



Retirement income policies in Australia and New Zealand

Facing the fiscal challenge from an ageing population

NZIER final report to Chartered Accountants Australia and New Zealand March 2018

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NZIER was established in 1958.

Authorship

This paper was prepared at NZIER by Derek Gill, Mike Hensen and Peter Wilson.

It was quality approved by John Ballingall.

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L13 Willeston House, 22-28 Willeston St | PO Box 3479, Wellington 6140 Tel +64 4 472 1880 | econ@nzier.org.nz

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Key points

Facing the fiscal challenge from an ageing population

Chartered Accountants Australia and New Zealand (CAANZ) commissioned NZIER to investigate attitudes to retirement income policies in New Zealand and Australia in light of the fiscal consequences of population ageing and both countries' fraught history of reforms in this space.

Both countries face an ageing population increasing the cost of their Pillar 1 superannuation/pension schemes. While the main focus of the work was looking forward, we briefly surveyed the two countries' experience with pension reform to understand the starting point. We then explored the fiscal outlook in both jurisdictions.

We worked with ResearchNow to produce the first survey that compares New Zealanders' and Australians' attitudes to retirement income and their preferences on how retirement incomes policies should be reformed.

Both countries have a long history of publicly-funded pensions: the only constant is change

Public pension systems funded from general taxation have been in place in both countries since the beginning of the 19th century. Public pension spending is relatively low by OECD standards but so are poverty rates amongst the aged.

Where the two countries' regimes differ is in the second-tier occupational superannuation: Australia has compulsory private superannuation, New Zealand a voluntary scheme with automatic enrolment and a limited opt-out opportunity. Both private schemes have been the target of repeated reforms.

Despite similar population forecasts the fiscal outlook is quite different

Both New Zealand and Australia face similar ageing populations but the future settings for retirement policy, and their fiscal outlooks, are different.

In New Zealand, the National Government under John Key and now the Labour Government under Jacinda Ardern have pledged to retain the age of eligibility for New Zealand Super at age 65. In Australia, an increase to 67 is underway with a planned further increase to 70.

As a result, the medium term fiscal impact of population ageing is quite different, with the pension cost to GDP ratio in New Zealand projected to rise by 60% in 40 years. In Australia by contrast, the corresponding increase is around 25% under current policies and a small decline if the announced entitlement age increase to 70 is enacted.

New Zealand and Australia have opted to take different approaches to the fiscal challenge

Across the OECD around half the governments have undertaken major pension reform. In Australia, it is widely accepted that older citizens suffer from reform fatigue and are sick of constant change. There are strongly held views about increases in the minimum pension age, protection of the family home from asset testing, and that the Age Pension is an entitlement.

In New Zealand, with the notable exception of the short-lived changes announced by the Bill English administration, there have been no significant changes announced to superannuation policy since the introduction of KiwiSaver and moving to part-funding of the NZ Super Fund in the 2000s.

High awareness of New Zealand Super and the Australian Age Pension but less of the detailed operation

Our survey shows around half of Australians and New Zealanders are 'thinking somewhat' about retirement planning and awareness of the Age Pension and New Zealand Super is high (92% in Australia, 87% in New Zealand). For example, in both countries, four in five people know that almost anyone aged over 65 can receive the Age Pension/New Zealand Super payments.

However, respondents are less familiar with the level of payment, how the schemes were funded and in the case of Kiwis whether income and asset testing is applied.

Remarkable similarities in New Zealanders' and Australians' attitudes to retirement incomes policies

Across a range of questions there were remarkable similarities between New Zealanders' and Australians' attitudes. This was quite striking given how the two regimes have diverged over time with very different approaches to Pillar 2 and income and asset testing in Pillar 1. For example, at least two-thirds of Australians and almost three-quarters of New Zealanders are aware that New Zealand Super/Age Pension will cost more in the future.

Young people less likely to believe that the Age Pension/New Zealand Super will exist in its current form when they retire

Unsurprisingly younger people's responses differed from those of currently retired regarding the continuity of the scheme. Thirty-three percent of younger Aussie survey respondents and 39% of Kiwis said that the scheme will exist in its current form compared to 77% and 89%, respectively for the over 65s. Nonetheless there is still a significant minority of younger people who believe the scheme will continue.

Overall New Zealanders were more confident than Australians about policy stability, which presumably reflects the frequency of changes to the policy regime in Australia compared to New Zealand.

We will need more than public education to change the debate

The survey split respondents into a group that received supplementary information before answering the questions on their policy preferences and those that didn't. Yet there was no real difference between the answers of the two groups.

The lack of daylight between information and non-information responses suggests public education on population ageing is unlikely on its own to move the debate forward.

Little consensus on preferred policy options to manage rising costs...

Faced with rising costs both New Zealanders and Australians were reluctant to contemplate major changes to the Pillar 1 scheme and were divided about tax increases.

The strongest opposition is to reductions in the amount paid across the board. There is mixed support for increasing the age of entitlement, amending how adjustments occur (by linking to prices rather than wages) or pre-funding through increased current taxes.

... although means testing is the option with the highest support

The least unpopular option with New Zealanders and Australians was the use of income and asset testing to determine how much government should pay to NZ super/Age pension recipients. However, respondents were strongly against the family home being used in means testing.

The depth of support for means testing is doubtful in New Zealand at least, as the Treasury study (Au et al (2015)), which used a different approach, found limited support for it.

The intergenerational compact is intact

We found little evidence of a distinct generational divide in the views on the policy options for dealing with the increased costs of New Zealand Super and the Age Pension. This is consistent with a range of studies which found weak effects or no evidence of self-interested responses. Among the young there was strong support for the continuation of the current policy settings even though the aged benefitted at their expense. For example, support for increasing the age or lowering the amount paid was lowest amongst 25-54 year olds and highest amongst those 65+.

Age did have some influence on policy preferences however. For example, amongst Kiwis support for continuing New Zealand Super at a universal amount (with no income or assets testing) increased very gradually with age: 25-34 years (39%), 45-55 (45%), 55-64 (64%), over 65 (78%).

Our survey indicates that politicians are between a rock and a hard place: the public resists changes despite knowing it will cost significantly more in the future

Politicians face the problem that there is no strong support for any one option for reform. The public are resistant to changes and divided over the prospect of an increase in taxes to fund the inevitable increase in costs. The public's dominant preference is that the status quo persists and that the government pension should be provided universally, without a means-test in New Zealand and with continued means testing in Australia. However, opposition to increasing the age and changing the basis of indexation reduced significantly if the policy changes are phased in over 10-20 years.

Strong political and technocratic leadership crucial for pension reform

Key supporting conditions likely to sustain pension reform include an electoral mandate, government leadership and cohesion, and persistence. These need to be accompanied by research and analysis and effective communication. Both New

Zealand and Australian governments have demonstrated in the past the ability to drive through successful reform.

We trust this study contributes supporting the momentum by providing the research and analysis about what Australians and New Zealanders believe and want from the public pension system.

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1. Our approach

1.1. Attitudes to retirement income policies

Chartered Accountants Australia and New Zealand (CAANZ), as part of their *Future Inc* series, commissioned research from NZIER that explored public attitudes to the future of retirement income policies in Australasia. New Zealand and Australia are different jurisdictions but with the same 'retiree funding' problem.

The countries are similar in that they both have a general tax funded Pillar 1 superannuation scheme. Both Pillar 1 schemes are reasonably generous (by OECD standards at least). However, the overall cost of the scheme in New Zealand is 1% of GDP higher after allowing for tax concessions etc.

This project compares the attitudes to retirement income policies in the two jurisdictions and examines why it is difficult to get durable changes in retirement policy onto the agenda in both countries.

1.2. Phases of work

The project involved four overlapping phases:

- Phase 1: The literature scan focused on the existing research on the attitudes of New Zealanders and Australians to retirement income policy and the results are presented in Appendix B. The literature scan identified an unpublished survey commissioned by the New Zealand Retirement Commissioner and undertaken by Colmar Brunton in 2014 that investigated New Zealanders' attitudes in some detail. No corresponding information was available for Australia on the Age Pension. This phase also included a brief scan looking back to draw out the lessons learnt from previous retirement policy reform attempts in both jurisdictions and the findings are discussed in Section 2.
- Phase 2: The modelling stream focused on a comparison of existing modelling undertaken by the Australian Treasury and New Zealand Treasury discussed in Section 3.
- Phase 3: The attitudinal research phase involved undertaking a survey that compared the attitudes of Australians and New Zealanders (henceforth Aussies and Kiwis) to retirement income policies and their policy preferences. We used the 2014 Colmar Brunton survey as a base. We worked with ResearchNow to repeat this survey for New Zealand as well as undertake a similar survey in Australia. The headline results are discussed in Section 4 and the detailed survey questions and responses are available separately.
- Phase 4: Articulation of the research findings involved pulling together the modelling and the attitudinal research into this report.

At the conclusion of each key phase we discussed our initial findings with an experts group consisting of Ross Guest, Kirsten MacDonald and Malcolm Menzies.

2. A history of pension policy

Australian and New Zealand governments have both provided publicly-funded pensions for retired people for over a century.

In 1898, New Zealand became one of the first countries in the world to introduce a state-funded age pension. The initial modest pension was subject to a means, assets and character test. It was non-contributory and paid for entirely out of current revenues.

At the Federal level, a means-tested, flat-rate aged pension was introduced in Australia in July 1909, superseding State age pension schemes which had been introduced in New South Wales (1900), Victoria (1900) and Queensland (1908).

Almost uniquely within the OECD, New Zealand and Australia continue to fund their state pension systems via general taxation, rather than use some form of separate tax or contribution system. (OECD 2017b).^{1, 2}

In parallel, private provision of retirement income via tax-preferred and increasingly regulated employment-based superannuation has also been common, although in both countries, coverage was largely restricted to higher-paid private sector employees and public servants (Australian Prudential Regulation Authority (2007) and Preston (2008)). Tax concessions have been progressively reduced and otherwise reformed. Both countries operate a TTE tax system.³

2.1. The current systems

Using the World Bank's "Three Pillar" classification system, Table 1 sets out a high-level summary of the current retirement income systems in Australia and New Zealand.

Denmark is the only other OECD member without a dedicated social security tax of some sort. Ireland operates a taxpayer-funded, means-tested pension scheme as well as a scheme based on mandatory employee and employer contributions.

Both Australia and New Zealand at various times have had an earmarked tax to fund the Pillar 1 scheme which led to the widespread belief in a separate 'super fund'. In fact, Australia did have a notional super fund that was in practice merely an accounting device until its abolition in 1985. 'New Zealand's Pillar 1 scheme never had a separate fund until the NZ Super fund was established in 2001

Under TTE or "income tax" treatment, retirement savings are taxed like other savings vehicles like a bank account. Under TTE, contributions to schemes are made from taxed income (no deductions), the funds are taxed and withdrawals are exempt from tax. The current New Zealand system is close to pure TTE, while Australia provides capped deductions for contributions and superannuation funds are taxed at a concessional rate. Australia, New Zealand and Turkey are the only OECD countries to operate a TTE system. While there is a wide variation, most OECD members operate an EET system, under which both contributions and returns on investment are exempted from taxation while benefits are treated as taxable income upon withdrawal. See OECD (2015).

In its 1994 report "Averting the Old Age Crisis", the World Bank recommended that governments develop a national retirement income system based on three "pillars": a publicly managed system with mandatory participation and the limited goal of reducing poverty among the old; a privately managed, mandatory savings system and voluntary saving. Subsequent work by the Bank has seen their recommended system expand to include five pillars: a non-contributory "zero pillar" targeted at poverty alleviation; a mandatory "first pillar" with contributions linked to earnings with the objective of replacing some portion of lifetime pre-retirement income; a mandatory "second pillar" of individual savings accounts (i.e. defined contribution plans); a voluntary, flexible and discretionary "third-pillar"; and a non-financial "fourth pillar" which includes access to informal support (such as family support), other formal social programs (such as health care), and other individual financial and non-financial assets (such as home ownership). See World Bank (2008).

Table 1 Different approaches to retirement incomes

Feature	Australia	New Zealand	
Pillar 1	Means-tested public age pension, financed via general revenue.	Universal public age pension, financed via general revenue.	
	Pension included in taxable income, but may be eliminated by tax offsets available to seniors.	Pension included in taxable income at the marginal rate (so with a progressive tax system there is a very mild form of income testing).	
Pillar 2	Compulsory private superannuation, via the Superannuation Guarantee system.	KiwiSaver (but the scheme is a hybrid Pillar 2 and Pillar 3 scheme, because membership is optional, but on an opt-out basis). ⁵	
Pillar 3 Voluntary private superannuation.		Voluntary private superannuation, separate from KiwiSaver.	

Source: Guest (2013)

These current systems are the result of considerable policy reform over the last thirty to forty years on both sides of the Tasman, in both retirement incomes specifically, but across all economic policy in general. In Australia, much reform has focused around the Pillar 2 system of workplace-based occupational superannuation, although there have been significant changes to the taxation of both Pillars 2 and 3. In New Zealand, by comparison, there has been much more focus on Pillar 1.

2.2. Australia

Occupational superannuation has changed significantly since it first emerged in Australia in the mid-nineteenth century as a way in which a select group of salaried employees gained an independent retirement income. For more details, see Commonwealth Treasury (2001) and Guest (2013).

Figure 1 highlights the main changes in policy settings from 1985 to 2017. It highlights major developments in the second pillar and more recently an increase in age of eligibility in the Pillar 1 pension. In the early 1980s, a series of separate but related developments saw the start of a dramatic increase in both the coverage and quantum of superannuation:

• the June 1986 decision of the then Conciliation and Arbitration Commission to allow employers and unions to negotiate a superannuation arrangement costing no more than 3% of wages. This arrangement was generally referred to as the "3 per cent productivity benefit" or "award superannuation".

All new employees are automatically enrolled with their preferred KiwiSaver provider or the provider of their employer (or with a default provider allocated by Inland Revenue if their employer has not selected a provider), with minimum employee contributions of 3% and employer contributions of 3%. Members can either opt-out of the scheme or elect to be a member of any other registered provider's scheme. A government subsidy, in the form of a tax credit paid to the fund, equal to 50 cents for every dollar of member contribution annually up to a maximum payment of \$521.43, is paid into each fund. Members can elect to contribute either 3%, 4% or 8% of their pay. Member and employer contributions are made via the PAYE tax system.

This national system followed campaigns by individual unions in the late 1970s and early 1980s to secure employer superannuation contributions to industry funds for their members.

- reforms to the prudential regulation of occupational superannuation, motivated in part by the expected increase in coverage stemming from award superannuation, which cumulated with the introduction of the Occupational Superannuation Standards Act in 1987
- successive reforms to the taxation of superannuation, firstly in 1983, to address concerns about the inequity of tax treatment of superannuation compared to wages and then more generally as part of reforms to improve the efficiency of the tax system.

The award system was replaced in 1992 by the "Superannuation Guarantee". The Superannuation Guarantee was first introduced as a near-universal employee entitlement in 1992 with a contribution rate of 3% of salaries, or 4% for employers with payrolls above \$1 million per annum. The contribution rate has been gradually increasing over the past 20 years to its current level of 9.5%, and with further increments is scheduled to reach 12% of salaries by the year 2025. Many players in the superannuation industry have argued the rate should be 15% but neither party has formally adopted this policy.

Major policy changes have been announced almost every year since 1992 (Murphy, (2017)). Figure 1 shows these are mainly focused on the Pillar 2 superannuation regime but also include recent changes to the Pillar 1 threshold for asset testing and an increase in the age of eligibility for the Aged Pension.

2003 1985 1992 2002 2004 2005 2006 2007 2008 2009 2010 2011 2012 2017 ↑ ↟ ↑ 1 ↑ 3% employer SG reaches 9% Employees Super withdrawals SG levy to rise from 9 to New govt cosuper 12% over 7 years from 1 end of phase-in allowed to tax-free for over 60s. contribution for contribution. July 2013. period. choose their Concessional low income via ACTU contribution limits fund earners, to apply Cap on concessional Govt. cofrom 2012, up to national wage Transition to Employer contributions for over contribution for contributions 50s reduced from \$50k case. retirement' \$500 p.a. low income to \$25k from 2013/14. earners. introduced. 75 (from 70) Superannuation Age of eligibility for Cap on concessional 'Stronger super' Guarantee (SG) contributions halved reforms, esp. My age pension starts commenced at Super: a low cost to \$25k for under 50s to increase. Will Reduction in 2003 and 3%, gradually and \$50k for over 50s, default super reach 67 in 2023. abolition in 2005 of 15% rising to 9% by from 2012/13. Pensions paid from tax surcharge on 2002. contributions of high super restricted to \$1.6m Transfer Balance Cap.

Figure 1 Australia: major retirement policy developments

Source: Guest 2013 (Figure 1) and NZIER

Assessment

Chomik and Piggott (2012 p.350) provide a positive assessment of the current Australia system:

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.

Murphy (2017) considers that the Australian superannuation system is yet to reach full maturity. Mandatory employer contributions were only introduced 26 years ago, and it took 20 years for those contributions to reach 9.5% of salaries. It will not be until the mid-2030s that those at the point of retirement have spent their entire working lives under the current system, and it will not be till 2075 that retirees will have been accumulating superannuation at the 12% rate through their whole lives.

The Age Pension will therefore continue to be a major element of the Australian system for many years to come.

The integration challenge

Because Australian operates a targeted Pillar 1 scheme, one issue that it faces is how to integrate its occupational superannuation system with both the Age Pension's means and assets tests and the tax systems applying to contributions, accumulations and draw-downs.

As Figure 2 shows, the key issue is the period between age 55, where access to benefits begins to the age of eligibility for the Age Pension, currently 65.5 years (it will be age 67 by July 2023).



Figure 2 Integration in the Australian system is incomplete

Source: Productivity Commission

Official projections in Australia have consistently pointed to a decreasing share of pensioners receiving the full pension — suggesting that older Australians will increasingly rely on other savings and income to supplement any Age Pension receipts.

The Association of Superannuation Funds of Australia (ASFA) project that a person retiring in 2016 with an average amount of occupational superannuation will receive \$14,770 a year from the Age Pension and \$19,340 from superannuation (Clare (2014)).

While average superannuation balances will grow, it is important to also consider the distribution of balances. The Australian system continues to see an increasing disparity in superannuation balances meaning that reduced pension reliance is likely to be concentrated among those with higher wealth levels, a disparity the Productivity Commission expects to continue through time. People who have low incomes during their working years or have an interrupted work history (which often is the case for women), are likely to exhaust any superannuation they may have managed to accrue, and so will remain heavily reliant on the Age Pension as a source of retirement income (Productivity Commission (2015)).

2.3. New Zealand

The New Zealand retirement income system has been relatively stable compared to developments in Australia.

Figure 3 highlights the main changes in Pillar 1 and Pillar 2 policy settings since 1975. It highlights that there were, however, substantial changes to both pillars. Space precluded showing all the changes to the Pillar 1 scheme from 1976 till 2001, including changes in the age of eligibility and a taxation surcharge (effectively an income testing regime) that was introduced in 1985, amended and subsequently abolished in 1998. Since 2001 changes mainly have been technical due to indexation. A new pre-funding scheme (the NZ Super Fund) was introduced in 2001 and a new hybrid Pillar 2/3 scheme, KiwiSaver, was introduced in 2007.

1987 1993 1997 2001 2007 2011 2013 2015 1 ↑ ↑ Government NZ Super Fund Kiwisaver introduced Default contribution rate to NZ Super NZ Super kick-start on established to in July. scheme linked to % increase to 2% from 2013. Contribution rates first entry launched. of AWOTE. partly prefund **Employer contribution** removed. of 4% (default) or increased to 3% from 2013. NZ Super. 8%. Tax exempt status of Employer employer contributions Removal of tax contribution of 1% removed. incentives for rising to 4 % by savings Referendum on Dec. 2008: Minimum New default contribution rate of 2%, employeeand compulsory super other options being 4% and 8%. employer Employer contribution rate set at 2% contributions with no ramp up. Employer tax credit increase from 2% replaced by tax exemption for to 3%. employer contributions up to 2% Annual fee subsidy removed.

Figure 3 New Zealand: major retirement policy developments

Source: Guest 2013 (Figure 2) and NZIER

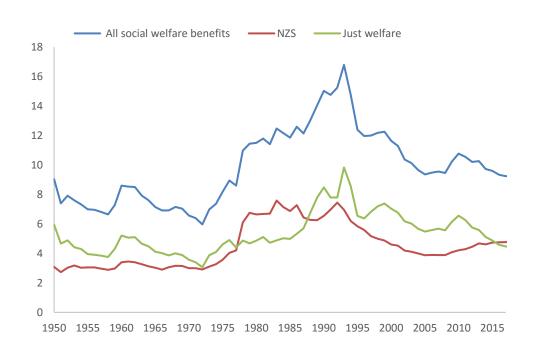
A Royal Commission on Social Security in 1972 proposed that the state should "ensure ... that everyone is able to enjoy a standard of living much like that of the rest of the

Both figures are in 2015 dollars.

community and thus is able to feel a sense of participation and belonging to the community". This shifted the focus from meeting basic needs to ensuring that the proceeds of economic growth were shared more evenly. A universal pension at age 60 at more than twice the previous level was introduced in 1976. The level of benefits for a couple was set at 80% of the gross average wage.

The social welfare system strained under the increased cost of New Zealand Super when coupled with the increased numbers of newly unemployed and the effects of the post-Royal Commission increases in entitlements. Social welfare spending, as a proportion of GDP, which had been falling since 1950, started to climb in 1972, reaching a peak of 16.8% in 1993 (Figure 4).

Figure 4 Spending on social welfare peaked in the early 1990s
As a percentage of GDP



Source: The Treasury and NZIER calculations

Unsurprisingly, successive governments introduced a series of reforms designed to reduce the fiscal cost of the Pillar 1 scheme.

Table 2 Major changes to the NZ Pillar 1 scheme

Year	Feature Feature		
1976	Scheme introduced under name 'National Superannuation' by the new National Party government (the naming was not a coincidence).		
	Universal, taxed pension payable from age 60.		
	Benefit for couples set at 80% of gross average ordinary time earnings. This means that pensions are indexed to wages, not prices.		
1979	Benefit for couples set at 80% of net (after tax) average ordinary time earnings.		
1985	Superannuation surcharge introduced. Effectively a means-test, but implemented as an additional tax on the other income of superannuants.		
	Pension rates indexed to prices, not wages		
1987	Wage indexation restored: pension for couples set at 80% of net average ordinary time earnings.		
1989	Superannuation renamed Guaranteed Retirement Income. Payments indexed to lower of price or wage movements. Government signals that age of eligibility will increase, although changes would not take place till the early 21st century.		
1990	1991 and 1992 pension increases cancelled and from 1993 onwards, indexation would be to prices alone.		
and 1991	The age of eligibility was increased to 61, effective from 1992 and thereafter to steadily increase until it reaches 65 in 2001.		
	Rate of superannuation surcharge increased from 20 to 25% and threshold for exemption lowered.		
	The scheme was again renamed 'National Superannuation' by the new National Party government.		
1993	A "Superannuation Accord" signed by the main political parties, largely accepting the status quo. The Accord also called for the establishment of a Retirement Commissioner, who would conduct periodic		
	reviews of retirement incomes and policy.		
1996	Effect of the superannuation surcharge reduced.		
1997	A referendum on a compulsory Retirement Savings Scheme provided for in the coalition agreement between the National and New Zealand First Parties overwhelmingly rejects the proposed scheme.		
1998	Surcharge abolished, returning New Zealand to a universal Pillar 1 scheme, albeit at a lower rate than previously and applying from age 65. The pension was to be indexed to prices, but with a "wage floor" of 65% of net ordinary time earnings.		
	Later in the year, following the collapse of the coalition agreement, the wage floor was reduced to 60%.		
1999	The wage floor was restored to 65%.		
2001	The New Zealand Superannuation Act 2001 again renames the scheme, this time to New Zealand Superannuation.		
2004	Public Finance Act amended to require the Treasury to a statement on the long-term fiscal position at least every four years. The first statement was published in 2006.		
2005	Under a confidence and supply agreement between the Labour Party and New Zealand First, the wage floor is increased to 66%.		
2008	National Party leader John Key pledges to resign from Parliament if the age of eligibility for superannuation is increased.		
2017	New Prime Minister Bill English announces that the age of eligibility for New Zealand Superannuation will rise to age 67.		
	During the subsequent election campaign, Labour Leader Jacinda Ardern repeats John Key's pledges to resign from Parliament if the age of eligibility for superannuation is increased. This commitment is subsequently included in the Coalition Agreement between the Labour Party and New Zealand First.		

Source: Based on Preston 2008 and NZIER

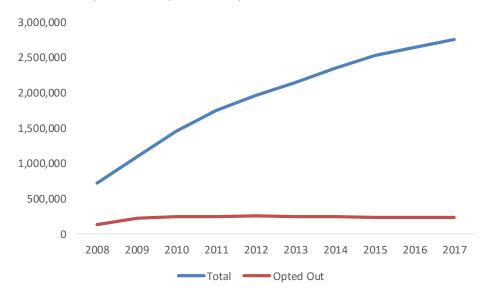
Pillars 2 and 3

Since 2005, the major development in the New Zealand system has been the introduction of a new hybrid Pillar 2/3 scheme, called KiwiSaver.

The scheme is voluntary, so it is really a Pillar 3 scheme, but enrolment is compulsory when an employee changes jobs and there are minimum contribution rates from both employees and employers, based on annual incomes. Employees must, however, take conscious action not to join (opt-out) within a narrow window of two to eight weeks of starting with a new employer. As Figure 5 shows, total Kiwisaver membership continues to grow, while the number of potential members opting out each year as stabilised at about 240,000 each year.

Figure 5 Kiwisaver membership is growing

Total membership and annual opt-outs, June years.



Source: Inland Revenue, http://www.kiwisaver.govt.nz/statistics/annual/

Table 3 Major KiwiSaver changes since inception

Year	Change		
2005	Scheme announced in the 2005 Budget. When first announced, the scheme involved member contributions, with the government providing:		
	 a \$1,000 kickstart payment to each member upon joining 		
	 a fee subsidy, which the Government has since confirmed to be \$40 per member per annum, and 		
	 a housing deposit subsidy of up to \$5,000, available after three years of saving into KiwiSaver for eligible members (eligibility is governed by income caps and regional house price caps). 		
2007	Before the scheme is to start on 1 July, the 2007 Budget announced additional features:		
	 a Member Tax Credit to match member contributions into KiwiSaver at a rate of 100%, up to a cap of \$20 per week (about \$1,040 per year). 		
	 From 1 April 2008, the phasing-in of compulsory matching employer contributions. The rate of compulsory employer contributions will increase by 1% each year until 2011/12, when the compulsory contribution reaches 4% (the 4% rate was never brought into effect). 		
	 A new Employer Tax Credit to reimburse employers for their contributions to employees' KiwiSaver accounts by providing a tax credit at a rate of 100% up to a maximum of \$20 per week per employee (about \$1,040 per year). 		
2008	Announcement that \$40 fee subsidy cancelled and mortgage diversion option removed. Minimum contribution rate reduced from 4% to 2%.		
2011	Maximum tax credit halved from \$1,043 to \$521 (contribution required to achieve tax credit stayed the same).		
2012	Tax credit for children removed (April 2012).		
	All employer contributions made subject to tax applied at the employee's marginal tax rate.		
2013	Minimum employee and employer contribution rate increased from 2% to 3% of gross income (April 2013).		
	Standardised Fund Management reporting introduced.		
2015	\$1,000 kick-start removed.		
	House price caps increased for first home buyer schemes and member tax credits now eligible for withdrawal.		

Source: Drew and Wilson (2015)

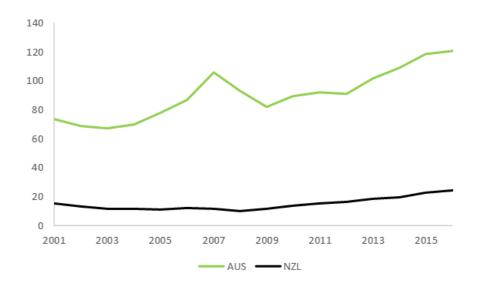
While the scheme has endured over three governments, the 2008-2017 National Party government significantly reduced the extent of government contribution, arguing that it was often poorly targeted (Drew and Wilson (2015)).

2.4. Conclusion

The only constant in retirement income policy in Australia and New Zealand is change. For the past 40 years, governments of all political persuasions on both sides of the Tasman have adjusted policy settings across all the pillars of retirement incomes. In both countries, the level of pension fund assets as a share of GDP has been increasing, although it is impossible without much further analysis to attribute any of this to policy changes.

Figure 6 Pension funds are expanding

Pension fund assets as a percentage of GDP



Source: OECD statistics

The Australian Superannuation Guarantee system is yet to mature: it will be many years until all retirees will have been accumulating superannuation balances based on 12% of incomes. Even then, differences in pre-retirement earnings and employment patterns will persist, meaning that for many, the Age Pension will remain a significant source of post-retirement income.

While extending the coverage of employment-based retirement savings, KiwiSaver will always be a supplement to New Zealand Super. The universal nature of New Zealand Super also means that, unlike in Australia, increasing savings through KiwiSaver will have little effect on the fiscal cost of retirement.

In both countries, the Pillar 1 schemes will continue to be an important feature of retirement incomes, providing a basic safety net for large sections of the community.

3. The common fiscal challenge

3.1. Demographic change

Demographic change is projected to increase future spending on retirement incomes in Australia and New Zealand. That Australia, New Zealand and, indeed, most of the western world, is going through a period of demographic change is clear to see.

Driving this change is a combination of:

- reductions in mortality rates across the whole age spectrum, but especially infant mortality and
- a reduction in fertility, which is the combined effect of both a fall in family size and a delay in the timing of child-bearing: women are having fewer children, later in life.

3.2. On average, we are living a lot longer

The reduction in mortality can be illustrated using data from life tables produced by the Australian Bureau of Statistics and Statistics New Zealand. In Figure 7, we combine the actual mortality experience of people born in 1876 (called a cohort life table) with that occurring across the whole population in 2012 (called a period life table) to show the pattern of survivorship over time: what proportion of a group of people (in this case 100,000) live to a given age.

The 1876 data shows what happened to a cohort of 100,000 people born in 1876. The 2012 data shows what would happen to a similar cohort of 100,000 people if they experienced the age-specific mortalities that applied across the whole population in that year. This is not a prediction of what will happen to a cohort born in 2012, since that group will most likely continue to experience improvement in mortality. It does however, illustrate the effects of the current mortality rate compared to those in the past.

In the context of this report, a key point is that the number of people living to the age of eligibility for government-funded pensions, is set to increase significantly. For people born in 1876, only 47.4% lived to age 65. For a cohort experiencing current mortality, a staggering 87.5% will live to 65.

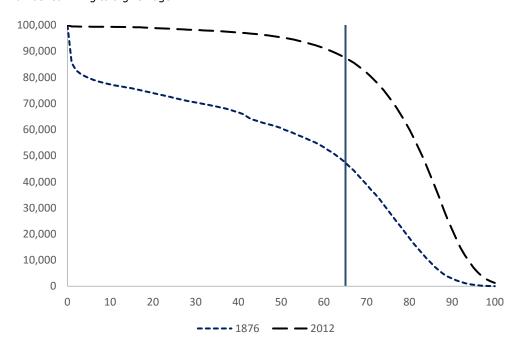
Living longer does not necessarily mean living with increased disability. Australian data suggests increased life expectancy does not mean that rates or level of disability will increase (Negline 2017). New Zealand data points to a 'good news bad news' story.

Cohort life tables have the advantage of showing the actual experience of a group of people. The disadvantage is that they require data over many years, theoretically until the death of the last survivor. Period life tables, on the other hand, are based on the experience of the population during a specific period of time. The data presented below for the 2012 period is a hypothetical survivorship assuming people experience the age-specific death rates of that period over their lifetime.

"We may be living longer, and living longer in good health, but we are also living longer in poor health" (Ministry of Health, 2016, p. ix).

Figure 7 New Zealand men are living much longer

Number surviving to a given age



Source: Statistics New Zealand

3.3. And families are having fewer children

While more Kiwis and Aussies are living into old and very old age, at the other end of the life-course, fewer children are being born.

There are two effects at work here: a delay in starting families and a fall in the size of families.

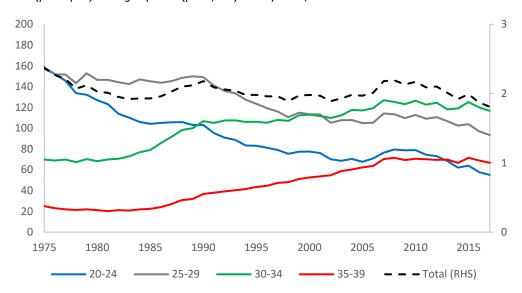
These two effects are shown in Figure 8 (New Zealand) and Figure 9 (Australia), which show the total fertility rate (the number of children a woman can be expected to have) and age-specific rates, by five-year bands from 20-14 to 35-39.

In New Zealand, while the total has been reasonably stable, the age-specific rates for 30-34 and 35-39 women have increased, while those for younger groups have fallen.

To elaborate "New Zealanders are living longer, and are living longer in good health (i.e. both life expectancy and health expectancy are increasing). Health loss, measured in DALYs, is declining by an estimated 1.2% per year, once adjusted for changes in population size and age structure – a major achievement for the health and wider social sectors. Yet because the population is growing and ageing, the absolute number of DALYs is still increasing. This finding suggests that improvements in health do not necessarily reduce health care expenditure." (2016 ibid).

Figure 8 New Zealand women are having fewer children, later in life

Total (per capita) and age-specific (per 1,000) fertility rates, New Zealand

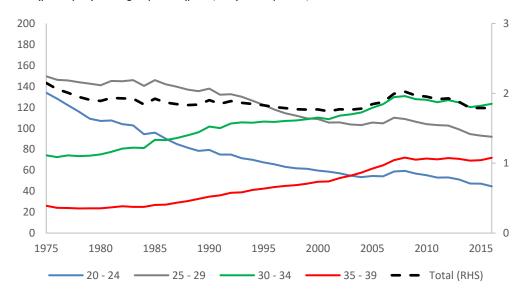


Source: Statistics New Zealand

In Australia, although the fertility rates themselves are slightly different, the pattern is the same.

Figure 9 Australian women are also delaying child bearing

Total (per capita) and age-specific (per 1,000) fertility rates, Australia



Source: Australian Bureau of Statistics

3.4. Sizing up the challenge

An ageing population raises challenges to both fiscal sustainability and fiscal resilience. Gill (2012, p7) defines fiscal sustainability as "the ability to predictably raise sufficient revenue over time to meet financial commitments and sustain a certain level of services". Measuring sustainability requires making judgements about political acceptability of raising taxes and cutting spending, and the public legitimacy of government rather than making purely technical assessments. Fiscal resilience refers to the ability to withstand shocks and avoid unnecessary risks.

Forecasts of how pension and health spending will change over the long term (40 to 50 years) provide a starting point for assessing fiscal sustainability and fiscal resilience. The comparison in this section is based on the '2015 Intergenerational Report – Australia in 2055'¹⁰ (IGR Australia) with the Long-Term Fiscal Model 22 November 2016'¹¹ (LTFM New Zealand). Unless otherwise stated these are the data sources used for comparison in this section.

The IGR Australia is a narrative report with supporting data for charts and tables. Results are presented as ratios of spending to GDP with current and proposed policy change for pension eligibility age. In contrast, the LTFM New Zealand is a detailed spreadsheet model that projects current policy settings forward. An alternative fiscal policy setting 'Stabilise Net Debt' is included but this does not alter the eligibility age for New Zealand Super.

For our comparison, we have focused on the modelling of forecast pension and aged care health spending and real Gross Domestic Product (GDP) as this is the approach used in the IGR Australia and there is insufficient published data to construct other measures. We begin with the model structure and then comment on the key model results.

3.4.1. Model structure – retirement income

The Australian and New Zealand models have the following common features:

- the key inputs are population demographic forecasts by age cohort
- assumptions about economic growth, inflation and tax revenue as a proportion of GDP
- recent historical spending is used as a baseline for forecasting spending by age group
- government social welfare spending which is usually assumed to be a combination of change in the population by age cohort, multiplied by a per capita price (including inflation) plus a trend increase factor for some types of social spending.

The demographic forecast and assumptions about costs are used to project forward the effect of population changes on the tax revenues and government spending assuming no change in policy settings.

 $^{^{10} \}quad \text{Available at } \underline{\text{https://treasury.gov.au/publication/2015-intergenerational-report/}}$

¹¹ Available at http://www.treasury.govt.nz/government/longterm/fiscalmodel

3.4.2. Model structure – health spending

The IGR Australia and LTFM New Zealand use different approaches to forecast health spending. The proportion of the increase in health spending that is attributable to demographic factors is 80% for IGR Australia¹² and 77% for New Zealand.¹³ Although these numbers appear similar, the New Zealand health expenditure includes aged residential care payments and Australian health spending excludes them.

The LTFM New Zealand forecasts of health expenditure are based on the historical proportion of health spending for males and females by age group, multiplied by the following:

- separate inflation rates for input expenses and health labour costs
- population growth by age and gender adjusted for 'healthy ageing'.

The IGR Australia forecasts four major categories of health expenditure: PBS (pharmaceuticals), Medicare Benefits, Hospitals and Private Health Insurance Rebates. and includes a description of the key model features but does not provide the formulae used. For Pharmaceutical and Medicare Benefits the initial modelling is based on projected non-demographic growth in spending by age group and gender adjusted for change in the size of the population group and the CPI. Hospital and private health insurance rebate spending is increased by the product of population growth and the CPI. These initial modelling approaches are transitioned to an aggregate model of health expenditure from 2027-28:

by growing the projected real spend per person in each age and gender group by an aggregate non-demographic growth rate.¹⁵

(The non-demographic growth rate is based on an exponential growth rate.)

3.4.3. Model results – retirement income

In addition to health spending as a share of GDP, the key challenge is to forecast public pensions under a 'no policy change' assumption. The LTFM New Zealand estimate of gross¹⁶ pension costs assume the eligibility age remains constant. The IGR Australia report included two policy options for the Age Pension:¹⁷

- current policy to increase the eligibility age gradually from 65 (in 2017) to 67 by 1 July 2023
- proposed policy to increase the age gradually from 65 (in 2017) to 70 by 1 July 2035.

¹² IGR Australia, Box 2.4 page 61.

Estimated as the difference between growth in Core Crown Health spending and 'Bottom-up' Spending growth from the LTFM New Zealand for the period 2021 to 2055.

 $^{^{14}}$ $\,$ See 2015 Intergenerational Report – Australia in 2055, Survey results pages 116 to 128.

¹⁵ See 2015 Intergenerational Report – Australia in 2055, Survey results page 125.

¹⁶ The LTFM New Zealand includes assumptions includes 'gross' and 'net' per person payments but only the gross rate is used to forecast total New Zealand Superannuation payments.

The Age Pension is a means-tested payment for people over 65. From 1 July 2017, the qualifying age for the Age Pension will gradually increase to 67 by 1 July 2023.

The proposed increase in eligibility age has not been implemented but is included in the following chart to indicate the change in eligibility age required to stabilise pension payments as a proportion of GDP.

On current Pillar 1 policy settings, gross New Zealand Super is forecast to increase from 4.8% of GDP in 2015 to 7.5% of GDP by 205518 – an increase in share of GDP of almost 60%.19 In contrast Australia's Age Pension will increase from 2.9% of GDP in 2015 to 3.9% of GDP by 2055 - an increase in share of GDP of just under 25%.20

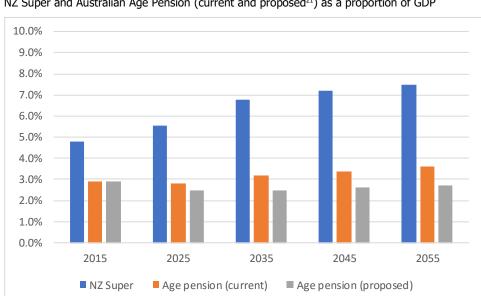


Figure 10 Forecast pension payments

NZ Super and Australian Age Pension (current and proposed²¹) as a proportion of GDP

Source: NZIER

Two key drivers of the difference between the forecast change in retirement pensions as a percentage of GDP for Australia and New Zealand do not relate to differences in retirement income policy. Rather they are assumptions about the forecast rate of economic growth and the ageing of the population. The IGR Australia forecasts assume:

a faster rate of economic growth than the LTFM New Zealand so that by 2055 the ratio of Australia's GDP to New Zealand's GDP is forecast to increase by 30%

Source: Long-Term Fiscal Model' downloaded from http://www.treasury.govt.nz/government/longterm/fiscalmodel 17 Dec 2017.

The New Zealand Superannuation Fund Contribution Rate Model (14 Dec 2017) (available at http://www.treasury.govt.nz/government/assets/nzsf/contributionratemodel) forecasts net New Zealand Superannuation to 4.12% of GDP in 2018 and 6.4% by 2055 and increase of 55%.

Guest (2013 p27) comparison of the overall effect of Pillars 1 and 2 combined concluded "NZS is fiscally more expensive than Australia's Age Pension but KiwiSayer is cheaper. In net terms New Zealand's retirement income system is currently more expensive by about 1 per cent of GDP. The gap between the cost of NZS and Australia's Age Pension will grow, but will be offset by lower relative cost of KiwiSaver due to tax free super pay outs available at an earlier age in Australia (age 60)."

^{&#}x27;Age pension (current)' is based on the eligibility age increasing to 67 by 2023. 'Age pension (proposed)' is based on the eligibility age increasing to 70 by 2035. This 'Age pension (proposed)' policy was proposed in the 2014-2015 Budget but was not implemented.

 a younger population than is forecast for New Zealand – the proportion of adults 'aged 65 and over' are almost equal for Australia and New Zealand at the beginning of the comparison period (2015) but for most of the forecast period (2025 to 2055) the proportion of adults 'aged 65 and over' in Australia varies between 87% and 92% of the proportion for New Zealand.

Table 4 shows the individual and combined effects of the differences between the forecast assumptions on the forecast ratio retirement pension payments to GDP. It shows the effects of applying the Australian forecast assumptions about GDP and population growth to the New Zealand Treasury forecasts.

Table 4 Effect of key assumptions on forecasts

Retirement income to GDP ratio based on Australian growth and population assumptions

Retirement income/GDP	2015	2025	2035	2045	2055
LTFM New Zealand (start)	4.8%	5.6%	6.8%	7.2%	7.5%
GDP difference adjustment					
Aus. GDP/ NZ GDP	100%	107%	115%	124%	130%
LTFM NZ (Aus. GDP growth)	4.8%	5.2%	5.9%	5.8%	5.7%
65 and over adjustment					
Aus. >=65/ NZ >=65	99%	92%	87%	87%	91%
LTFM NZ (Aus. >=65)	4.7%	5.1%	5.9%	6.3%	6.8%
Combined GDP and >=65	4.7%	4.8%	5.1%	5.1%	5.2%
Difference	0.1%	0.8%	1.7%	2.1%	2.3%

Source: NZIER

3.4.4. Model results – health spending

Health care spending (including aged care spending) as a proportion of GDP is forecast to increase at approximately the same rate in Australia (41%) and New Zealand (46%) over the period 2015 to 2055. However, Australia's aged care spending share of GDP is forecast to increase by almost 90% over the period 2015 to 2055 compared with 30% growth for narrowly defined health care spending.

10.0% 9.0% 8.0% 7.0% 6.0% 5.0% 4.0% 3.0% 2.0% 1.0% 0.0% 2015 2025 2035 2055 2045 ■ Health NZ ■ Health & Aged Care (Aust)

Figure 11 Health care plus aged care spending

Source: NZIER

As a proportion of GDP

The differences in GDP growth assumptions discussed in the previous section on the retirement income results also apply to forecasts for health spending growth relative to GDP.

3.4.5. Model uncertainty

Both the IGR Australia and the LTFM New Zealand models project forward retirement pensions and health spending based mainly on a combination of demographic forecasts, continuation of current policy settings and constant assumptions about key economic inputs such as productivity growth, labour force participation rates and health service cost increases.

The choice of value for these assumptions have a material effect on the model outcomes but neither the IGR Australia nor the LFTM New Zealand:

- include simulations based on ranges of the input assumptions
- consider the potential for changes in policy settings during the forecast period.

Two recent working papers by the same authors at the New Zealand Treasury have considered how to model the uncertainty about long term fiscal projections (Ball et al (2015)) and the option value (2016) of policy responses to partially hedge against the uncertainty about the range of outcomes.

This work highlights that long term fiscal projections are just that – central projections around which there are a range of probabilities. Central projections are less helpful in assessing fiscal resilience including the ability to withstand shocks and avoid unnecessary risks. Central projections tend to downplay the extent of the downside risk from negative shocks like wars and disasters as well as the upside risk from favourable shocks (such as automation and artificial intelligence).

Central point projections are however a useful tool for assessing fiscal sustainability of existing policy settings. The modelling work by Ball and et al highlights that for a wide range plausible values New Zealand Super is fiscally unsustainable at current tax rates if other government programmes and services levels are to be continued at present levels. The modelling also highlights concerns about fiscal resilience given that the ageing population will also put pressure on health and other social spending programmes.

3.5. Crisis, what crisis?

While the models used by the Treasuries on both sides of the Tasman are robust, we must remember what they are showing.

What they do, and do well, is provide information about the effects of likely demographic change on the fiscal positions of both countries.

They are not models of wellbeing and say nothing about the benefits of spending, at either the individual or aggregate level.

By presenting their results as shares of GDP, the models tend to disguise the fact that both Treasuries are projecting consistent productivity growth over the modelling period. This growth could provide ever-increasing capacity to provide the higher health and retirement costs while still providing higher living standards. They also disguise the downside risk that the current productivity slowdown is sustained, in which case the ageing population provides an even larger fiscal challenge.

They are also deterministic: they show the effects of the combination of many inputs on fiscal outcomes, rather than being based on any theory of optimal outcomes. Unlike other economic models, they do not predict that the economy will settle into a steady state pattern.

The models also do not contain feedback loops, where the outcome in one sector of the economy has an impact on others. For example, in neither model is economic growth a function of the size of the tax take, which it probably should be given deadweight losses increase at the square of the tax rate (Creedy (2003)). At the same time, neither model considers the option value of delaying policy action in the face of uncertainty over the forecast period or shows the effect of expected increases in health status on labour productivity.

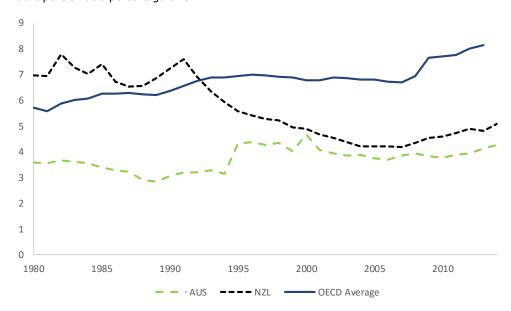
The models are essentially silent on the impact of housing affordability. In both New Zealand and Australia of home ownership provides an implicit fourth pillar for retirement incomes. A recent Australian report (AIST, 2018, p. 4) noted that if housing affordability continued to deteriorate

an increasing proportion of retirees would be living in less secure accommodation than in previous decades, having to spend a greater proportion of their income on housing.

We therefore need to be careful in being too categorical about there being a serious **economic** or **social** problem resulting from population ageing that must be addressed. That population ageing has **fiscal** consequences is undoubtedly true. But whether those consequences are undesirable, compared to some feasible alternative, is not something that the models the Treasuries use are designed to address.

Figure 12 Pension spending in Australasia compared to the OECD average

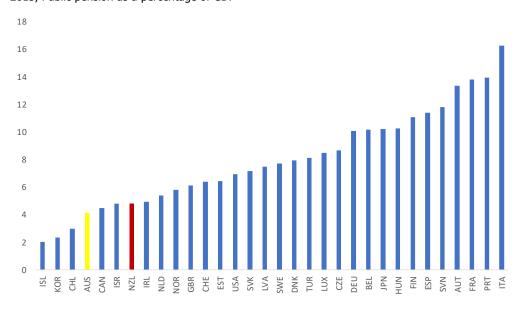
Public pension as a percentage of GDP



Source: OECD Statistics

Compared with the OECD average, both Australia and New Zealand have low levels of spending on public pensions. Figure 12 compares New Zealand's and Australia's public pension spending (excluding taxation subsidies) to the OECD average, while Figure 13 compares Australasian spending with other OECD countries.

Figure 13 Pension spending in Australasia is low by OECD standards 2013, Public pension as a percentage of GDP



Source: OECD Statistics

Governments have choices about what they spend taxpayers' money on, and those choices have consequences that should be made transparent.

If either government wants to reduce the growth in spending on retirement incomes, then our new research provides some useful new evidence that can inform the policy choices.

4. Survey results

4.1. New survey comparing Kiwis' attitudes across time with those of Australians

Section 2 discussed the *similarities* of the Pillar 1 publicly-funded component of the New Zealand and Australian retirement income regimes and the marked *differences* between the Australian Pillar 2 system and New Zealand Pillar 2/3 KiwiSaver scheme.

This section summarises the key conclusions that emerged from an internet panel survey undertaken in late 2017 in New Zealand (1,005 respondents) and Australia (1,228 respondents) focused on Pillar 1. This unique survey allowed a comparison across time as well as across countries in attitudes to retirement income policies.

The survey was modelled on the 2014 Colmar Brunton survey, but for obvious reasons we limited the scope to Pillar 1 superannuation issues to ensure comparability between jurisdictions. Essentially it was possible to asks Kiwis and Aussies largely the same questions with only minor wording changes such as the term 'Age Pension' in Australia rather than 'New Zealand Super'.²²

The survey had four parts:

- 1. Thinking and planning for retirement
- 2. Public understanding of New Zealand Super or the Age Pension
- 3. Understanding of the increased cost of public pensions
- 4. Policy options for dealing with the increased cost.

There is a wealth of interesting insights on how Kiwis and Aussies think about planning for their own retirement and how much they understand about the retirement policy regimes in their respective countries. The detail of the individual questions and summary of the responses are available separately. Where possible, the New Zealand data for 2017 was compared with the 2014 responses.

In the last part of the survey we divided the sample in half. One half were given additional information on the extent and the drivers of the increased cost of retirement income policies. We had expected to see different responses from the information group relative to the non-information group. This was based on the 2014 Colmar Brunton survey where respondent policy preferences changed once the magnitude of the impact of an ageing population was evident.

Across a range of questions there were remarkable similarities between New Zealanders' and Australians' attitudes. This was quite striking given how, as section 2 above discussed, the two regimes have diverged over time with very different approaches to Pillar 2 and income and asset testing in Pillar 1.

Colmar Brunton augmented their telephone survey with an on- line discussion forum, an addition that could be explored in subsequent research. We added in one additional question in the Australian surveying only on the deeming option for the income and asset testing regime.

4.2. Thinking and planning for retirement

Consideration of retirement increases markedly as it approaches

The survey asked people about the extent people had thought about retirement and how much they would need as well as sources of retirement income. Around half of Aussies and Kiwis are thinking somewhat about retirement, as well as the amount required, and the remainder only a little or not at all. Unsurprisingly, thinking about retirement increases markedly with age. Around 40% of 18-24 year olds compared to over 70% of those over 65 had thought a great deal or a fair amount about retirement.

Looking to augment the public pension

Australians and New Zealanders identified four main sources of income:

- 1. Compulsory Superannuation/KiwiSaver (Pillar 2)
- 2. Age Pension/New Zealand Super (Pillar 1)²³
- 3. Private Savings
- 4. Part time earnings.

The main change in the 2017 NZ survey is the growing awareness of KiwiSaver. In the 2014 survey, New Zealand Super was most commonly identified as the source of retirement income and KiwiSaver was second.

We asked about the level of income needed in retirement "just to get by" and "to live comfortably". Overall based on respondents' own estimates most Kiwis and Aussies thought they would need income from sources other than the government pension.

- in New Zealand 48% of couples and 24% of singles believe they could 'get by' on current New Zealand Super levels. In the 2014 survey the corresponding results were 48% and 12%, respectively. In addition, only 16% of couples and 8% of singles feel they could 'live comfortably' on New Zealand Super at current levels.
- in Australia 41% of couples and 35% of singles feel they could 'get by' on Age Pension income levels. In addition, only 12% of couples and 12% of singles feel they could 'live comfortably' at that level.

These results are consistent with other surveys such as ASFA's (2011) which found most Australian respondents thought that they would need more than \$750k in retirement saving to live comfortably, taking into account the Age Pension. The similarity in the responses from Kiwis and Aussies is even more striking given the level of the Age Pension is notably higher than New Zealand Super.

Interestingly NZ Super (like the Age Pension) is only listed second as a source of retirement income in New Zealand (by 62% of respondents) even though it is essentially universal after 65.

4.3. Public understanding of New Zealand Super or the Age Pension

Reasonable awareness of NZ Super and the Australian Age Pension but less of the detailed operation

There was high awareness of the existence of New Zealand Super and Age Pension (87% in New Zealand, 92% in Australia,). For example, in both countries, four in five people know that almost anyone aged over 65 years can receive the national super/pension payments. However, there was much less understanding about the operation of the Age Pension/ New Zealand Super regimes amongst younger people in particular.

In both Australia and New Zealand while the majority identify current taxes as the main source of funding, there is still widespread belief in a 'super fund'. Thirty percent of Aussies and 50% of Kiwis think 'the Age Pension/New Zealand Super comes from money the government has saved and invested over time'.

There was also low awareness of the actual level of payment from Age Pension or New Zealand Super. In fact, in New Zealand in 2014, 54% of people were aware of the correct amount of New Zealand Super – this has dropped to 28% in 2017. The majority of respondents were not aware how the schemes were funded and in the case of Kiwis whether income and asset testing is applied.

Young people less likely to believe the Age Pension/ New Zealand Super will exist in its current form when they retire

We asked people whether both whether they expected the Age Pension/New Zealand Super to exist in its current form when they retire. Around half of Kiwis and 41% of Aussies thought that it was quite or very likely the government pension would exist in its current form.

It would appear Australians have less confidence in the stability of the system which is probably because of the frequency of changes to the policy regime.

Unsurprisingly younger people's responses differed from the currently retired as shown in Table 5. The average level of belief in regime continuity overall masks a wide range of views by age cohort. Nonetheless there is still a significant minority of younger people who believe in the continuity of the schemes in their current form.

Table 5 Continuation of the Age Pension/NZ Super in current form

'Quite' and 'very likely' combined

	Kiwis	Aussies
25-34	39%	33%
65+	77%	89%
Total	48%	41%

Source: ResearchNow - p25 in Survey resutls

4.4. Understanding of the increased cost of retirement incomeless policies

Kiwis' and Aussies' awareness of the expected increase in the costs of retirement incomes and public health policies

At least two-thirds of Australians and almost three-quarters of New Zealanders are aware that the Age Pension/New Zealand Super will cost more in the future. Similarly, three-quarters in each country were aware that public health costs (including aged residential care) will increase markedly at the same time.

People in both countries tended to underestimate the extent of the cost increases for both public pensions and public health.

Extra information didn't change responses much

The survey split respondents into a group that received supplementary information before answering questions on the policy options and those that didn't. Yet there was no real difference between the answers of the two groups.

The lack of daylight between information and non-information responses suggests public education on population ageing is unlikely on its own to move the debate forward.

4.5. Policy options for dealing with the increased cost

Considerable disagreement about the preferred policy options

Faced with rising costs both Kiwis and Aussies were reluctant to contemplate major changes to the Pillar 1 scheme and are divided on tax increases. The strongest opposition was to across the board reductions in the amount paid.

There was mixed support for the other options, including increasing the age of entitlement, amending how adjustments occur (linked to prices rather than wages) or pre-funding through increased current taxes.

Income and asset testing is the option with the highest support

The least unpopular option with New Zealanders and Australians across all age groups was the use of income and asset testing (shown in Figure 13). Interestingly support for asset testing did not extend to including the family home, which was not supported.

Support came through for egalitarian notions of paying through taxation and restricting access to those who don't need assistance. The depth of support for this option is doubtful, in New Zealand at least, as another New Zealand Treasury study (Au et al (2015)) which used a different methodology to the survey found very limited support for means testing.

The intergenerational compact

We found little evidence of a distinct generational divide in the views on the policy options for dealing with the increased costs of New Zealand Super and the Age Pension. Among the young there was strong support for the continuation of the current policy settings even though the aged benefitted at their expense. For example, only around 25% of Kiwi and Aussie 25-54 year olds supported increasing the age of eligibility for the Pillar 1 public pension. Similarly support for lowering the amount of the Pillar 1 public pension (the red segment in Figure 13 below) was low across all age groups.

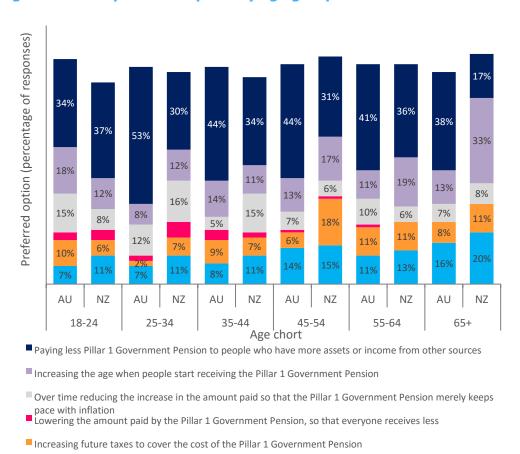


Figure 14 Most preferred option by age group

Source: ResearchNow

Figure 13 shows for each age group the policy option that Aussies and Kiwis 'most prefer' to address the increased cost of the public pension scheme. For simplicity the figure doesn't includes 'don't knows' and 'other options such as compulsory KiwiSaver'.

■ Increasing current taxes to build up a fund to meet the future cost of the Pillar 1 Government Pension

Amongst those who identified support for increasing the age of eligibility as their most preferred policy option, support was much higher amongst 55-64 year old Kiwis (19%) than 18-44 year olds. This is striking even though the former stand to lose most from

the change and the latter to gain. This is consistent with a range of studies which found weak effects or no evidence of self-interested responses. Support for increasing the age was highest with the 65+ age group for Kiwis but not with Aussies.

There was remarkable little variation in the views of respondents across variables such as gender, income and employment status and provision of additional information did not significantly influence the survey results. Age did, however, have some influence on policy preferences across a range of policy question. For example, amongst Kiwis support for continuing New Zealand Super at a universal amount (with no income or assets testing) increased very gradually with age: 25-34 years (39%), 45-55 (45%), 55-64 (64%), over 65 (78%).

Between a rock and a hard place

Politicians face the problem that there is no strong support for any one option and the public want to have it both ways. The public's dominant preference is that the status quo persists and that the government pension should be provided universally, without a means-test in New Zealand and with continued means testing in Australia. However, the public are resistant to change including the prospect of an increase in taxes to fund the inevitable increase in costs.

Our survey results are consistent with other studies suggest that that there are clusters of support for a range of policy options but no one option attracts overwhelming sustained support. In the survey the option with the least opposition, in both New Zealand and Australia, was income and assets testing. It was notable that support for assets testing did not include support for including the family home.

5. The political economy of pension reform

In this section we explore the proposition that policy makers are between a rock and a hard place: the rock of a constrained fiscal future, and the hard place of public opinion. This is best summed up by the former Prime Minister of Luxembourg and President of the European Union's immortal quote:

We all know what to do, but we don't know how to get re-elected once we have done it. Juncker (2007).

The issue is not that retirement income policy is a "wicked problem" that defies analysis.²⁴ Quite the contrary, cause and effect are easy to trace and the menu of policy options is straight forward. Retirement income is one of the most studied areas of public policy in Australia, New Zealand and, indeed, the OECD. There is no shortage of expert advice and analysis available to decision-makers when it comes to setting or adjusting policy parameters.

Retirement income reform is also not rare. Since the 1990s, about half of OECD member governments have undertaken major reforms of their pension systems (CESifo (2009)). While ongoing momentum for pension reform is now reducing after the impetus of the global financial crisis (GFC) has eased, the majority of OECD countries have adjusted their retirement ages over the last year (OECD (2017)). While some of these have been minor, or even reversing legislated increases, many have been highly visible and controversial.

The options available to the Australian and New Zealand governments should they wish to address the mounting fiscal pressures are well known. The basic options for Pillar 1 are changing system parameters (age of entitlement, level of payment over time, extent of means testing, etc.) or changing the Pillar 2 system parameters (moving from defined benefit to defined contribution schemes, increasing employer or employee contributions and reducing the extent of tax-payer funding, etc.).

As we set out in Section 2, Australia and New Zealand have undertaken both Pillar 1 and 2 changes (the Superannuation Guarantee and KiwiSaver were both step changes).

We asked New Zealanders and Australians their views of the most likely additional Pillar 1 setting changes, including:

- the level of the pension
- how pension is indexed
- the age of eligibility
- the desirability of means testing
- the willingness to increase current taxes

[&]quot;Wicked problems" are those with multiple, interrelated causes, where one cause might exacerbate others (Kreuter et al (2004), but see also Alford and Head (2017) for a more sceptical analysis). They are also problems that don't have a single right or wrong answer. The best we can often hope for with such problems is to make things 'better', not 'cured'. Wicked problems are, almost by definition, immune to solution by analysis. The issue isn't that we don't have enough data; it is that no amount of data will shed sufficient light to enable us to solve the problem. We need to be careful not to think that all complex and controversial problems about which people disagree are "wicked" and thus should not be subject to traditional public policy disciplines. These traditions have solved complex problems and will continue to do so in the future.

the willingness to increase future taxes.

People were reluctant to engage with any of these options, although when pressed they preferred means testing. What people will actually do if a government wishes to enact further reforms and whether they get re-elected is beyond the immediate scope of this research. We did not test how respondents' preferences would change if a pensions reform-focused government was in power, nor consider how long such a government might stay in power. The key question is how to enact enduring reforms that will survive across a change of government.

Also not addressed were the potential consequences of means testing, for example the introduction of disincentives for older people to continue working, for "gaming" the system, or the strong preference for assets testing not to include the family home.

In a major review of pension, product market and labour market reforms (OECD (2009)), the OECD set out a useful list of the pre-conditions for successful reform.

Table 6 OECD's pre-conditions for reform

Lesson	Comment
Reform needs an electoral mandate.	Reform "by stealth" has severe limits. Unannounced major reforms are unlikely to succeed unless they can produce visible benefits very quickly, which is unlikely to be the case with retirement savings.
Effective communication is required.	The need to undertake reform must be made, as must the costs of non-reform.
Research and analysis needs to accompany the case for reform.	Pronouncements that reform is necessary, without supporting research and analysis, are unlikely to convince voters. Research presented by authoritative, non-partisan institutions that command trust across the political spectrum appears to have a great impact.
Successful reforms take time.	Retirement income reform is a process, not an event. Making the case for reform can take years, especially if making that case is to involve stakeholders in meaningful debate and discussion.
Government cohesion is key.	Reforming governments must present a united front, especially in the face of concerted criticism.
Government leadership is needed.	While it is possible to undertake reforms through a process of formal consultation between the government, industry, workers and the public, firm leadership by the government is often necessary for reforms to succeed.
Where you start will determine where you end up.	The state of the unreformed policy is a key determinant of the success of reform. If the status quo is clearly in need of reform, then making the case for change becomes easier.
Successful reform requires persistence.	Experience shows that it is very rare for a major reform to proceed perfectly from start to finish. Most reforms suffer setback and unsuccessful attempts before a reform that will endure is arrived at.

Source: OECD (2009)

5.1. The policy window model

One conceptual approach for understanding policy change is provided by the work of John W. Kingdon on 'policy windows'. Kingdon (1995) suggests that for an issue to get on the political policy agenda, three 'streams' must be aligned: the problem stream (is the condition considered a problem?), the policy stream (are there are policy alternatives that can be implemented?), and the political stream (are politicians willing and able to make a policy change?).

When these three streams come together, a window of opportunity is open and action can be taken on the subject at hand.

The Kingdon Model Politically desirable **Political Effective** and technically feasible, but difficult imperative? policy? about the problem **POLICY** WINDOW Politically achievable Technically feasible & publicly popular, but ineffective in and possible with voters, but not "on achieving ultimate message" with the political agenda objectives Perceived problem?

Figure 15 Windows of opportunity

Source: NZIER based on Kingdon (1995)

In the case of retirement policy, the policy stream is well developed. The political stream has been active in Australia but not so in New Zealand over the last decade. We suggest that this reflects the lack of convergence in the problem stream.

The OECD (2009) reminds us that robust research and analysis along with effective communication is important for reforms to succeed. We hope this study contributes to the research and analysis by increasing the understanding about what Australians and New Zealanders believe and want.

6. Reflections on trans-Tasman experiences with retirement income reform

6.1. What are the similarities and differences between New Zealand and Australia?

New Zealand and Australia face the same challenge but have taken different approaches

CAANZ asked NZIER to look at trans-Tasman attitudes to adjusting retirement income policy in light of the fiscal pressure both countries will come under as a result of ageing populations. Both countries face the same fiscal challenge with an ageing population projected to significantly increase the relative cost of superannuation along with the costs of health, residential care, disability support, rental assistance, tax concessions, and other concessions (travel, utility and other discounts).

Both have broad tax bases but have a common vulnerability to any economic slowdowns. And despite very clear Treasury projections in both countries of the fiscal consequences of an ageing population, New Zealand has yet to grapple with the problem in a serious way and Australia is struggling to make the announced changes stick.

Officials and commentators on both sides of the Tasman have pointed to the fiscal consequences of an ageing population. International organisations like the OECD and the IMF have likewise studied the issue, both in general and specifically in relation to both Australia and New Zealand.

Citizens think the government has a solution looking for a problem

We asked citizens in both Australia and New Zealand a series of questions to determine what they think about current retirement income policies options for reform. The result could be summarised as "the government has a solution looking for a problem".

While the Treasury in both countries has argued the fiscal case for reform by successive studies of the long-term fiscal positions of Australia and New Zealand, this case has not resonated with the public in either country. Neither has the intergenerational equity argument that raising the age shares the benefits of the "longevity dividend" among young and old. This was put forward in the 2016 Periodic Review of Retirement Policy in New Zealand (Commission for Financial Capacity (2016)).

New Zealand and Australia have differed in how they have failed to address the fiscal challenge of an ageing population. In Australia, older citizens are widely regarded as suffering from reform fatigue and are sick of constant change. There are strongly held views about increases in the minimum pension age, protection of the family home, and that the Age Pension is an entitlement (the view that "I've paid for it through my taxes").

In New Zealand, the previous Government (following the change from John Key to Bill English as Prime Minister) announced two proposals to offset the increased costs of New Zealand Super by increasing the age of eligibility (from 2037) and the length of residency required before permanent migrants can claim New Zealand Super. This was the first significant announcement of changes to superannuation policy in over a decade (since the introduction of KiwiSaver and moving to part-funding of the New Zealand Super fund). However, the announced changes left unchanged the key driver of fiscal cost – indexation to wages rather than prices.

The 2017 election overturned this policy position and the coalition agreement for the new Labour/New Zealand First government includes a specific provision that the age of eligibility for New Zealand Super will remain at age 65.

6.2. What is blocking discussion?

We need an evidence-based discussion of everyday Kiwis' and Aussies' attitudes to retirement income policy and their openness to policy change. This will contribute to the debate on both sides of the Tasman by increasing the understanding of why changes in retirement policy are difficult to achieve.

We have explored how the landscape will change for retirement policy in Australia and New Zealand because of their ageing populations. The Treasury in each country has done extensive work in this area so there is a robust body of well-established fiscal projections that can be accessed. A range of policy options have been canvassed to offset the increasing cost of the Pillar 1 schemes. This work is well known in policy circles in Wellington and Canberra but has yet to significantly influence the public discourse on retirement policy.

Presentism, the bias against long term policy change, isn't the entire explanation. Policy decision makers in both countries - New Zealand in the 1990s and Australia post GFC - have shown a willingness to make the tough policy decisions on retirement incomes with a view to the longer-term. Both the 2014 Colmar Brunton survey of Kiwis and the 2017 survey of Aussies and Kiwis found a willingness to support change if it is was phased over 10-20 years. For example, in the 2014 poll forty percent of those who *opposed* increasing the age of New Zealand Super would support it if the increase was gradual. Overall support for an increase in the age of eligibility of New Zealand Super improved from 44% to 65% if the increase were gradual.

6.3. What can clear the roadblocks?

Experience in this part of the world and elsewhere shows some clear lessons that we suggest should underlie future work in this space.

The need to undertake reform must be made, as must the costs of non-reform. While the fiscal projections that officials have undertaken have provided valuable information about the fiscal consequences of ageing populations, they have yet to convincingly set out the case that there is a better alternative to the projected future. Why is paying people the level of pension that has been on the statute books for over 40 years a bad thing? "That there will be more old people" is not a compelling answer.

While it might sound self-serving for a research think tank to suggest that more independent research is needed, we think that more independent research that clearly sets out a future scenario that is clearly "better" than the current projections is necessary.

The research, to be effective, needs to address the issue that much government spending, including on retirement income, is of wider benefit, not just to the recipients, but to the communities in which they live. At the same time, the research needs to show that those benefits come at a cost: taxes aren't a free lunch, everybody has to pay.

Scaring the community into begrudging acceptance is unlikely to be effective. Effective communication is required, combined with a meaningful debate and discussion with all the stakeholders (which must, in this case, mean future taxpayers: the children of today will end up paying tomorrow's bills).

More and more compelling evidence about the costs of non-reform is needed, together with active engagement, to build trust, understanding and willingness to consider reform.

Our survey of the opinions of citizens has, we consider, provided the governments of Australia and New Zealand with more information than they have previously had about attitudes to retirement incomes.

While Australians and New Zealanders are aware of the fiscal consequences of ageing, there is no clear agreement about what, if anything, should be done. More targeting of assistance based on needs had some support, but it was hardly overwhelming.

Both New Zealand and Australia need to find a way of moving the public beyond wanting to have it both ways. Our survey showed how faced with rising costs both New Zealanders and Australians were reluctant to contemplate major changes to the Pillar 1 scheme and are divided about tax increases. However, there was a marked willingness to contemplate reform to the age of eligibility and indexation arrangements if the change was phased in over 10-20 years. Further research could usefully take Kiwis and Aussies through a structured process such as a citizen's jury so they can make a more informed choice from amongst the policy options.

Absent a clear social or economic crisis, experience suggests that government needs to be patient in building the case for change and, while providing clear leadership, understand that reform involves playing a long game.

They also need to remember that insanity can be defined as repeating the same mistakes and expecting different results. The information about the fiscal consequences that has been presented for many years by finance ministries on both sides of the Tasman has clearly not convinced politicians or the public that population ageing is a problem that needs to be solved.

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Appendix B Literature scan

Scope and approach

The first phase of the project was a literature scan focused on the existing research on the attitudes of Kiwis and Aussies to retirement income policy. We are interested in attitudes e.g. 'what people think about retirement incomes policies' rather than financial capability 'what they do with their money' or 'how they plan for retirement'.

Our scope included existing research which may have used a range of techniques both quantitative polls (telephone survey, internet poll) as well as more qualitative research (focus groups) and both grey and academic literatures. Because of changes in policy setting our prime focus was on the last decade.

We used a range of search techniques. We started by identifying key papers and then looking for citations for these papers. We augmented this with a key word search to see if we had missed any major references.

Two surveys of New Zealanders' attitudes to retirement incomes policies were identified

In the case of New Zealand, the literature scan identified an unpublished survey commissioned by the Commission for Financial Capability²⁵ (the New Zealand Retirement Commissioner) and undertaken by Colmar Brunton (2014) that investigated Kiwis' attitudes to retirement. The survey results are discussed in some detail in Section 4 above so are not repeated here.

Themes from Treasury working paper

The Treasury working paper (Au et al (2015)) used cluster analysis to explore Kiwis' attitudes to different policy options to the reform of New Zealand Super.

The key feature of the approach that differs from survey approach taken by Colmar Brunton and ResearchNow, is that it estimates people's preferences by asking them to rank two policy options at a time. The research included Pillar 2 options such as making KiwiSaver compulsory which were not included in the ResearchNow survey (available separately).

The key overall headlines from the Treasury study were:

- dominant preference (41.7%) is that the government pension should be provided universally without a means-test
- respondents wanted to avoid future tax increases (2nd preference) but are not opposed to increases in current taxes (prefunding)
- considerable disagreement about the desirability of raising the age of eligibility from 65 to 67, with equal numbers of people either strongly opposed or unconcerned.
- some evidence of self-interested responses (but not large).

In late 2016 the CFFC created the Financial Capability Barometer to assess New Zealanders' financial capability and the impact of the CFFC on financial capability. However, the data from the monitor were not available for this project.

The overall position however masks a wide range of views. Cluster analysis identified five groups of people with distinct preferences:

- 1. Status quo plus making KiwiSaver compulsory
- 2. Raise age plus making KiwiSaver compulsory
- 3. Means-test plus making KiwiSaver compulsory
- 4. Pension minimalists age increase, no compulsion or means testing
- 5. No compulsion.

No corresponding information was available for Australia

We did not identify any corresponding surveys that focused on Australians' attitudes to retirement income policies. We did however identify a range of polls and surveys that included a question or questions on the Pillar 1 retirement income regime. Highlights included:

- age the preferred position is 65 for men and women, only limited support to raise the age of eligibility to 67 (15%); slightly more support to revert to 60/65 (17%) (ANUPoll 2016).
- similarly, in the Freedom Aged Care's (2013) Australian Attitudes to Ageing poll most respondents (58%) opposed the increase in the age to 67.
- amount/funding majority thinks older people getting less than 'fair share', but perceive 'not very strong conflict' (only 18-29s perceived much conflict) (Freedom Aged Care 2013).

Evans and Kelley (2004) used the International Social Science Survey to look at a continuum from no pension/fully private provision to universal pension. (The current pension, with means testing restricting pensions to around 2/3 of the population, was not modelled.) They found:

- strongest support for full pension then contributory pension, with least support for no pension
- declining support for private provision or poverty-based pensions over time (1993 to 2001)
- support for 66% of the average wage (declining over time).

There was a much more information available on Australians attitudes to the Pillar 2 compulsory superannuation. An example would be the ASFA 2011 survey of Australians attitudes to superannuation which highlighted (p 3):

- "having enough money to retire on" was the most important of a list of financial concern of respondents
- the level of satisfaction with superannuation was not high (only 27%)
- two in three respondents supported an increase in the Superannuation Guarantee from 9 to 12%
- most respondents thought that they would need more than \$750k in retirement saving to live comfortably. There is a mismatch between this and reality – only a small percentage of retirees will have this much in retirement saving.