouse superannuation tax offset. This would apply to all contributions (employer and employee) up to a maximum of \$25,000 indexed (\$50,000 for those over 50). For most taxpayers, the offset, in the context of the personal income tax scales recommended by the Review would mean that they would pay no more than 15 per cent tax on their contributions. The Review would also have rationalised the three different tax rates that apply to fund income, being 15 per cent for income, 10 per cent for capital gains and zero per cent for earnings in the payout (over-59) phase, to become a single rate of 7.5 per cent. The relevant Recommendations are set out below.²⁹

Recommendation 18: The tax on superannuation contributions in the fund should be abolished. Employer superannuation contributions should be treated as income in the hands of the individual, taxed at marginal personal income tax rates and receive a flat-rate refundable tax offset.

- 1. An offset should be provided for all superannuation contributions up to an annual cap of \$25,000 (indexed). The offset should be set so the majority of taxpayers do not pay more than 15 per cent tax on their contributions. The cap should be doubled for people aged 50 or older.
- 2. An annual cap on total contributions should continue to apply.
- 3. The offset should replace the superannuation co-contribution and superannuation spouse contribution tax offset
- Compulsory superannuation contributions made by employers should not reduce eligibility for income support or family assistance payments. They should also not form part of the calculation for child support.

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²⁹ Henry et al (2009), Chapter 12.

Recommendation 19: The rate of tax on superannuation fund earnings should be halved to 7.5 per cent. Superannuation funds should retain their access to imputation credits. The 7.5 per cent tax should also apply to capital gains (without a discount) and the earnings from assets supporting superannuation income streams.

Recommendation 20: The restriction on people aged 75 and over from making contributions should be removed. However, a work test should still apply for people aged 65 and over. There should be no restrictions on people wanting to purchase longevity insurance products from a prudentially regulated entity.

Because this proposal would tax contributions to the individual rather than the fund, applying this system, the Review noted that the net of tax superannuation guarantee would in effect rise from 7.65 per cent to 9 per cent which it considered would have led to adequate income replacement rates, implying that no further rise was necessary (it is now 9.5 per cent).

The Review proposals achieve an approximation to expenditure tax treatment, while embedding superannuation concessions in an income tax (TTE) framework. The result can best be described as **ttE**, where the small 't's indicate taxation at less than full rates.

The Henry Tax Review also recommended that the home remain tax-free (essentially a TEE or pre-paid consumption tax approach to the home) and that other savings be treated more coherently at a 40 percent savings discount for net income, gains and losses from savings.

In respect of the age pension means test, the Review recommended extending a deemed income approach to replace the separate assets test. It proposed that the home should be exempted up to a high indexed threshold. The full Recommendation states:

Recommendation 88: The current income and asset tests for income support payments should be replaced with a comprehensive means test based on a combined measure of employment income, business income and deemed income on assets. The comprehensive means test would:

- a. extend deemed income on assets in addition to financial assets, including superannuation income streams, rental housing and other asset classes (whether income-producing or not). Superannuation income streams where deeming income would be difficult to apply would be tested on gross income but with an actuarially fair deduction for capital;
- b. have low and high deeming rates based on the returns expected from a portfolio of assets held by a prudent investor. These rates should be set by reference to an appropriate benchmark;
- c. continue the means test exemption for owner-occupied housing up to a high indexed threshold;
- d. set a high capped exemption for personal-use assets;
- e. retain the current concessional treatment of employment income for certain allowances and pensions;
- f. have different free areas for pensions and allowances; and
- g. remove the liquid assets waiting period and the sudden-death cut-out that applies to people on certain payments.

Australia previously had a "merged means test" during the 1970s. Assets (apart from the home) were deemed to yield 10 per cent per annum and actual income from assets was

disregarded. Ten per cent was the assumed yield on an annuity purchased at age 65. Currently, an indexed annuity at that age would yield around a third of that in real terms, and even a 'growth' investment strategy will yield only 5 to 6 per cent so a much lower deeming rate around that level could be justified.

After pension deeming was abolished in 1976 (and replaced by the inclusion of actual investment income) anecdotally pensioners with substantial assets found many and varied means to get around the pension income test, a practice sometimes called income rigging. This led to a variety of ad hoc responses by governments including the introduction of a specific asset test and later the re-introduction of deeming for (initially) a limited range of financial assets.

The Henry Tax Review proposal is that deeming under the pension income test be extended to all assets apart from the home and that the assets test be abolished. Deeming could be at a common rate for all assets or at different rates for different assets. Lower rates could apply to bank accounts, for example, or up to an initial threshold as now. The deeming rate is not specified by the Review, who considered that "deeming rates would be based on the returns expected from a portfolio of assets that would be held by a prudent investor" (Henry 2009b).

There is a similar recommendation in the National Commission of Audit Report (Shepherd et al, 2014). That report, like the Henry Review, would include some part of owner-occupied housing in the base. The Henry Review does not specify the level at which housing assets would impact the test; Shepherd suggests quite low levels of \$500,000 single and \$750,000 couple. In general including part of housing assets is better than having asset disregards or (equivalently) higher thresholds for non-home-owners. We recognise that this is a politically sensitive area as the government has ruled out any inclusion of housing. It also has gender equity implications. Women benefit from home ownership but not from other assets including superannuation; a move to change home ownership rules for the age pension would differentially and more severely affect women than men. Further research is needed on this question. In fact, in the current system, home ownership is addressed in a limited way by having a higher asset test threshold and supplements for low income renters.

6.2. Reform of the age pension means test

It would be possible to reform the age pension means test to achieve a more consistent schedule of effective tax rates. This is implicit in our modelling results above, where we apply a 35 per cent linear tax rate to all non-pension income with capital income deemed at 6 per cent.

We suggest that comprehensive deeming (for all assets) is a better option than combining some income deeming and the asset test, as now; the latter is complicated and inefficient. Either test could be designed, of itself, to do the job better. As explained in section 3, the current system combines quite low deeming rates for financial assets (1.75 and 3.25 per cent) with a high annual wealth tax (the asset test) at a rate of 7.8 per cent of assets from 2017, which is equivalent to a deeming rate of 15.6 per cent in association with the current pension taper of 50 per cent. In our Submission to the Senate Committee which considered the new asset test (Stewart and Ingles 2015) we suggest a deeming rate around 6 per cent as being consistent with the returns that can be achieved by an aggressive investor or by a conservative investor in conjunction with, say, a 3 per cent annual drawdown of capital, with the possibility of a lower rate below the current 3.25 per cent thresholds and a disregard for non-homeowners.³⁰

If the age pension means test were to be reformed in this way, we would also recommend that the SAPTO be adjusted downwards to increase tax clawback. If SAPTO were designed to cut in from the first dollar of private income such clawback would be considerable. This throws up some interesting reform options. For example, the combination of TEE and means test-free pension might be made to be cost neutral.³¹ Because of the effect of the SAPTO, little revenue is to be gained from taxing investment income during the pension phase: many older people have incomes below the SAPTO thresholds. Hence, replacing the age pension means test with tax clawback requires changes to tax during retirement.

To enhance clawback the SAPTO would need to be recast so that tax applies from or close to the first dollar of private income. Ideally the definition of assessable income also needs to be more comprehensive. In principle, substantial clawback is available in conjunction with a

³¹ Means test abolition costs \$15 billion and TEE raises approx. \$12 billion. It would not be difficult to increase tax clawback by \$3 billion in the context of a universal pension.

³⁰ Conceptually the preferred treatment for homeowners is to include the home in the deeming regime and gross up the base payment to offset the impact on those with a median level of home equity. This would allow rent assistance to be abolished, and remove the case for a higher asset threshold for non-homeowners. The government has explicitly ruled out inclusion of the home in the asset test.

universal pension. At the moment the high tax free areas created by the SAPTO might be justified by the need to reduce interactions with the pension income test. This would not be a factor with a universal pension.

Another option is to have a special tax rate scale for the aged. The thresholds would be set at and indexed to the maximum pension rates. The couple scale would be for the family unit. The tax rate might be, say, 35 or 40 per cent above the threshold. The aged would be free to revert to the normal income tax scale as soon as it was to their financial benefit.

These tax options are particularly attractive under the cash flow tax options modelled above, which result in all the pension drawdown being fully taxable. For example, the 35 per cent flat tax rate ensures that tax rates when saving for retirement are approximately the same as tax rates on drawdown. If tax rates on drawdown are lower there is an effective subsidy for capital income.

In New Zealand which pays a universal pension ("national superannuation", NZS) there are no special income tax benefits available to retirees. Pensioners (national superannuants) simply pay income tax on the same basis as other taxpayers. This means that even base rate pensioners lose some of their benefit in tax. This creates some "churning" but essentially, a net amount is paid to the pensioner. An alternative may be to confine tax clawback to private earnings.

There was a period when the pension means test was abolished for those aged over 70 and both deeming and the pension asset test were abolished. Pensioners found it possible to reduce the impact of taxation (and income testing) by various avoidance practices. This is largely because the taxation of capital income is very light (on average) in Australia – as in many other countries. Options for reform of taxation of capital are discussed in more detail in Ingles (2015b). Some of these options include including owner-occupied housing in the tax base – which could tax capital income concessionally relative to a comprehensive income base. If the income tax on capital returns were reformed, we could safely rely on it to clawback up to half of the pension (at a top 47 per cent rate) for well-off retirees.

Another option is that pensions would be clawed back by a moderate means test. The income test and the tax system would overlap. A simplified approach which we use in our modelling is a simple 35 per cent flat taper with income tax not cutting in until most or all pension is exhausted, with the rate then to be 50 per cent.

A lower pension taper of 25 per cent could alternatively be adopted with full deeming of asset returns. This would interact with income tax rates around 20 percent to produce effective marginal tax rates of around 40 per cent for many pensioners. This option might involve abolition of income test free areas entirely. This also might remove the case for reforming the SAPTO, although ideally the SAPTO would be re-designed to merge seamlessly with the new pension taper.

A deeming rate of 6 per cent would result in effective marginal tax rates on asset incomes of around 40 percent for those able to achieve a 6 per cent real return, or 25 per cent for those with incomes below the effective tax thresholds. Some part of housing wealth might be included (e.g. as suggested by Shepherd et al 2014); however if this were done there would be a case for grossing up the base rates of payment, so that it might not in aggregate be a savings measure. This would be very redistributive to poorer pensioners.

The linear taper option plus deeming is much lighter on assets that the current system except at the low end (below the taper thresholds) where the current system is quite generous. However the current parameters only make sense in the context of a superannuation tax system which discriminates very severely against low–income earners – they receive, no, or little benefit from current tax concessions. This is mitigated to some extent by the LISC, but it is to be abolished in 2017. Hence, our proposal for a more-or-less linear withdrawal rate under the means test presupposes that the superannuation tax system becomes more consistent in its treatment of different income groups.

We also do not envisage the pension work bonus continuing under any of these options. The bonus involves taxing work income more lightly than capital incomes; there is no need for this if capital incomes are taxed fairly and consistently in a reformed system. However removal of the work bonus is only sensible if effective marginal tax rates are dramatically lowered as suggested in the options canvassed above.

6.3. Recent changes by governments to superannuation and pension tax setting

The government did not adopt the Henry Tax Review recommendations and instead moved to moderately reduce the regressivity of the super tax concessions by tightening contribution caps (now limited in general to \$25,000 and \$35,000), applying a tax of 30 per cent for contributions of high income earners and introducing the LISC. The surcharge impacts only the top 1 to 2 per cent of income earners and raises relatively little revenue.

In the 2013-14 Budget the then Labor government foreshadowed a 15 per cent tax on fund earnings supporting pensions over \$100,000 per annum in retirement; this would have broadly impacted those in the pension phase with account balances over \$2 million, but was never enacted. This measure would have yielded only \$350 million in the forward estimate period and affected 0.4 per cent of retirees.³² More recently, the ALP has proposed to tax earnings of over \$75,000 pa in pension phase. This also shows a comparatively small saving. These changes would slightly improve the equity of the system but they lack a coherent rationale and can best be regarded as patches.

The Government's recent tightening of the age pension asset test proposes total savings of \$2.4b spread over 3 years. However, these savings are too small to change the aggregate picture. It is difficult to reap expenditure savings through further means test tightening, as the effective tax rates on pensioners' savings are already very high. As explained above, the effective savings tax rate of 7.8 per cent in the new asset test corresponds with the 50 per cent income taper, to an implicit deemed rate of return of 15.6 per cent – a rate of return which is simply unachievable for most investors. Real fiscal savings from retirement tax/transfer reform, if they are to be achieved, must come from the tax side.

6.4. Proposals to the Re:think Better Tax Discussion Paper

Many policy suggestions to date, including the options canvassed by the Henry Review or ACOSS (2011, 2012a, 2012b) would an improvement on the current situation. However, they all envisage the continuation of a superannuation tax regime which combines both income and expenditure tax elements and lacks a clear theoretical rationale in terms of the ideal tax treatment of savings. We suggest that such a hybrid scheme is distorting and inefficient and leads to a host of well-documented problems (see e.g., St John 2007, 251).

There are various policy suggestions in recent Submissions to the Re:think Tax Discussion Paper. Some of the main suggestions are set out in the Table attached to this paper. In sum, the submissions include a number of ideas for improving the equity of current tax arrangements. Some other interesting ideas for reform have been proposed by researchers such as the Grattan Institute (Daley and Wood 2014; Daley et al 2015). However, most of

³² "Reform to make the superannuation system fairer" Joint media release by Treasurer and Minister for Financial Services and Superannuation 5 April 2013

these ideas do not address savings taxation as a whole but focus on specific aspects of the current hybrid system.

6.5. Matrix of options

We have estimated approximate fiscal costs of the different options that we model in section 5, and ranked them by "generosity" to savers, in the matrix below (Table 7). Options ranged along the diagonal from bottom left to top right are broadly similar in terms of cost and net outcomes. All these options are cheaper than the current system. Options on the top line have no means test on the pension, except for tax claw-back. They all result in a consistent treatment of saving before and after retirement. They can also result in consistency inside and outside the superannuation system if the general taxation of saving is of the same sort.

As already explained, the current system for superannuation savings and the age pension is highly generous on the tax side and only "moderate" on the means test side. This is because a high income test and (particularly) asset test thresholds offset very high effective marginal tax rates on both tests. This system could be made "harsh" either by reducing these thresholds or including owner-occupied housing (or both).

The dollar savings under the various policy combinations are illustrative only and have not been comprehensively costed; such a modelling exercise is beyond the scope of this study. But we have some basis for the estimates. For example, the combination of a CIT and no means test costs \$15 billion on the means test side but raises around \$30 billion in extra tax revenue (2015-16 revenue gain estimate from Treasury 2015a), giving us an estimate of \$15 billion net saving.

Table 7: Matrix of tax/means test options; rough estimate of fiscal cost/savings (\$billion)

	Current system for tax of superannuation (most concessional)	Expenditure tax (EET or TEE) (no taxation of savings)	(moderate taxation of savings)	(full taxation of savings)
No means test on age pension Universal payment or tax clawback only	High earnings replacement rates Net fiscal cost	Generous treatment of aged, high public spending, high earnings replacement rates even at top Equivalent	Moderately generous; consistent treatment of saving	Like other universal options, consistent across all forms of savings
	\$15b	cost to current system	saving \$10b	saving \$15b
Moderate means test on pension Effective tax rates less than 50 per cent Basic minimum and income	Generous earnings replacement rates: Current system for those not impacted by the means test taper Net fiscal cost	Generous tax treatment; moderate on means test Net fiscal saving \$10b	Moderate treatment in tax and means test Net fiscal	CIT in general but harsher than CIT under the means test Net fiscal saving \$25b
replacement goals	nil		saving \$20b	J
Harsh means test on pension Effective tax rates over 50 per cent Anti-poverty only	Moderate earnings replacement rates, but flattened for those subject to means test (conflicted system)	Generous tax treatment but harsh means test High earnings replacement rates at top and bottom but not in middle	Moderate tax and harsh means test; those subject to means test have savings treated as CIT or more.	Least public spending but little support for the aged; low earnings replacement rates, except at bottom
	Net fiscal saving \$10b	Net fiscal saving \$20b	Net fiscal saving \$25b	Net fiscal saving \$35b+

7. Conclusion

This paper presents an argument for rethinking superannuation taxation and the age pension means test, on the basis of a principled approach across all categories of saving and over the lifecourse. The current retirement tax-transfer system embodies two conflicting policies. On the tax side, the tax concessions for superannuation are excessively generous relative to either a comprehensive income or an expenditure tax benchmark, and relative to the tax treatment of other forms of saving outside superannuation. In the transfer system, the age pension has a moderately tight means test, comprising an income test (including deemed income from financial assets) and an alternative asset test. The pension means test operates as a combination of an income tax and wealth tax for those in the pension system. We characterise the test as "moderate" because the high thresholds and housing exemption offset the very high effective marginal tax rates that can apply to both earned and especially investment income. As a result of these conflicting policies, Australia's tax settings for superannuation and our age pension means test may distort both savings and investment behaviour, while the age pension means test also may distort work behaviour.

A principled tax treatment of savings could apply to savings both inside and outside of superannuation and thus make the tax system neutral across the various investment options open to savers. It also opens up the possibility of a tax/transfer system which is neutral over the life course, as between the pre-retirement and post-retirement phases. We do not take issue with mandatory retirement savings; these proposals relate to the tax treatment, not other regulatory aspects. However, with a neutral tax treatment, some regulatory requirements that restrict superannuation savings, such as contribution limits and preservation rules, could be removed.

We discussed Australia's current tax and transfer settings for retirement savings in this paper, and model five different options for savings taxation compared with the current system. We set out above a number of recommendations for reform of the age pension means test, including in particular a deeming approach to all assets.

In general, the means test options for clawing back pension result in a more comprehensive assessment of capital income than do the income tax options, even though the effective tax rates are similar under both options. However, if capital income taxation became more consistent – e.g. through use of an expenditure tax (ET) or a rate-of-return allowance (RRA) – then the case for retaining a means test is correspondingly less. In the meantime, a move towards the TEE approach (with taxation on contribution to superannuation funds),

combined with reform of the pension means test, is a pragmatic option. Apart from the advantages noted above it is consistent with the tax treatment of owner-occupied housing; however that consistency disappears when the transfer system is taken into account, as housing is exempt from the means test.

In the longer term, we recommend that Australia should move towards a more coherent tax/transfer treatment, not only in the retirement system but across all forms of saving.

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Appendix
Summary analysis of some Submissions to Re:think (2015)

Submission	Superannuation	Age pension
Rice Warner 2015	 Uniform 12% tax on fund earnings in earnings and pension phase Uniform 20% rebate on concessional contributions; tax contributions to the member rather than the fund (this increases the effective contribution rate from 8.1% to 9.5%) – suggested saving \$6 billion Increase the cap from \$35,000 to say \$50,000 Lifetime cap on non-concessional contributions of say \$500,000 Withdrawal allowed up to \$100,000 pa cap; above this to be taxable Full death benefit to be taxed at 175 irrespective of the source of contributions Benefits to top income earners reduced from \$1.8m over a lifetime to \$1.3m 	 Age pension means test to be phased out; retirees should first spend their own assets and be eligible for full pension when they fall below a threshold, this being \$500,000 outside the home or including home, up to \$1.5 million New pension loans scheme for asset rich but cash-poor pensioners Suggested saving \$52 billion in 2055
Actuaries Institute 2015	 Low income super contribution be extended beyond 30 June 2007 Tax concession between 15 and 22% for most people Lifetime cap for contributions; any excess to be taxed at 15% on fund earnings Maximum limits on income streams, excess to be taxes as a lump sum payment 	Release of home equity not assessed under the means test
ACOSS 2015	 Tax concessions need major structural reform Incomes in retirement do not need to be higher than in working life 	Tax thresholds for older people are not sustainable; SAPTO to be paid only to pensioners

	 Contribution tax concessions to be based on a system similar to Henry's, but fund tax rate in pension phase to be 15% (Henry 7.5%) 15% fund tax to be rebated for low income earners Only net additions to savings attract a concession Non-concessional cap to be halved Progressively align preservation age with pension age (67) 	
ASFA 2015	 Super is broadly achieving its primary objective "To provide income in retirement to substitute or supplement the age pension" (from FSI 2015) Cost of super concessions is overstated because of pension savings – in fact is around \$16b not \$30b Ceiling of \$2.5 million for taxpayer support to retirement savings Amounts above this to remain in accumulation phase and be taxed at 15% or be removed Non-concessional contributions to be limited to \$1m over a lifetime People with broken work histories should be able to catch up with concessional contributions 	
Australian Super 2015	 A fair superannuation system is taxed concessionally for all users, up to the point where it is necessary for provision for retirement outcomes and no further And where tax concessions provided by all taxpayers are not used to advance estate planning by some Some level of tax concessions will always be required because investors are being asked to give up access to their own savings for up to 40 years Tax reforms must be biased in favour of retirement income streams 	
Challenger 2015	Not fiscally sustainable to provide tax concessions to support	

	 accumulation of balances that are very large by community standards Notes Treasury modelling showing that the current system provides abnormal benefits to the top 10,5 and 1 percentiles Generally supportive of Henry Tax Review proposal to tax contributions at full marginal rates but provide a uniform percentage rebate 	
Australian Institute of Superannuation Trustees 2015	Trible to proper tangening or control of the men	

	recent changes widening this gap	
SMSF Association 2015	 Super should encourage people to save for a self-sufficient retirement with AP to function as a safety net rather than a primary source of retirement income Concessional taxation of super is justified on the rationale that people should be encouraged to save for retirement and super is subject to strict regulatory requirements (e.g. preservation); also to reduce reliance on the AP lowered contribution caps will limit the generosity over the system in the future Propose a light tax on superannuation payouts that are over a generous tax-free threshold (e.g., \$125,000 pa) to improve the equity of the system and claw back tax benefits from those with balances over approx. \$2.5m Status quo for contributions and fund earnings; this is a ttt system Alternatively, keep the LISC and possibly tighten DIV 293 threshold (to say \$180k); this would increase equity without introducing complexity in the manner of, say, the Henry recommendations EET system would be simplest and most equitable but practical limitations in transitioning to such a system Deeming regime in lieu of pension asset test, which creates a "black hole' for those over the asset thresholds. 	