

ARC Centre of Excellence in Population Ageing Research

Working Paper 2012/15

'Long-term Fiscal Projections and the Australian Retirement Income System'

Rafal Chomik and John Piggott

Rafal Chomik is a Senior Research Fellow at the ARC Centre of Excellence in Population Ageing Research, Australian School of Business, University of New South Wales.

Email: r.chomik@unsw.edu.au

Professor John Piggott is Director at the ARC Centre of Excellence in Population Ageing Research, Australian School of Business, University of New South Wales. Email: j.piggott@unsw.edu.au

This paper can be downloaded without charge from the ARC Centre of Excellence in Population Ageing Research Working Paper Series available at www.cepar.edu.au

'Long-term Fiscal Projections and the Australian Retirement Income System'*

Rafal Chomik and John Piggott

May 2012

Rafal Chomik (Corresponding author)
Senior Research Fellow
ARC Centre of Excellence in Population Ageing Research
Australian School of Business
University of New South Wales
Sydney 2052 Australia
r.chomik@unsw.edu.au

John Piggott

Director
ARC Centre of Excellence in Population Ageing Research
Australian School of Business
University of New South Wales
Sydney 2052 Australia
j.piggott@unsw.edu.au

*This paper was initially prepared for IGR+10, a conference hosted by the Melbourne Institute, Canberra, 11 May 2012. George Kudrna provided helpful comments on an earlier draft. We acknowledge financial support from the ARC Centre of Excellence in Population Ageing Research (CEPAR).

©2012 Chomik and Piggott. All rights reserved.

'Long-term Fiscal Projections and the Australian Retirement Income System'*

Abstract

Australia's retirement income provision system, comprising the 'three pillars' of a means-tested Age Pension, mandatory occupational Superannuation and other, voluntary long term savings, is at the heart of understanding the fiscal implications of ageing. While the Intergenerational Report, an account of long term fiscal sustainability, is celebrating its tenth birthday since the first edition was published, the Superannuation Guarantee (SG), first implemented in 1992, is about to turn a sprightly twenty. This paper considers the intergenerational reports as a prism for studying fiscal, demographic, and policy developments in the Australian retirement income system over the last decade and into the future.

Key words: Intergenerational Report; Retirement; Pensions; Superannuation;

Population Ageing

JEL codes: H55; J11; J14; J26

1 Introduction

The Charter of Budget Honesty Act (1998) tasked the Australian Government with the preparation of a five-yearly intergenerational report (IGR) to assess the long-term sustainability of Government policies in the following 40 years. The first IGR was published in 2002, followed by reports in 2007 and 2010. A primary motivation for the reports is to provide insight about the fiscal sustainability of current policy, including the structure of the retirement income regime, in the context of demographic shift.

The current picture looks positive. Australia's retirement income provision system, comprising the 'three pillars' of a means tested Age Pension, mandatory occupational superannuation and other, voluntary long term savings, compares well internationally. Total spending on age-related pensions is about 3.6 per cent of GDP, one of the lowest in the OECD. The aged dependency ratio is 20%, low by international standards. Old-age poverty stands at about 14%, again low by most international standards. Older labour force participation is climbing, notably among men, and overall participation among those aged 55-64 in 2010 stands at 60.6%, the sixth highest rate in the OECD, and up from 50.3% in 2003, which was close to the OECD average. Superannuation assets are about equal to GDP, one of the highest ratios in the world.

But even with this positive set of numbers, the ageing demographic remains a challenge. IGR 2010 projects that, without policy change, ageing pressures would push government spending up from 22.4 per cent of GDP in 2015–16³ to 27.1 per cent of GDP and result in a fiscal gap of 2.75% of GDP by 2049-50. At the level of general policy response, the increasing revenue requirement implied by population ageing will increase distortionary taxes, and Australia's relatively low reliance on consumption taxation means that, in the absence of major tax reform, other, more distortionary taxes will shoulder this increasing burden. Age-related pensions are expected to make up a significant proportion of these additional costs. But in the domain of labour force participation, retirement, and pensions, Australia's successful basic retirement provision paradigm is bedevilled by design flaws that have been ignored or made worse by successive governments.

While the Intergenerational Report celebrates its tenth birthday since the first edition was published, the Superannuation Guarantee (SG), first implemented in 1992, is about to turn a sprightly twenty. This paper takes advantage of this milestone and uses the intergenerational reports as a prism for studying the developments in the fiscal, demographic, and policy landscape affecting the Australian retirement income system over the last decade and into the future.

The paper is organised as follows. Section two looks at various IGR projections relevant to pensions and compares these across the three iterations of the report as well as against up-to-date historical figures. Section three covers a decade of policy responses that have ensued, discussing

¹ Rodgers and Rodgers (2010), Tables 2 and 3. The OECD (2009) reports old age poverty in Australia at more than 25%, the 4th highest rate in the OECD This estimate ignores imputed income from owner-occupied housing. Australia has one of the highest rates of owner-occupied housing in the world among the elderly, and this remains true even for households in the lowest quintile of consumption expenditure.

² Employment and labour markets: Key tables from OECD - ISSN 2075-2342.

³ Fiscal stimulus is expected to be completely phased out of the spending base during 2012–13.

the objectives of different measures, while section four identifies unresolved policy issues that will require attention and analysis in the future. Section five concludes.

2 Projections

Expenditure on age-related pensions

The comprehensive but conditional retirement income support provided through the Age Pension and a less severe ageing of the population compared to other countries, means that Australian public spending on pensions relative to GDP is projected to remain lower than most other OECD member states (Figure 1).

The fiscal impacts are nonetheless significant. In its latest IGR (and as shown in Figure 1), treasury modelling suggests that demographic pressures will increase spending on age-related payments from 3.6 per cent of GDP in 2009-10 and 2014-15 to 4.9 per cent of GDP in 2049-50.

Increases in the pension component, along with higher spending on health and aged care, will have an impact on overall spending. In the absence of policy change (be that tax hikes or spending cuts) expenditure is expected to outpace revenue by the early 2030s and the gap will widen to 2.75 per cent of GDP by 2049-50. In the absence of a substantial policy response, net debt will, in turn, grow to around 20 per cent of GDP by 2049-50.

It is a great challenge to model the impact of current policies and demographic trends over a horizon of up to 40 years. Projections over much shorter timeframes of several years are highly uncertain and sensitive to strong assumptions. And uncertainty increases with the time horizon. Figure 2 presents Treasury's fiscal projections of expenditure on the Age Pension (including other age-related payments) and Disability Support Pension compared across the three iterations of the Intergenerational Report and alongside actual, historical figures. The comparison makes for an instructive exercise in how projections can change as new data on real world trends become available, different assumptions are used, or in some cases, if given the benefit of the doubt, as government takes action.

In each Report, including the 2010 revision of IGR 2007, long-term public expenditure on age and service pensions (excluding disability pensions) was projected to increase from the period of publication, driven by population ageing. What is interesting is that in each successive report the increase, as a percentage of GDP, was lower. For example, the 2002 report projected that in 2041-42, the cost of such pensions would be 4.6 per cent of GDP. By the 2007 report, this figure was 0.3 percentage points lower. In 2010, when the Treasury released its third report, which also applied newer methodology⁴, the revised 2007 and the new 2010 estimates were 0.2 and 0.6 percentage points lower still.⁵

⁴ Methodological changes in System of National Accounts (SNA) by the Australian Bureau of Statistics in December 2009. This also explains why there is a revised version of IGR 2007 projections.

⁵ The earliest analysis, from 2001, was carried out by Treasury and reported by the OECD. It showed an increase of spending on 'old-age pension' and 'early retirement programmes' from 3.9% in 2000 to 4.8% in 2050 (Dang et al., 2001)

Some of the decline can be ascribed directly to changes in policy. For example, Treasury estimates that the reforms to age pension announced in 2008 and 2009 budgets represent some \$85bn of structural savings by 2050 (see following section for a summary of pension related policy). Nonetheless, it is the underlying drivers, such as population structure and participation by age, at times steered by policy, that are most important in explaining an easing in population ageing and a slower increase in public pension expenditure. The IGR reports base their projections on the influence of three factors: population, participation and productivity. Here the focus is on population, participation and superannuation.

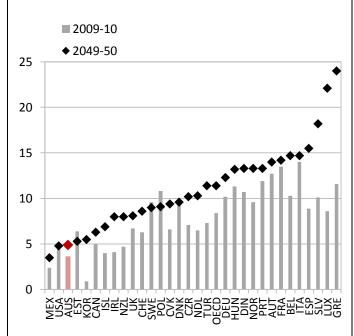
Population

Population ageing is a function of three demographic effects: declining fertility, increasing longevity, and low net migration of younger workers. Australia's total fertility rate has been below replacement rates and falling since the mid 1970s. At the time the IGR 2002 was being published, this downward trend appears to have reached its lowest point on record of 1.7 births per woman per year before recovering to 1.9 by 2010. As a result, the long term assumptions in the Reports have been successively more optimistic about long-term fertility, changing from 1.6, to 1.7 and then to 1.9.

Assumptions about migration have also changed. In IGR 2002 future net migration was a constant figure of 90,000 people per year based on migration levels in 1998. In IGR 2007 a constant of 110,000 people per year was used, reflecting an average of the previous 10 years. IGR 2010 projections, far more sensibly, were based on a proportion of the projected population per annum. This proportion, averaging at 0.6 per cent (or 180,000 people per year) over the next 40 years, is equivalent to the rate seen over the past 40.

For this outcome to eventuate, the rate will need to drop considerably from the highs seen over the last five years – an average of 1.11 per cent. UN (2010) projections and to some extent ABS (2011) projections agree with this decline, at least in the short term. The drop would be surprising given that net migration is positively related to economic growth and Australia's economy is expected to stay buoyant relative to many other countries for some years to come. It is worth adding that migrants tend to also be younger than intakes modelled a decade ago, which contributes to a slower rate of population ageing.

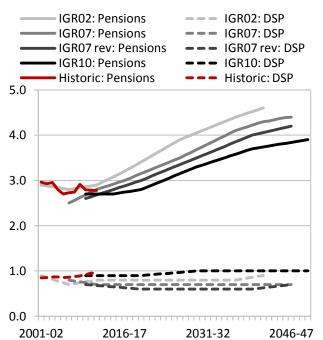
Figure 1. Current & projected public expenditure on agerelated pensions in OECD (% of GDP), 2010-50



Source: OECD (2011)

Note: Expenditure includes Disability Support Pension

Figure 2. Historic and projected public expenditure on age-related pensions (% of GDP), 2001-2050



Source: Treasury (2002, 2007, 2010), FaCSIA (various), DVA (various), DEWR (2006), ABS Cat. 5206.0. Note: IGR age & service pensions are: 'Age Pension and similar payments to veterans and war widows'. Authors' calculations of historic: Age Pension, widow and wife pensions, senior supplements and allowances, aged savings bonus, Self-funded Retirees' suppl. bonus, veterans' 'Outcome 1' benefits. DSP is Disability Support Pension.

Figure 3. Historic and projected net overseas migration growth (% of total population p.a.), 1945-2050

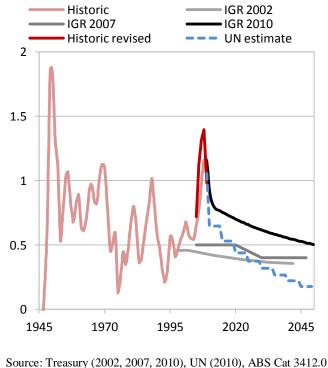
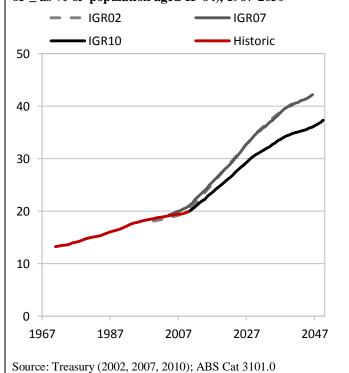


Figure 4. Historic and projected old-age dependency (pop $65 \ge as \%$ of population aged 15-64), 1967-2050



Offsetting increases in fertility and migration that make for a younger population are increases in longevity that result in population ageing. Longevity assumptions have changed slightly between the different Reports. For example, IGR 2002 estimated that in 2042 life expectancy at birth would be 82.5 for men and 87.5 for women. By IGR 2010 this estimate increased by about four years for men and two years for women. Taken all together, demographic change as measured by the change in the projected age dependency ratio – the population aged 65 and over relative to the population aged 15-64 – has decreased between the reports. This has been most pronounced between IGRs 2007 and 2010. The projection for 2047, for example, decreased from 42.4 per cent in IGR 2007 to approximately 36 per cent in IGR2010. Importantly, the ratio is still increasing from 20 per cent in 2010.

Participation

While the number of older people compared to those of traditional working age is important, the eventual impact of population ageing also depends on the extent to which these older people remain productive in the labour market. Recent increases in participation rates of older women are not surprising given the 'cohort effect' – increasing employment rates in successive cohorts at older ages because of past increases at younger ages – but the increases for older male workers appear exceptional (Figure 5). For example, after a downward trend since the late 1970s and some smaller gains in the late 1980s, the participation ratio of men aged 60-64 has climbed from about 47% in 2000, when data for the first IGR was being collected, to 57% in 2006, just before the second IGR. The increases have been variously predicted and documented (McDonald and Kippen (1999); Kennedy and Da Costa (2006)). Evidence summarised in McDonald (2011) puts such increases down to a strong labour market on the demand side, and to improved health, work conditions, education, and certain policy changes on the supply side.

Figure 5 presents these trends alongside the projections used in IGR 2002 and IGR 2007 (the comparable disaggregated rate was not published in IGR 2010). Because of the strong growth in labour participation rates of older workers, Treasury revised upward its projections of total participation and downward the fiscal impacts of an ageing population. There is certainly scope for participation rates to increase further and IGR projections to be revised again. Australia still lags behind countries such as the US, UK, Switzerland and New Zealand (OECD, 2011) in the participation rates of its mature workers. Even if Government doesn't take the opportunity to further withdraw incentives to retire early, improvements in health, work conditions, and education may continue to affect the participation rates of older workers positively.

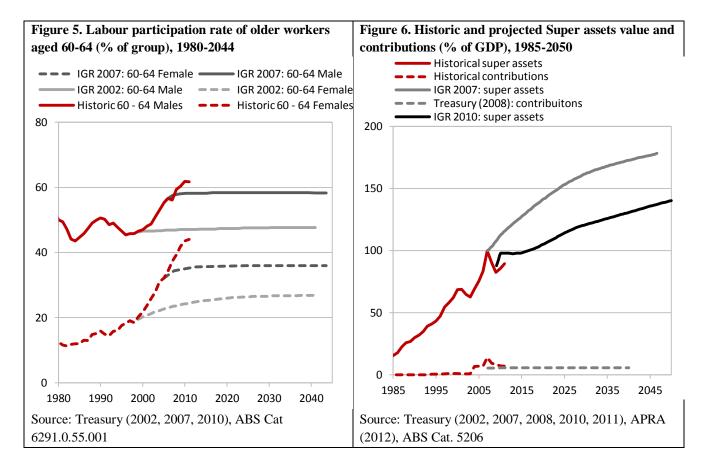
Super accumulation

Treasury's projections of spending include the interactions between age-related pensions and increasing income and wealth of successive cohorts of retirees, especially the maturing of the Superannuation Guarantee.

Figure 6 presents the historic and projected trajectory of the value of superannuation assets and contributions. The most significant event affecting asset value was of course the financial crisis in 2008. Australian funds suffered real losses of some 27% in 2008. Compared with other

countries this was the second worst investment performance for private pensions in the 30 OECD countries, after Ireland (OECD, 2009)⁶. IGR 2007 could not have predicted such a development. Modelling following the crisis in IGR 2010 projects superannuation fund assets to reach 140 per cent of GDP by 2050, down from the nearly 180 per cent of GDP predicted by IGR 2007.

Of course total superannuation asset values will be a function of contributions and investment growth, as well as payouts. Treasury modelling (2008) suggested that contributions would be just above 5 per cent of GDP in the long term. This is similar to actual figures. These, as well as asset growth projections, will require revision to the higher level of compulsory employer contributions from 9% to 12% of earnings, reflecting recent policy. The projections indicate that superannuation assets are not expected to decline as baby boomers withdraw their assets in retirement, but asset growth relative to GDP is projected to slow.



The degree to which these numbers affect pension spend depends on the interaction between the Superannuation Guarantee and the benefit system. The Superannuation Guarantee was designed to perform an income smoothing role between earnings in work and income in retirement. In doing so it supplements retirement income available through the Age Pension (and private savings) rather than replacing it.

⁶ OECD highlighted that investment losses in Australia were much larger than in most other countries because of the large share of equities in pension-fund portfolios: around 57% before the crisis hit compared with an average of 36% in the 20 OECD countries for which data is available. They note that encouraging 'life-cycled' portfolios would mean people reallocate away from risky investments as they approach retirement.

Consequently, even as the Guarantee matures, most retirees will continue to receive a significant level of Age Pension. Treasury estimates, as quoted in the Harmer Review (2009), suggest that the Superannuation Guarantee will only reduce the total value of pension spending by some 6 per cent in 2050. This is surprising for a system that by then will be fully mature. In fact, their modelling shows that in 2050 about 45 per cent of the population aged over 65 years will receive a part pension – an increase from 31 per cent in 2010 – and 28 per cent will receive a full pension – a decrease from 46 per cent. The proportion of those over 65 not receiving any Age Pension is projected to increase by 3 percentage points to 23 per cent.

It is unclear to what extent these changes reflect a higher eligibility age from 65 to 67 (if the increase was modelled at all at the time) and how much is due to greater wealth and income from Super. These numbers suggest that there may be scope to tighten the means test in the future, allowing the second pillar of Australia's retirement income system to shoulder a greater burden of the fiscal impacts of population ageing.⁷

3 Policy responses

The discussion so far has focused on a number of elements that affect projections of the fiscal impact of age-related pensions. But against the backdrop of an ageing population, the Intergenerational Reports are a means by which government can be held accountable for policies that run beyond the electoral cycle. Policy can influence many of the elements above, such as immigration, participation, and means testing. Some of the revisions between successive IGRs can be directly attributed to differences in the policy and regulatory environment, and in turn, the rhetoric around policy changes can involve the projections as a catalyst for action.

So how has the government responded to this new form of information about the future? While the ink was still fresh on the 2002 report, it was being quoted in the budget speech of that year as motivation for introducing co-contributions for low to middle earners and reducing a surcharge on higher earners. The 2004-05, 2005-06, and 2007-08 budgets emphasised these policies further (co-contribution was increased and surcharge was decreased and then abolished). In the meantime, superannuation supervision and governance was strengthened by the Superannuation Safety Amendment Act 2004 while Commonwealth employee pensions funding, or lack thereof, was being addressed by the introduction of the Future Fund in 2006.

In releasing the second IGR in 2007, the then Treasurer stated that "In practically every portfolio area — health, education, family benefits, welfare, superannuation, pensions — the IGR now provides the overall architecture within which we operate" (Costello, 2007). This was the year in which the superannuation system was shaken up with the implementation of the 'Simplified Superannuation' package (also known as 'Better Super') announced in budget 2006-07. Changes included the tax exemption or reduction on pension benefits (whether as income stream or lump sum) if taken after age 60 ⁸, a relaxation of the Age Pension assets test, and abolition of Reasonable Benefit Limits in favour of limits on concessional contributions (in both cases, a means to target tax advantage to those with low- and middle-incomes).

⁷ Of course, in tightening the means test, policy makers need to be mindful of its disincentives to save and work.

⁸ Tax exemption excludes pensions that have not been taxed at the contribution stage.

With a new government came new reviews and reforms. In 2008 and 2009, Government enhanced the indexation of the Age Pension and announced four reviews relevant to retirement income provision. First, the Mathews Review on the price adjustment of military and civilian pensions was published in 2008 and made a case for the status quo of CPI indexation. Second, the Pension Review, known as the Harmer Review, looked at the financial security of seniors (as well as carers and people with a disability). Its publication in 2009 resulted in increases to the pension age, rationalisation of seniors' supplements, and permanent increases and better targeting of the Age Pension (i.e., a higher, more progressive taper and exemptions for small earnings from employment through the work bonus).

The third review, the Cooper Review, was on the regulation of Australia's superannuation system, and was published in 2010. The outcome was the 'Stronger Super' package of reforms introduced in parliament since 2011. Measures include mandating new default Superannuation products called 'MySuper', and improving governance and back office functions to reduce costs.

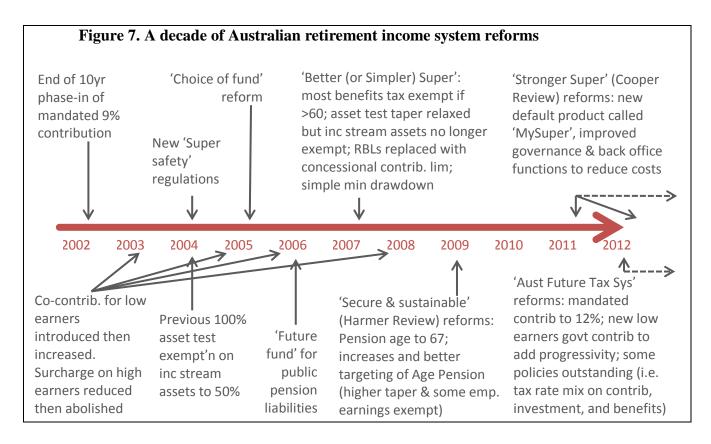
Finally, the review of Australia's Future Tax System, also referred to as the Henry Review, was published in 2010. Within its remit the review considered the appropriate tax regime for accumulation, growth, and decumulation of Superannuation. Some policies have been released on the back of the Review, including the increase to mandatory employer contributions from 9 to 12 per cent⁹ of earnings and greater tax progressivity through a government contribution for low earners on top of co-contributions, which were anyway frozen at a lower level. Other policies, such as decisions on the tax on contributions, investment, and benefits, are still outstanding. Nonetheless, the government has continued to introduce small changes to Super taxation, such as the 2012-13 budget's 30 per cent tax on concessional contributions for those with incomes above \$300,000.

The flurry of activity has meant a new measure in each year of the last decade. An up to date list of these is provided in the Appendix and a summary shown in Figure 7.

To make some sense of these reforms it is helpful to think about the rationale behind them. All well-designed pension systems share some common principles and objectives. The OECD (See Whitehouse et al, 2009, for example) analyses pension reforms around a framework of six objectives of retirement income systems. These consist of:

- 1. coverage, by both mandatory and voluntary schemes;
- 2. adequacy of retirement benefits;
- 3. *sustainability* and affordability of pensions to taxpayers and contributors;
- 4. *economic efficiency* that minimises distortions of the retirement income system on individuals' economic behaviour, such as labour supply and private savings;
- 5. *administrative efficiency*, keeping the cost of collecting contributions, paying benefits and (where necessary) managing investments as low as possible; and
- 6. *security* of benefits in the face of different risks and uncertainties. ¹⁰

⁹ The Henry review actually recommended tax reductions rather than an increase in the mandatory contribution rate. ¹⁰ Similarly, the Henry Review identified five objectives (AFTS, 2008), accepted by the government (Sherry, 2009), that the retirement income system should be: (1) broad and adequate - protects those unable to save and provides means by which individuals must or can save for retirement; (2) acceptable to individuals - considers income needs



The framework illustrates trade-offs inherent in designing pension reforms. These trade-offs can be managed well or badly. The 2009 increases to Age Pension level by over 10 per cent (from 25 to 27.7 per cent of Male Total Average Weekly Earnings)—an adequacy measure—were balanced with a steeper taper in the income means test and higher eligibility ages—to address sustainability¹¹. This was a sensible balancing of objectives. By contrast, the 2012-13 budget savings sought from Super meant that the objectives of economic and administrative efficiency were undermined through greater complexity and uncertainty.

In other cases, there are synergies between different objectives. Encouraging later retirement improves both economic efficiency and financial stability. The pension age is one of the most visible retirement system parameters which can raise labour market participation of older workers and reduce government expenditure¹², but there are many other ways in which policy has attempted to influence retirement behaviour. Examples range from more recent introduction of a new Work Bonus, which treats earned income more generously under the Age and Service Pension income tests to measures such as the Mature Age Worker Tax Offset, introduced in 2004, which provides an annual tax rebate for persons aged 55 or over who choose to remain in the workforce.

of individuals before and after retirement, is equitable and does not bias other saving decisions; (3) robust - deals appropriately with investment, inflation and longevity risk; (4) simple and approachable - allows individuals to make decisions in their best interests; and (5) sustainable - is financially sound and detracts minimally from economic growth.

economic growth.

11 These would have been the key drivers for the Treasury's estimates at the launch of IGR 2010 that the reforms to age pension announced in 2008 and 2009 budgets represent some \$85bn of structural savings by 2050 (Swan, 2010).

12 Australia is one of many countries that responded to greater longevity by increasing the pension age. However, there is an argument that pension age should be more systematically linked to longevity. (see Chomik and Whitehouse, 2010, for an international comparison and related discussion).

Our overview of reforms in the last ten years suggests that the balancing of objectives by successive governments has not always been clear minded. The intergenerational reports may have helped government to think about long-term fiscal issues and built impetus for commissioning the reviews seen in recent years. However, short-term budget and political demands can be blamed for piecemeal implementation of review recommendations and regular capricious tinkering with the retirement income regime. It is unlikely that any other OECD country has had to endure more changes to the taxation of its private pensions than Australia. This lack of stability introduces not only unnecessary complexity but also uncertainty for individuals deciding how much they ought to work and save. Indeed, IGR type modelling is seldom used (publicly) to underpin and enumerate policy measures and their long-term impact. Perhaps if it were, some of these reforms would be more consistent and considered.

4 Remaining issues

Despite a decade of reforms, the Australian retirement income system retains certain flaws. Four are highlighted here: Super decumulation, tax, age of retirement, and choice.

Decumulation

In Australia, the principle of mandatory superannuation contribution does not extend to mandating or encouraging savings to be used as an income stream. The result is a greater likelihood that people will 'double dip': prematurely exhaust their Super savings and then rely on the Age Pension. This is one reason why Treasury expects a high proportion of people to depend on the state for their income by 2050 despite considerable private pension build-up.

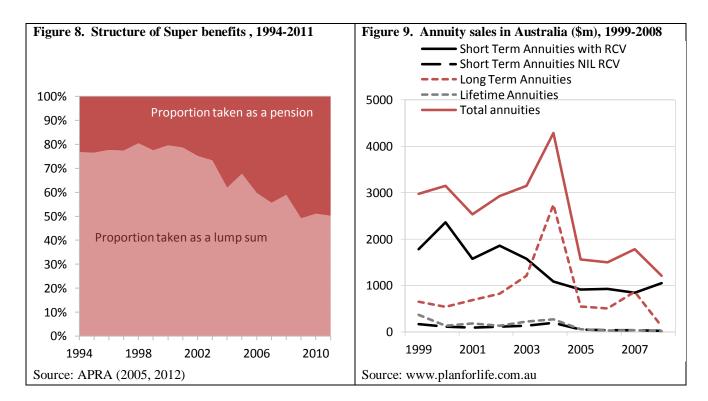
Annuities had a favourable tax treatment from 1998 until these advantages were relaxed in 2004 and removed in 2007. Whilst the trend away from lump-sums and towards pension benefits has continued (see figure 8)¹³ account-based products, which expose individuals to longevity, investment and inflation risk, dominate the retirement income product market. Without government support the fledgling annuities market has dwindled by some 70% between 2004 and 2008 (Figure 9). The supply of annuity products is limited because the private sector is unable to insure against the aggregate component of the risks involved. Yet the problem is not insurmountable. Government could intervene by providing a means to hedge the aggregate risks involved by, for example, covering the tail end of longevity risk though deferred annuities after age 85 (Sherris and Evans, 2009).

Tax

Despite a number of reforms, and some thorough reviews, successive governments have not resolved some of the inherent flaws in the taxation of Australia's retirement income regime. Tax design should incentivise savings to align with efficient self-provision levels and adequate retirement income, as well as minimising distortions in timing of retirement and asset choice. These incentives can come through tax exemptions on one or more of stages of the pension

¹³ The chart should be carefully interpreted. The increasing trend toward benefits taken as a pension may merely reflect an increasing number of past and new pensioners taking an income stream compared to a snapshot of lump-sum withdrawals in a given year.

lifecycle: pension contributions under personal income tax, investment earnings, or benefits. On the whole, it is better to tax benefits, as most countries do. This avoids administrative complexities while lower (and higher) investment outcomes are mediated by higher (and lower) taxes – government shares the risk. The timing of tax collections is also favourable – tax revenues increase when an expanding older population cohort is driving up public expenditure. But whether contributions or benefits are taxed, as long as investment earnings are exempted, economic efficiency is well served. This is because the price distortion between consumption during working life and during retirement is largely eliminated, as is the distortion between choosing owner-occupied housing versus pensions as a savings vehicle. ¹⁴



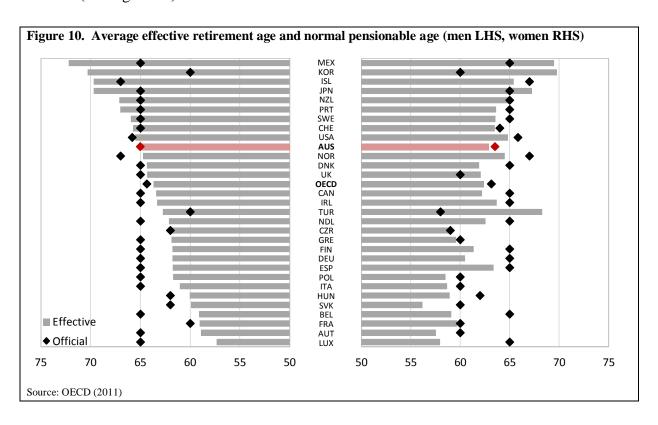
Australia's superannuation tax departs from these standard paradigms. Contributions are income tax exempt, but taxable at a flat rate, which means they are separated from income tax and its progressivity. Separating superannuation taxes from personal income tax makes tinkering with pension tax tempting for governments – changes can and have been made without their showing up in a pay packet the next week. The recent changes are a small step in the direction taken by the Henry review, which accepted contributions taxes were here to stay, but recommended the rebate be linked to the progressive personal rate schedule. It also recommended a reduced earnings tax to help the power of compound interest generate more accumulations and reduce price distortion between assets and over time. It would be better to take the proposal in its entirety, rather than to clumsily apply part of it, with little discussion and consultation, to those with incomes above \$300,000, as has been done in the 2012-13 budget.

Age of retirement

_

¹⁴ See chapter 6 in Bateman et al. (2001) for a full discussion of the economic approach to tax analysis and Bateman and Kingston (2007) for some related policy proposals.

As noted earlier, one response to the challenge of an ageing population is increasing levels of labour participation at older ages and delaying retirement. Policy has generally moved in the right direction to reduce early retirement incentives on the labour supply side as well as introducing various anti-discrimination measures on the demand side. Still, comparing to other countries Australia's mature age participation and average effective retirement ages have scope to increase further. Data on effective retirement can emphasise this further. The OECD (2011) shows that the average effective age of labour-market exit in Australia in 2004-09 was 64.8 for men and 62.9 for women. This was below the Age Pension age and lower than in 9 other countries (see Figure 10).



The incentive structure of the tax and benefit system as well as workplace barriers may require some attention. For example, the disincentives to continue to work are strong for middle-income Australians facing the means tests of the Age Pension (Kudrna and Woodland, 2009). The inconsistency between the preservation age (the age at which superannuation can be drawn) and Age pension age introduces both a signal for people to retire and an incentive that may pull people out of the labour market and lead them to draw down tax-free Super benefits before then relying on the Age Pension. ¹⁵ In this context, the recently announced review of the legal barriers to mature age employment by the Australian Law Reform Commission is welcomed.

Choice

Government legislation in Australia has progressively introduced more choice into superannuation, most notably the 'Choice of Fund' measures in 2005. This was done with the hope that consumer-driven competition would lower fund costs and improve outcomes. Nonetheless switching rates between funds have declined from 5 per cent in 2005 to 2 per cent in

¹⁵ See Spoehr et al. (2009) for a summary of policy issues and possible responses to extending working lives.

2009 and fees in superannuation have not reduced in line with what could have been expected given economies of scale that are present or available (Cooper, 2010).

Of course shifting choice to individual members is also passing on the responsibility for investment risk. However, research shows that few have the capacity to take on such a responsibility. For example, an ABS (2006) survey found that only 37 per cent of Australians have the minimum literacy (including numeracy) required "to meet the complex demands of everyday life and work in the emerging knowledge-based economy".

Reforms following the Cooper Review address this by mandating a default option for those choosing not to choose. The review suggested that there are some 40 per cent who do exercise choice in the system but aside from greater transparency it did not look in detail at how the choice architecture can support those who depart from the default. An important element of this is how 'framing' can nudge those making an investment decision. The superannuation industry uses different formats to explain investment risk but thus far regulators are only beginning to consider standards about how risk ought to be communicated (Bateman et al., 2011).

5 Conclusion

This paper has provided an overview of relevant drivers behind long term fiscal projections, including changes to the population structure, mature age participation, and superannuation wealth. While commendable on many counts, we find that the IGRs may still suffer from some assumption myopia (e.g. migration, participation) and exhibit a lack of clarity about certain assumptions and methodology (e.g. Super accumulation and decumulation).

Also, the IGR methodology is seldom used to demonstrate specific policy impacts. This is a shame, because an important reason for predicting the future is in understanding how it can be shaped. It could answer questions about what changes will keep budgets balanced despite the demographic shift. One reading could be that if the IGR and the projected fiscal balances are tools to evaluate the fiscal sustainability of current policy then, by their own measure, successive Governments have failed to implement policies that will keep budgets sustainable.

Whether in direct response to the IGR or not, successive governments have implemented numerous reforms over the last decade, addressing the various objectives of a well designed retirement income system to different degrees. At times the reforms were piecemeal and lacking clear rationale and as a consequence some issues remain (including those relating to Super decumulation, tax, age of retirement, and choice).

The tenth birthday of the Intergenerational Report and twentieth birthday of the Superannuation Guarantee are a cause for celebration, but also a reminder that much remains to be done to shape policy structures for an older Australia.

References

Australian Bureau of Statistics (2006) 'Microdata: Adult Literacy and Life Skills Survey, Basic CURF', Commonwealth of Australia, Cat. 4228.0.30.001

- Australian Bureau of Statistics (2011) 'Australian Demographic Statistics, Sep 2011', Commonwealth of Australia, Cat. 4228.0.30.001
- Australian Bureau of Statistics (2012) 'Labour Force, Australia, Detailed Electronic Delivery', Commonwealth of Australia, 2006 Cat. 6291.0.55.001
- Australian Bureau of Statistics (2012) 'Migration, Australia, 2009-10', Commonwealth of Australia, Cat. 3412.0
- Australian Bureau of Statistics (2012) Australian National Accounts: National Income, Expenditure and Product, Dec 2011, Commonwealth of Australia, Cat. 5206.0
- Australian Prudential Regulation Authority (2007), A Recent History of superannuation in Australia, APRA Insight, Issue 2, 2007, http://www.apra.gov.au/Insight/Documents/History-of-superannuation.pdf
- Australian Prudential Regulation Authority (2005) 'Statistics: Superannuation Trends, September 2004', January 2005, http://www.apra.gov.au/Super/Publications/Documents/Superannuation-Trends-PDF.pdf
- Australian Prudential Regulation Authority (2012) 'Statistics: Annual Superannuation Bulletin, June 2011', February 2012, http://apra.gov.au/Super/Publications/Documents/June%202011%20Annual%20Superannuation%20Bulletin.pdf
- Bateman, H., C. Eckert, J. Geweke, J. Louviere, S. Satchell and S. Thorp (2011) 'Financial competence, risk presentation and retirement portfolio preferences', ARC Centre of Excellence in Population Ageing Research Working Paper 2011/20, http://cepar.edu.au.tmp.anchor.net.au/media/62139/financial_competence_risk_presentation_nand_retirement_portfolio_preferences_september_2011.pdf
- Bateman, H., and G. Kingston (2007) 'Superannuation and personal income tax reform', CPS Discussion Paper,

 http://www.asb.unsw.edu.au/research/cps/Documents/H.%20Bateman%20and%20G.%2
 http://www.asb.unsw.edu.au
- Bateman, H., Geoffrey Kingston, and John Piggott (2001) 'Forced Saving: Mandating Private Retirement Incomes', Cambridge University Press
- Chomik, R. and E. R. Whitehouse (2010), 'Trends in Pension Eligibility Ages and Life Expectancy, 1950-2050',OECD Social, Employment and Migration Working Papers, No. 105, OECD Publishing. http://dx.doi.org/10.1787/5km68fzhs2q4-en
- Cooper (2010) 'Super system review: Final report', Commonwealth of Australia http://www.supersystemreview.gov.au/

- Dang, T. T., P. Antolín and H. Oxley (2001), "Fiscal Implications of Ageing: Projections of Age-Related Spending", OECD Economics Department Working Papers, No. 305, OECD Publishing http://dx.doi.org/10.1787/503643006287
- Harmer J. 2009, Pension Review Report. Department of Families, Housing, Community Services and Indigenous Affairs, Commonwealth of Australia, 27 February, https://www.facs.gov.au/about/publicationsarticles/corp/BudgetPAES/budget09_10/pension/Documents/Pension_Review_Report/PensionReviewReport.pdf
- Kennedy, S., and A. Da Costa, (2006) 'Older Men Bounce Back: The Re-emergence of Older Male Workers'. Economic Round-up, Spring 2006: 31-43, http://search.informit.com.au/documentSummary;dn=320499459635329;res=IELBUS
- Kudrna, G. And A. Woodland (2009), 'An inter-temporal general equilibrium analysis of the Australian age pension means test', School of Economics, Australian School of Business, The University of New South Wales
- McDonald, P. and R. Kippen (1999), 'Ageing: the social and demographic dimensions', in Policy implications of the ageing of Australia's population, Productivity Commission and Melbourne Institute of Applied Economic and Social Research, Canberra, pp.47—70. http://adsri.anu.edu.au/sites/default/files/publications/pop-futures/02.pdf
- McDonald, P. and Utomo, A. (2011) 'Employment at Older Ages in Australia: Determinants and Trends', CEPAR working papers

 http://cepar.edu.au.tmp.anchor.net.au/media/49424/mcdonald_employment_at_older_ages_in_australia_ncverreport.pdf
- Nielson L. 2010, *Superannuation 2010-2011*, Research Paper, No. 3, Parliamentary Library, Parliament of Australia, 9 September, www.aph.gov.au/binaries/library/pubs/rp/2010-11/11rp03.pdf
- Nielson L. and Harris B. 2010, Chronology of superannuation and retirement income in Australia, 2010, Background Note, Parliamentary Library, Parliament of Australia, 1 June, www.aph.gov.au/binaries/library/pubs/bn/eco/chron_superannuation.pdf
- Nielson, L. (2005) 'Superannuation, social security and retirement income' Parliamentary Library, Parliament of Australia, http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/WI3I6/upload_binary/wi3i66 http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/WI3I6/upload_binary/wi3i66 https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/WI3I6/upload_binary/wi3i66 https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/WI3I6/upload_binary/wi3i66 https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/WI3I6/upload_binary/wi3i66 https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/WI3I6/upload_binary/wi3i66 https://parliamentary <a hre
- OECD (2009), 'Pensions at a Glance 2009: Retirement-income Systems in OECD Countries'
- OECD (2011), 'Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries, OECD, Paris

- Sherry, N., (2009) Speech by Minister for Superannuation and Corporate Law to SPAA National Conference, 13 March 2009

 http://www.treasurer.gov.au/DisplayDocs.aspx?doc=speeches/2009/008.htm%pageID=005&min=njs&Year=&DocType="http://www.treasurer.gov.au/DisplayDocs.aspx">http://www.treasurer.gov.au/DisplayDocs.aspx
- Spoehr, J., K. Barnett, and E. Parnis (2009), 'Experience Works: The Mature Age Employment Challenge', The Australian Institute for Social Research http://www.productiveageing.com.au/userfiles/file/Experience%20works-full%20reportFINAL_web.pdf
- Swan, W., (2010) 'Australia to 2050: Future Challenges' Speech at launch of the 2010
 Intergenerational Report, National Press Club, Canberra, 1 February 2010
 <a href="http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=speeches/2010/001.htm&pageID=005&min=wms&Year=&DocType="http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=speeches/2010/001.htm&pageID=005&min=wms&Year=&DocType="http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=speeches/2010/001.htm&pageID=005&min=wms&Year=&DocType="http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=speeches/2010/001.htm
- Treasury (2002) 'Intergenerational Report 2002-03', Commonwealth of Australia http://www.budget.gov.au/2002-03/bp5/download/BP5 Combined PDF.zip
- Treasury (2007) 'Intergenerational Report 2007', Commonwealth of Australia http://archive.treasury.gov.au/documents/1239/PDF/IGR_2007_final_report.pdf
- Treasury (2010) 'Australia to 2050: future challenges', Commonwealth of Australia http://archive.treasury.gov.au/igr/igr2010/report/pdf/IGR_2010.pdf
- Treasury (2011), 'Budget Paper No. 1: Budget Strategy and Outlook 2011-12', http://www.budget.gov.au/2011-12/content/bp1/download/bp1.pdf
- Treasury: Rothman, G., and Tellis, D., (2008) 'Projecting the distributions of superannuation flows and assets', Retirement & Intergenerational Modelling & Analysis Unit, Department of the Treasury (http://rim.treasury.gov.au/content/pdf/CP08_1.pdf)
- United Nations Population Division (2010), 'World Population Prospects: The 2010 Revision' http://esa.un.org/unpd/wpp/
- Warren D. 2008, 'Australia's Retirement Income System: Historical Development and Effects of Recent Reforms', Melbourne Institute Working Paper Series, Working Paper No. 23/08, www.melbourneinstitute.com/downloads/working_paper_series/wp2008n23.pdf
- Whitehouse, E., A. D'Addio, R. Chomik, and A. Reilly, (2009) 'Two Decades of Pension Reform: What has been Achieved and What Remains to be Done?', The Geneva Papers on Risk and Insurance Issues and Practice, Palgrave Macmillan, vol. 34(4), pages 515-535, http://ideas.repec.org/a/pal/gpprii/v34y2009i4p515-535.html

			Sys	tem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	V			
			OE	CD s	stanc	lard			gov	stralia ernm ounc	nent			Age	e pen	sion				nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2002	Required Superannuation contribution percentage reaches the end of the ten year phase-in period at 9%.	ATO guide		·	_			_				-	_				·	,				
2002	Increased threshold for tax deductible Super contributions for self employed.																					
2002	Maximum age for superannuation contributions increased from 70 to 75 (for people working at least 10 hours a week).		X			X			X									X				
2002	Temporary residents permanently departing Australia may withdraw their accumulated superannuation benefits before their preservation age. This does not apply to New Zealand residents.	SIS Regs 6.20A, 6.20B & 6.24A					X			X		X							X			
2002	Superannuation assets able to be divided between the parties in a marriage breakdown	Part VIIIB Family Law Act 1975					X			X									X			

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	ents	viev	N			
			OE	ECD	stano	dard			gov	strali vernr nounc	nent			Age	e per	nsion		-		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2003	Superannuation surcharge reduced from 15% to 12.5%.			X			•			?					•		,	X				
2003	Government co-contribution for low income earners effect in respect of personal (or undeducted) contributions. Introduced to replace previous tax offset for personal superannuation contributions for low income earners.	Superannuation (Government co-contribution for Low Income Earners) Act 2003, no. 110		X					X									X				
2004	Government co-contribution enhanced: a higher maximum benefit of \$1,500 (from \$1,000) and an above-indexation increase to the higher income threshold, covering individuals further up the income distribution (from \$40k to \$58k)		X	X					X	X								X				
2004	Superannuation Safety Amendment Act 2004 enacted changes to regulation of superannuation. All superannuation	Superannuation Safety Amendment Act						X			X									X		

			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	W			
			OE	ECD	stano	lard			gov	strali vernr nound	nent			Age	e per	sion		-	oerar buara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	trustees of large eligible funds have to be licensed from 1 July 2004. Trustees of SMSFs do not have to be licensed. This is a follow-on from a 2001 review 'Options for Improving the Safety of Superannuation'	2004, no. 53			3,		7	31		7			9 1				7	7				
2004	Superannuation regulations changed to allow the portability of money between different superannuation accounts.	SIS Regs 6.28 and 6.29					X					X								X		
2004	Superannuation surcharge reduced from 12.5% to 10%.			X						?								X				
2004	Tax-free payment of superannuation benefits can be made to the surviving partner on an interdependent relationship. An interdependent relationship can encompass same-sex couples, or a relationship where one	SIS Reg 10(1) and 10A	X						X										X			

	LINDIA																					
			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	nents	viev	N			
			OE	CD s	stanc	lard			gov	strali vernn	nent			Age	e per	ision	l	-	perar Suara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	person is financially dependent on another person. For example, were a son or daughter is financially supporting a parent.																					
2004	Work test governing contributions made under age 65 ceased to operate. Work test remains for contributions made above age 65.					X			X									X				
2004	Asset test restricted, so only 50% of assets relating to a complying income stream are exempt from test. This was to keep wealthier individuals from accessing Age Pension, while still maintaining an incentive to purchase income stream (since 1998, assets in annuities were 100% exempt from asset test). At same time broadened definition of complying income stream.																					

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	ents	viev	W			
			OE	CD	stano	dard			gov	stral verni noun	nent			Ago	e per	nsion		_	perar Juara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2005	Choice of Fund Policy: Employee choice of fund passed Senate in June, to come into operation from 1 July 2005.	Superannuation Legislation Amendment (Choice of Superannuation Funds) Act 2004, no. 102					X				X	•	94		_		,				X	
2005	Implementation of accounting standards requiring that an asset or liability must be recognised on the balance sheet and that it will reflect the funded status of the DB plan. While more transparent, this may have had an impact on supply of employer provided DB schemes.	BIS paper						X			X									X		
2005	Budget announcement of abolition of Superannuation Surcharge. Changes take effect from 1 July 2005	Treasurer's Budget speech 2005		X						?								X				

			Sys	tem	obje	ctive	es vi	ew						Sys	tem	elem	ents	viev	N			
			OE	CD	stanc	lard			go	stral vernr noun	nent			Age	e per	nsion		_		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2005	Transition to Retirement Pensions available. A member may commence to receive a transition to retirement pension without having to leave the workforce or retire. Choice of Superannuation Fund takes effect.	SIS Reg 6.01.		7	3,	X		31		X		31	51				7	7	X			X
2006	Future fund created to accumulate financial assets and invest them to address the Government's unfunded superannuation liability.	Future fund			X								X									
2006	Contributions Splitting took effect. A Member's SG and other contributions may be split with their spouse.	SIS Regs 6.40 – 6.46	X						X									X				
2007	Super benefits paid from a taxed source either a lump sum or pension will be tax free to people aged 60 and over. Abolished superannuation withdrawal	Simplified Superannuation				X	X			X		X							X			

			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	N			
			ОЕ	CD	stano	lard			gov	strali verni nound	nent			Ago	e per	nsion		-	beran buara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	tax as well as tax on earnings from Super accounts in decumulation.			7	91		7	91				9,1	91				7					
2007	Drawdown rules simplified, with maximum abolished and age-related minimum applied.	Simplified Superannuation					X			X												
2007	Abolished compulsory payment of benefits to members over the age of 65 who do not meet the work test and to those over 75.	Simplified Superannuation					X															
2007	Abolished reasonable benefit limits and introduced limits on contributions receiving concessional tax.	Simplified Superannuation reforms passed into law		?	X		X			X								X				
2007	Transferring between funds made easier.	Simplified Superannuation reforms passed into law					X					X								X	X	

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	ents	viev	V			
			OE	ECD	stano	dard			gov	strali vernr	nent			Age	e per	sion		-		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2007	Full tax deduction for contributions for employees and self-employed up to age 75.	Simplified Superannuation reforms passed into law	X						X				-		-		·	X				
2007	Streamline superannuation fund reporting requirements and improve regulation of self-managed superannuation funds through new administrative penalties for late returns and false statements.	Simplified Superannuation reforms passed into law					X				X											
2007	Co-contribution to include self-employed.	Simplified Superannuation reforms passed into law	X	X					X	X								X				
2007	Halve the pension assets-test taper so recipient loses \$1.50 a fortnight (rather than \$3) for every \$1,000 of assets	Simplified Superannuation reforms passed		X					X	X					X	X						

	7.1.1	LINDIA		Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	V			
				OE	CD	stano	lard			gov	strali zernn	nent			Age	e per	sion		-		ınuat .ntee		
Yea	r	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
		above threshold. 50 per cent assets-test exemption removed for 'complying' income streams (to ensure wealthier individuals don't access age pension).	into <u>law</u>			_		·			·			_									
200	7	Tax-free benefits able to be paid to those with a terminal illness.	Press Release: 'Australians with a terminal illness now able to draw their Super tax free'. Schedule 2 Tax Laws Amendment (2008 Measures No. 1) Bill 2008 also s303-10 ITAA 97.		X					X	X									X			

	LINDIX	•																				
			Sys	stem	obje	ective	es vi	ew						Sys	tem	elem	ents	viev	V			
			OE	CD	stanc	lard			gov	strali vernn	nent			Age	e pen	sion		_		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2007	Assets test threshold raised from \$531,000 to \$839,500 (couple); from \$343,750 to \$529,250 (single); estimated 300,000+ extra people eligible for Age Pension.		X						X							X						
2007	Enhanced employee's ability to recover unpaid superannuation amounts from employers that have ceased operating.	Sub paragraph 556(1)(e) Corporations Act 2001.						X			X									X		
2008	ASIC begins to provides advice on long-term superannuation returns.	ASIC Website – Long Term Performance figures for Typical Super Fund		X			X			X		X									X	

			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	N			
			OE	ECD :	stanc	lard			gov	strali vernn nounc	nent			Age	e per	nsion		_		nuat		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
		Investment Options								·	•	_					·	,				
2008	Legislation providing further relief for employers who make a late superannuation guarantee contribution receives Royal Assent.	Press Release Tax Laws Amendment (2008 Measures No.2) Bill 2008	X						X									X				
2008	Review of Australian government civilian and military pension schemes indexation (Mathews Review) completed and in 2009 government supported the recommendation to maintain indexation to CPI in the absence of a more appropriate index.	Pension Indexation Review																				
2008	Act requiring temporary residents' superannuation benefits to be paid to the	Press Release			X								X							X		

			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	N			
			OE	CD	stano	lard			gov	strali vernr nounc	nent			Ago	e per	nsion		_		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	ATO, if not claimed within 6 months of departing Australia, commences operation.	Temporary Residents' Superannuation Legislation Amendment Act 2008			3,		7	51					5 1					7				
2008	Royal Assent to the Same-Sex Relationships (Equal Treatment in Commonwealth Laws— Superannuation) Bill 2008 (No. 107 of 2008) passes through Parliament.			X					X	X									X			
2009	Act raising tax rates of Temporary Residents' superannuation benefits when paid takes effect.	Press Release Superannuation (Departing Australia Superannuation																				

,			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	v			
			OE	CD s	stanc	lard			gov	strali ernn ounc	nent			Age	e per	sion		_	eran uara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
		Payments Tax) Amendment Act 2008																				
2009	Rate at which government superannuation co-contribution is paid is reduced temporarily between 1 July 2009 and 30 June 2014. Rate returns to \$1.50 for every \$1 contribution (subject to income test threshold) on 1 July 2014.	Schedule 2 Tax Laws Amendment (2009 Budget Measures No. 1) Act 2009			X								X					X				
2009	Limit on concessional contributions reduced from \$50,000 p.a. to \$25,000 p.a. for 2009–10 and later years. This limit is indexed to changes in AWOTE (if those changes are sufficiently large enough). For those 50 years old or over cap reduced from \$100,000 to \$50,000	ATO note			X								X					X				

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	ents	viev	V			
			OE	CD	stano	dard			gov	stralia vernm	nent			Age	e pen	sion		-		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2009	Income for government superannuation co-contribution purposes now includes a person's reportable employer superannuation contributions. That is the amount that the employer puts into superannuation on the employee's behalf that exceeds the superannuation guarantee requirements.	Item 88, Part 3, Schedule 3 Tax Laws Amendment (2009 Measures No 1) Act 2009		X					X									X				
2009	Expanded definition of 'ordinary time earnings' for superannuation guarantee purposes takes effect. 'Ordinary time earnings now include over award payments, shift loadings, allowances and piece rates paid in relation to a person's ordinary hours of work. It does not include overtime payments.	ATO SGR 2009/2. Later regulation exempted parenting payments from definition of 'ordinary time earnings' for	X						X									X				

			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	nents	viev	V			
			OE	CD	stano	lard			gov	strali vernn	nent			Ago	e per	nsion	Į	-	eran uara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
		superannuation					,			,					•		,					
	Superannuation funds now able to offer	purposes.																				
2009	limited financial advice to their members.	Press Release						X				X									X	ſ
2009	Rate of the age pension was raised by \$30 per week for single people and the 25% of MTAWE adequacy benchmark was adjusted to 27.7% for single people and 41.76% for couples.	An Increase in the Pension Rate; Pensioners overseas;		X					X	X				X								
2009	Existing pension supplements were consolidated into one pension supplement and increased by \$2.49 per week for single people and \$10.14 per week for couples.	The Pension Supplement		X					X	X				X								
2009	New prices measure, Pensioner and Beneficiary Living Cost Index (PBLCI),	Pension Indexation		X					X	X				X								

			Sys	tem	obje	ctive	es vi	ew						Sys	stem	elem	ents	viev	N			
			ОЕ	CD	stanc	lard			gov	strali vernr nounc	nent			Ag	e per	nsion	ļ	_		nuat		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	introduced. Age benefits indexed with greater of PBLCI and CPI.				91		7	<u> </u>		7		31	<u> </u>									
2009	Pension income test taper increased from 40% to 50% (with transitional protection)	New Transitional Rate			X								X		X							
2009	Pension Bonus Scheme abolished in 2009 and work bonus introduced to start in 2011	Pension and work bonus			?								?									?
	Recipients of Pensions Supplement can opt to receive part of this on a quarterly rather than fortnightly basis.	Quarterly Pension Supplement				?						X									?	
2010	A free, optional superannuation clearing house service is set up for small businesses with less than 20 employees for small businesses when meeting their Super obligations.	Press release Act amendment					X					X								X	X	
2010	Formal inclusion of specific	Paragraph					X					X								X	X	

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	ents	viev	N			
			OE	CD	stanc	lard			gov	strali vernr nounc	nent			Age	e per	nsion		-		nuat		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	superannuation funds (usually industry funds) in industrial awards as part of Fair Work Australia legislation. Does not restrict employee's right to superannuation fund of their choice but aims to provide an appropriate default option.	139(1)(i) of the Fair Work Act 2009 Nature of default funds to be reviewed by Productivity Commission by end of 2012.																				
2010	Flexibility introduced to allow advance payments of their future pension entitlement as a lump sum, allowing capacity to budget and meet large or unforeseen costs.	Changes to Pension Advance Payments				X				X												
2010	Changes to co-contributions scheme. Income thresholds applying for 2009— 10 to continue for a further two years	Budget Paper No 2 2010–2011			X								X					X				

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	ents	viev	N			
			OE	CD :	stanc	lard			gov	strali vernr nounc	nent			Age	e per	nsion		_		nuat		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	(limiting eligibility) and co-contribution rate to be set permanently at \$1 for every \$1 of personal contributions made by those receiving an adjusted annual income below \$31 920 p.a.	Budget changes note						- A					5.4				,					
2011	Work bonus, announced in 2009, introduced in 2011. Exempts half of any income from employment up to \$500 per fortnight from consideration under the income test (replaces pension bonus, see above). Eligible pensioners can earn up to \$250 a fortnight without it being assessed in income test. Unused amount accumulated (e.g. max of \$6,500 pa across years).	Work Bonus																				
2012	New government contribution (Low Income Superannuation Contribution –	Government contribution fact		X	X				X	X			X					X				

<u>APPENDIX</u>

7.11.			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	v			
			OE	CD	stanc	lard			gov	strali vernn	nent			Age	e per	sion		_		nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	LISC) of up to \$500 annually into Super account of individuals on adjusted taxable incomes of up to \$37,000. Effectively refunds contributions tax otherwise payable on any SG payments made for these individuals. Is in addition to co-contribution scheme.	Sheet Tax plan for our future reforms																				
2012	Announcement that individuals with less than \$500k in Super benefits may make \$50k in annual concessional contributions, without being subject to excess contributions tax (replaces transitional arrangements that allowed \$50k limit on concessional contributions for those aged 50 and over, which was to end June 2012). Limit ability of a taxpayer over 50 to	2010-11 Budget changes note Tax plan for our future reforms		X	X				X	X			X					X				

			Sys	tem	obje	ective	es vi	ew						Sys	tem	elem	ents	viev	N			
			OE	CD s	stanc	lard			gov	strali vernn	nent			Age	e per	nsion				nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	make more than \$25k concessional contributions p.a., if already have above \$500k in super.			·								_	_		-		·	·				
2012	A range of measures relating to self managed superannuation funds to improve integrity, increase community confidence, more efficient transactions, including rollovers from superannuation funds regulated by APRA.	Stronger Super reforms					X	X				X								X	X	
2012	Measures to strengthen integrity of superannuation system aims to improve trustee and fund decisions, efficiency and effectiveness, and so help grow member superannuation entitlements.	Stronger Super reforms					X	X				X								X	X	

			Sys	stem	obje	ctive	es vie	ew						Sys	tem	elem	ents	viev	N			
			OE	CD :	stano	lard			gov	strali vernn	nent			Age	e pen	sion		-		nuat .ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
2012	Financial advice reforms including ban on commissions relating to Super products, statutory fiduciary duties subject to a 'reasonable steps' qualification, transparency and flexibility of payments for advice, availability of low-cost 'simple advice' to improve access to and affordability of financial advice. Strengthening ASIC powers.	The Future of Financial Advice package					X	X			X	X									X	
2013	Concessional cap for those age 50 and over halved from \$50,000 to \$25,000, including for those with Super funds less than \$500,000. Effective for financial years 2013/14 and 2013/14	Budget 2012/13			X								X					X				

			Sys	stem	obje	ective	es vie	ew						Sys	tem	elem	nents	viev	V			
			OE	CD	stano	dard			gov	stralia vernn ounc	nent			Age	e pen	sion	l	-	eran uara			
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	before reverting to previous policy.						,					_					·	Ì				
2013	The indexation of concessional contribution caps suspended for the year and deferred to 2014/15	Statements in mid-term economic outlook (see ATO note)			X								X					X				
2013	Announced increase of SG age limit from 70 to 75, which was further amended so that there will be no longer an age limit, starting in 2013. Increasing SG eligibility to workers regardless of age.	Age limit fact sheet Tax plan for our future reforms Amendment press release	X	X		X			X	X								X				X
2013-20	Announced changes that, if agreed to by parliament, will gradually increase Superannuation Guarantee rate from 9% to 12% between 2013-14 and 2019-20. From July 2013 funds will offer what	ATO rates Tax plan for our future reforms Stronger Super		X	X		X		X	X		X						X			X	
2013	From July 2013 funds will offer what	Stronger Super					X					X									X	ļ

	LINDIX		Sys	tem	obje	ctive	es vie	ew						Sys	tem	elem	nents	viev	v			
			OE	CD :	stanc	lard			gov	strali vernn	nent			Age	e per	nsion	l	_		inuat intee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
	government hopes will be a simple, low cost, comparable default superannuation product called MySuper	reforms		·	_							-	_		-		·					
2012-2015	Government commenced implementation of SuperStream, a package of measures designed to enhance the 'back office' of superannuation. Measures aim to improve system productivity and usability.	Stronger Super reforms					X					X								X	X	
2017	The qualifying age for the age pension will increase by six months every two years until it reaches 67 years of age on 1 January 2024	Social Security And Other Legislation Amendment (Pension Reform and Other 2009			X	X				X			X				X					X

			Sys	tem	obje	ctive	s vie	ew						Sys	tem	elem	nents	viev	V			
			OE	CD s	stand	lard			gov	stralia ernn ounc	nent			Age	e per	sion	l			nuat ntee		
Year	Measure	Ref	Coverage	Adequacy	Sustainability	Ec efficiency	Admin efficiency	Security	Broad & adequate	Acceptable to indivs.	Robust	Simple & approachable	Sustainable	Benefit level	Taper	Eligibility	Age	Accumulation	Decumulation	Regulation	Choice	Retirement behaviour
		Budget			_												í					
		Measures) Act 2009																				

Source: Nielson (2005), Nielson (2010), Nielson and Harris (2010), APRA (2007), Warren (2008), and some other sources as referred to in 'Ref' column. Note: Columns are based on common objectives and elements of the retirement income system. An 'X', applied by the authors, marks the possible motivations of and direct elements affected by each measure. '?' indicates that measure does not neatly fit into specific objective.