

Ageing populations, retirement incomes and public policy: what really matters

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Michael Littlewood

Co-director, Retirement Policy and Research Centre

University of Auckland¹

Abstract

When setting public policies on retirement incomes, governments should focus on objectives they have a unique capacity to influence. Only governments can reliably eliminate poverty in old age, level the tax and regulatory playing fields for financial service providers/savers and gather impeccable, deep data. They can also help citizens to understand the things that really matter to individual saving decisions. Governments should avoid trying to influence or direct private provision for retirement by tax breaks or compulsion ('hard' or 'soft'). That those common interventions seem not to work is only one of their many shortcomings. Then, citizens and employers should make their own decisions about financial provision for retirement.

1. Introduction

The issues are familiar; so familiar that they scarcely need repeating. Populations everywhere are ageing. Some countries have become rich before they are old; others will be old before they are rich and probably face the greatest challenges.

Those above the state pension age will about double in number, as will the annual cost of the pensions they expect to receive. Those under pension age may increase in number but will reduce as a proportion of the population. That demographic shift may see relative falls in real economic output, tax collections and growth prospects.

Healthcare costs are expected to follow an even more marked trajectory as pension costs. It seems that a perfect financial storm might unfold over the next two to three decades.

All this has encouraged what might be called age catastrophism. Now that the baby boomers are retiring, it seems like a downhill slide to national, even international penury.

This article is about pensions and describes a policy framework that embraces public and private provision for any country wishing to install an equitable, sustainable retirement income system. Australia and New Zealand offer lessons on what countries should and should not use.

2. Some framing issues

It is relatively easy to see that public pensions are claims on the economy, especially if they are financed on a 'pay-as-you-go' (PAYG) basis. A government's capacity to pay those pensions depends on its ability to collect tax and redistribute that to the qualifying old. Economic output is directly connected to a country's capacity to support the old: the stronger the economy, the greater that capacity.

¹ Michael Littlewood was a senior consultant in London and Auckland for what is now Towers Watson. He was then Employee Benefits Director at Fletcher Challenge Limited, founder-director of what is now SuperLife (www.SuperLife.co.nz) and helped start the Retirement Policy and Research Centre (www.RPRC.auckland.ac.nz). He was a member of the government's 1991-92 Task Force on Private Provision for Retirement, is the author of *How to create a competitive market in pensions – the international lessons* (IEA, 1998) and is the principal editor of www.PensionReforms.com.

The connection is indirect but just as evident with private provision. Saving for retirement involves setting aside money during the accumulation period. That is invested in the economy; returns are added and again set aside. At retirement, the collection of economic claims (savings) is converted to cash to support the retiree's income needs. Selling those investments requires a buyer who will pay a price that is related to the value of those claims. Again, there is a deep connection between that value and the strength of the economy at the time they are converted to pay for loaves of bread, milk and the other things that pensioners need.

There is no significant economic difference between public and private provision. For today's retirees, both types entail claims against today's economic output to support consumption by today's pensioners. The overall 'affordability' of any retirement income system is therefore directly related to the strength of the country's economy at the point of payment. For today's pensioners, that means now; for pensioners in 2040, it means the strength of the 2040 economy.

The total size of retirees' entitlements represents output that must be effectively delivered to them by workers and other producers of the day. Whether through redistribution (PAYG pension) or by converting financial savings, pensioners must have money in their bank accounts to meet their living expenses.

The economy has ways to adjust the real value of claims that taxpayers (public pensions) or citizens ('private' claims) expect to receive if those claims are deemed 'excessive'. For example, the real value of 'private' claims can be adjusted downwards by unexpected inflation or falls in the value of investments. 'Public' claims can be reduced by changes to the pension rules. Again, those adjustments occur in the contemporary economy, regardless of the way the claims have been accumulated or are accounted for. In that regard, private claims are no more secure than public claims.

Healthcare costs are also claims on the economy and both public and private costs are expected to increase even more markedly with ageing populations.

A government must balance the competing claims of the young, workers, the old and claims for all the other things governments do such as policing, defence, infrastructure-development etc. With a stronger economy, more is possible in all these areas.

It may seem that an individual saver can defer consumption (by saving) and so 'store up' claims against tomorrow's economic output. But what actually happens is that the saver converts the possibility of consumption today into a different form of claim on today's economy (a bank account, retirement saving account, a listed share or government bond). Whether that new claim can be realised to support the saver's lifestyle in retirement depends on the strength of the economy in each year up to and in retirement.

Whole countries cannot defer consumption by 'saving' for their citizens' future retirement². What they can do is re-arrange economic claims in today's economy. And the way those are re-arranged for retirement incomes doesn't much matter: whether they are public or private, defined contribution or defined benefit, pension or lump sum, pre-funded or PAYG. However, what they are 're-arranged into' matters greatly.

² A concept proposed by Nicholas Barr in *The Economics of the Welfare State*, Stanford University Press, 1987.

Faced with ageing populations, policy settings that encourage growth are more constructive than settings encouraging or even requiring particular forms of economic behaviour. Underpinning calls for compulsory private provision ('save-as-you-go' or SAYG) is the feeling that with greater levels of private provision, there would be more investment and greater growth. In fact, each of the links between savings, investment and growth is, at best, equivocal. More savings may (but may not) lead to greater investment while greater levels of investment may (but may not) lead to growth. The direct link then between savings and growth is even more tenuous. The evidence from empirical studies is mixed at best and even the direction of causality is unclear; it may be that higher growth leads to more savings as incomes rise. On the other hand, excess savings (low consumption) have even been known to lead to economic recession³.

Growth is central to a country's capacity to cope with growing numbers of pensioners. Whenever there are discussions about retirement income policies, at the bottom of every page should be the question: 'How will this policy help the country grow more than alternatives do?'

The final 'framing issue' is that populations respond to incentives. It's unlikely that whole populations are not 'saving enough for retirement', for example. It's quite possible they are saving in ways that a government might not approve of. Even where saving is supposed to be 'compulsory', large sections of the population avoid the mandate, legally or illegally. We must also expect people to maximise tax advantages or their claims to means-tested pensions. Regardless of a country's policy objectives, people attempt to adjust their behaviour to offset or avoid government rules that they decide are not in their best interests. As we shall see, they often succeed.

Tiers (pillars) of pensions

The architecture of a country's pension arrangements can be expressed in a shorthand of 'pillars' or 'tiers'. Of many definitions, the World Bank's 1994 explanation seems the most helpful:

- (1) Basic pension that is always defined benefit. This flat pension is sometimes universal (the same amount for all older persons), but is mostly reduced because the person has too few years of residence, insufficient contributions, too much income from earnings-related pensions, too many assets, or too much income in general (individual or family).
- (2) Earnings-connected pension (defined benefit, defined contribution or notional defined contribution; public or private; pre-funded or PAYG) with mandatory contributions – this can include a lump sum benefit, as in Australia.
- (3) Voluntary retirement savings, either workplace-related or individually arranged. This includes all other activities that might help to prepare someone financially for retirement – saving in a bank account or by direct investment, building a business, reducing debt etc.

'Tiers' rather than 'pillars' describe more naturally the way that entitlements arise.

3. A central proposition

The last few paragraphs might suggest that governments are relatively powerless when trying to affect individual behaviour with respect to retirement incomes. That is far from the case. When governments think about public policy issues associated with retirement incomes, they should focus on things they have a unique capacity to influence. There are four main ones:

3.1. Reducing poverty in old age: Only governments can directly reduce or even eliminate poverty in old age through public policy interventions. Only they have the power to tax and re-distribute. Collecting tax from everyone today and spending that on pensions for the current old is an example. A government cannot rely on private markets to satisfy this basic objective of public policy, or even 'force' private compliance with strategies that attempt to achieve that objective.

³ Increasing the size of private claims on the economy, in the absence of growth, may actually worsen affordability issues associated with ageing populations.

3.2. Codes of conduct: Next, only governments can regulate to enforce codes of private (and public) conduct. For example, in a retirement saving context:

- Investment offerings to the public need regulating to ensure investors and experts know what they need to know. Similar offerings should be regulated similarly.
- There should be minimum reporting standards so that investors are told about their investments in a complete, comparable, accessible and timely manner. Again, there must be consistent treatment across different investment classes.
- Investment vehicles with similar characteristics should be taxed similarly. What they are called or the legislation under which they operate should not be relevant to their tax liability, nor to the tax liability of those who use them.

3.3. Impeccable, accessible data: Next, only governments can demand access to data that is relevant to behaviour and issues connected with financial preparation for retirement and with the living standards of the old. The government must collect, produce and disseminate impeccable, deep, accessible information on population trends, saving and investment behaviour and poverty issues associated with ageing.

3.4. Information and education: Lastly, a government can help citizens understand the issues through information and education programmes. For private provision, these should cover both the saving ('accumulation') and spending ('decumulation') periods of individuals' financial lives. The programmes can be part of a school-based curriculum, work-based initiatives and public campaigns⁴. League tables of comparable investment performance data⁵ and 'best buy' consumer comparisons should be part of those. Citizens are more likely to believe information from a disinterested party, like the government, than from financial service providers. To build confidence, the government should regularly (say, every five years) openly review the retirement income framework, covering both public and private provision. Such reviews will depend on the data described in paragraph 3.3.

Governments have other, more general responsibilities that affect retirement incomes: for example, selling price-indexed bonds or following policies that keep inflation low so that savers can be more confident of earning real returns during the long deferral periods involved with private provision for retirement.

With specific regard to retirement income policies, governments that use the four tools outlined above will build a policy framework to support citizens' decisions about whether they need to save more for retirement, when they should do that and finally, help them answer the 'how?' and 'how much?' questions. Those are not questions for governments to answer; only individuals, perhaps with their employer's direct help, can do that.

⁴ Financial literacy programmes should be part of this: see, for example *Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel* (2007), Annamaria Lusardi and Olivia Mitchell, Michigan Retirement Research Center (accessible [here](#)). Such programmes have much wider potential uses than helping people understand their retirement planning needs.

⁵ For example, investors should have ready access to net, real returns across all comparable offerings on a regular, say, monthly basis over the last 5, 10, 15 and 20 years as well as for the current year. Similar comparisons of fees would also be informative. A public agency will be the most effective source of that data and the collection and comparisons should be subject to regular, public review.

The suggested framework will also help build and maintain public confidence in the government's strategy. That confidence must survive over decades as citizens make saving and investment decisions and eventually draw down their savings in retirement.

Any deeper government involvement must make assumptions about what individuals 'need'. It also makes a retirement income framework more complex and so builds barriers to understanding. That increases the risks of policy failure. For example, the line between saving and greater retirement income security should be clear and direct. Savers need to be confident they will be better off if they decide to save. They must trust the information they use in their decisions and be confident that the ways they choose to administer those savings are what they say they are and do what they say they do.

Before describing the practical implications of the suggested framework, we need to understand what governments cannot do.

4. What governments seemingly cannot do

International evidence suggests some natural limits to a government's powers. All developed countries have complex rules that use the tax system to identify and encourage 'appropriate' retirement saving behaviour. An increasing number of countries cannot trust their citizens at all and force them to set aside financial assets in compulsory, pre-funded Tier 2 schemes⁶.

Governments can undoubtedly influence the make-up of household balance sheets but the real question is whether they can improve levels of financial assets; even whether they can justify attempts to do so. The evidence suggests that governments face an uphill struggle to rationalise the following two key interventions:

4.1. Forcing people to save for retirement:

The compulsory, defined contribution Tier 2 scheme, adopted by Chile in 1981, copied by Australia in 1986 and by many other countries since, tries to force citizens (and their employers in some cases) to set aside financial claims and to lock those up until the state pension age⁷. From then, there are varying degrees of control on what Tier 2 savings can be used for and usually close links between the Tier 2 benefit and the Tier 1 pension. These vary from a direct offset (Sweden) to a complex array of income- and asset-tests that embrace most financial assets, including the Tier 2 accumulation (Australia).

There are three sets of difficulties with the kinds of arrangements promoted most notably by the World Bank in 1994⁸:

⁶ Tier 2 schemes also include PAYG, defined benefit arrangements like US 'Social Security' and publicly administered occupational schemes that are common in Europe, such as in France and Germany. These are different in character to the Chilean/Australian pre-funded schemes. This paragraph 4 focuses on the implications of the Chilean/Australian model for the policy framework described in paragraph 3. Paragraph 5.2(e) below suggests that governments should not have Tier 2 schemes at all, whether pre-funded or not.

⁷ In fact, Australia allows access to the compulsory savings before the state pension age. Currently the 'preservation age' is age 55, increasing to age 60 by 2024. This 'gap' encourages Australians to retire before the state pension age (currently age 65, increasing to age 67 between 2017 and 2023). The Australian government has announced in the 2014 Budget that the state pension age will further increase to age 70 by 2035 (see [here](#)).

⁸ *Averting the Old-Age Crisis – Policies to Protect the Old and Promote Growth* (1994) The World Bank; later refined into a 'five pillar' model in *Old-Age Support in the 21st Century – the World Bank's Perspective* (2005) by Robert Holzman and Richard Hinz.

- Controlling human behaviour over as many as seven decades - from first employment to death in retirement – is probably too difficult. It starts with convincing everyone to join. Success here seems correlated to a country's overall governance standards: the higher those standards, the more likely it is that 'compulsion' means everyone joining. The World Bank itself concludes that this defining characteristic of Tier 2 schemes seems not to be working in most of Latin America⁹.
- 'Compulsory' Tier 2 schemes inevitably require thickets of regulations that become more complex over time. There is so much to control and so many who might prefer to do something else; and they are constantly thinking of new ways to avoid Tier 2 or to mitigate its effects.
- Given the natural propensity of individuals to set their own objectives and timetables, even if the Tier 2 scheme successfully captures the memberships and mandated contributions, the rules cannot prevent members' changing their other behaviour to compensate. Australia provides good examples of this. First, the income/asset-tests that link Tier 2 (and all other assets) to Tier 1 are numbingly intricate and intrusive¹⁰. Next Australians seem to arrive at retirement with greater debt, having effectively 'pre-spent' their retirement savings¹¹. Australians also seem to retire early to collect their Tier 2 saving accounts¹² and spend those before the means-tested Tier 1 pension starts¹³. There is no way for governments to control offsetting financial behaviour. If governments want the Tier 2 scheme to increase self-provision for retirement, we should expect evidence that is in fact happening. Counting the money in the Tier 2 scheme's accounts (an approach favoured by financial service providers) does not tell us what is happening to household wealth¹⁴.

Whether or not existing compulsory, pre-funded Tier 2 schemes increase household savings (or even national saving) should be a central question asked by countries that are considering such a scheme. Countries *with* such a scheme should ask the same question. The answer is very likely to be equivocal and will probably fail to justify compulsory private provision as a public policy plank.

⁹ "...nearly half the countries have coverage rates below 30%" - from *Closing the Coverage Gap – Role of Social Pensions and Other Retirement Income Transfers* (2009), Robert Holzman, David Robalino and Noriyuki Takayama (accessible [here](#)).

¹⁰ Australian authorities require information from each pensioner on a regular basis: see [here](#) for the assets test and [here](#) for the income test.

¹¹ People should reduce overall debt as they approach retirement. That seems not to be the case in Australia. In the eight years to 2012, retirement savings among 50 to 64 year-olds grew 48%, other financial assets by 3% and real estate assets by 58% *but* property debt increased 123% and other debt by 43%. By ages 60-64, debt was 42% of retirement saving balances: see *Household savings and retirement – where has all my super gone? A report on superannuation and retirement for CPA Australia* (2012) by Simon Kelly.

¹² The OECD estimates that Australia's 'effective retirement age' in 2009 was 64.8 (males) and 62.9 (females). By contrast, New Zealand's was 67.1 (males) and 65.0 (females): see *Average effective age of retirement in 1970-2009 in OECD countries* (2010) accessible [here](#). The Australian Bureau of Statistics reported in December 2013 that the "...average age at retirement for recent retirees (those who have retired in the last five years) was 61.5 years." Men's average was 63.3 and women's 59.6 (see [here](#)).

¹³ The post-retirement asset test in Australia also leads to an 'over-consumption' of housing services as the primary residence is exempt under the test: see *Residential Transition Amongst the Australian Elderly* (2007), John Piggott and Renuka Sane, Australian Institute for Population Ageing Research (accessible [here](#)).

¹⁴ A 2006 household wealth comparison between Australia and New Zealand shows that Australians have higher proportions of wealth in retirement saving accounts (19.1% in Australia and about 4% in New Zealand) but much less in 'business investment' (7.6% in Australia and 22.2% in New Zealand): see *Household wealth in Australia and New Zealand* (2010), RPRC *Pension Briefing 2010-5* (accessible [here](#)).

Governments need clarity around the objectives of such an intrusive strategy. If the real problem is the likely future cost of the Tier 1 pension, that should be addressed directly, leaving citizens to decide what cuts might mean for them. Compulsory Tier 2 schemes may improve the depth of capital markets and that may have been justification enough for Chile's scheme in 1981 but the risk is that Tier 2 is captured by the financial services sector. The current level of compulsory contributions is unlikely ever to be considered 'enough' by that sector.

4.2. Encouraging saving through tax incentives: While governments can certainly influence the ways in which people save for retirement, they seemingly cannot incentivise people to save more for retirement than they want to save. Tax-favoured Tier 2 (compulsory) or Tier 3 schemes (voluntary and occupational) may see more financial assets accumulated than in the absence of such schemes but again, savers can and do change other aspects of their behaviour.

A set of acronyms summarises the tax treatment of financial assets, particularly in a retirement saving context. There are three main movements of money:

- **contributions:** 'T' means that contributions to the scheme come from after-tax income; 'E' that contributions reduce *taxable* income before tax is deducted; also, in the case of occupational schemes, that the employer's contributions are not deemed part of the employee's taxable pay.
- **investment income on the accumulation:** 'T' means that invested assets are taxed with the saver's other income; 'E' that the assets accumulate tax-free.
- **benefits received:** 'T' means that benefits are taxed as income in the year of receipt; 'E' that benefits are exempt from tax in the recipient's hands.

Most countries treat retirement savings on EET principles – contributions are deductible or directly subsidised through the tax system and, for employees, not deemed to be part of pay (E); there is no tax on the saving scheme's investment income (E) and the final benefits (usually pensions) are taxed as income (T). In an *expenditure tax* environment, EET is relatively neutral.

That's because if the government relied entirely on expenditure taxes, taxes are collected when the savings and all other assets are spent. However, in a world where most government revenue is collected from taxes on income, EET is highly favoured¹⁵. Such a strategy must therefore be designed to encourage greater self-provision for retirement and, impliedly, to reduce pressure on future government-delivered age pensions.

TTE is a 'neutral' treatment in an *income tax* environment. A bank account is a convenient example: savings into the account come from after-tax income (T); interest earned on the account is added to the saver's other taxable income (T) while withdrawals from the account are exempt (E). They are not really 'exempt'; they are withdrawals of tax-paid capital.

¹⁵ In New Zealand, about 60% of tax revenue was income tax in the 2011/12 year: see *Briefing for the Incoming Minister of Revenue – 2013*, Inland Revenue (accessible [here](#)). Only 27% was through expenditure tax.

Countries have different shades of these mixtures and usually run both together. Financial savings that are locked up for retirement may be EET while accessible bank accounts (another potential part of the retirement savings fabric) are TTE. There may also be reduced tax on 'retirement' accounts. Australia has 'ttE'¹⁶ which means lower levels of tax on contributions and investment income but, overall, retirement saving schemes are greatly favoured by comparison with, say, bank accounts. On generous assumptions, Australia's ttE is broadly equivalent to the more usual EET.

Of the three money movements, the tax treatment of the investment accumulation is the most significant. This reflects the power of compound interest over the very long periods involved in the accumulation and decumulation periods and the difference between pre- and post-tax returns. Even small differences between pre- and post-tax returns create large differences in the size of the retirement accumulations. Because of the relatively shorter decumulation period, even if all the benefits were taxed at the retiree's top personal tax rate, the government will never recover the value of the concessions given on contributions to the scheme and investment income earned on the accumulating savings¹⁷. That makes tax incentives for retirement saving very expensive, especially over the long run¹⁸. That is not their only difficulty:

- (a) **Tax incentives are regressive:** The rich can afford to contribute more and so capture most of the value of the concessions¹⁹. Poorer taxpayers, who cannot afford to save, help pay for the cost of the tax concessions.
- (b) **Regulations are complex:** Savings that attract the concessionary treatment must be kept under EET for decades so the regulations that control the money's entry, accumulation and exit are necessarily intricate. As individuals game the system, the regulations inevitably become more complex and more expensive to administer.
- (c) **Distortionary:** Tax concessions 'label' a particular form of behaviour as preferable to other equivalent behaviour. EET-approved retirement saving schemes are seemingly better for savers than, say, a bank account that retains the TTE treatment. Advocates for tax incentives should show why locked-up savings are better for a country than accessible equivalents²⁰.

¹⁶ Ross Guest in *Comparison of the New Zealand and Australian Retirement Income Systems* (2013) accessible [here](#) summarises the tax treatment: in Australia, contributions are taxed at a flat rate of 15% to an annual cap of \$A25,000. Investment income is taxed at a rate that probably averages 8% and benefits are tax-free if withdrawn after age 60. The lowest individual marginal rate of income tax is 19% after a tax-free band of \$A18,200.

¹⁷ In *How to create a competitive market in pensions: the international lessons* (1998), Institute of Economic Affairs, London, I explain the mathematics behind this suggestion.

¹⁸ Not many countries count the cost of tax incentives for retirement saving. In 2009, Australia spent almost as much on tax incentives (\$A24.6 bn) as it spent on the entire Tier 1 'Age Pension' (\$A26.7 bn) – see *The great superannuation tax concession rort* (2009) by David Ingles, The Australia Institute (accessible [here](#)).

¹⁹ David Ingles (*op cit*) suggests that in Australia, "The current concessions provide almost no benefit to low-income earners." Again: "The system has become so skewed that the annual cost of providing superannuation tax concessions to high-income earners is much greater than the cost of simply paying those same individuals the age pension. Providing tax concessions for superannuation as a mechanism to help insulate the budget from the cost of providing for an ageing population is not sensible."

²⁰ Some suggest, for example, that "The concessional taxation of superannuation [retirement savings] is...intended to address the bias in the current taxation system against long-term saving." *Submission to the Financial System Inquiry*, The Department of the Treasury, Australia, 3 April 2014 at page 44 (accessible [here](#)). This presumes a public policy interest in the relative quality of long-term savings ('better') than

Tax incentives also distort ‘signals’. Fund managers should aim to deliver real returns (more than inflation) to savers. That task is much easier under EET by comparison with an environment where all ‘income’ is taxed. Coupled with the fact that EET savings are locked-in until retirement, fund managers do not have to work as hard to achieve real returns.

Also, savers themselves do not capture the full value of EET concessions. Savers can afford to be less sensitive to the fees charged by managers of EET savings compared with their TTE equivalents. That special treatment increases the risks of capture by managers and promoters. Locking EET savings up until retirement increases those risks.

- (d) **Inequitable:** As with compulsion at Tier 2, a policy driven by work-based income necessarily favours higher income earners. This is a separate point from the regressive nature of tax concessions (paragraph (a)). Those with higher rates of pay increases and more complete working lives tend to save more when saving rates are set in relation to pay. They arrive at retirement with larger retirement accumulations both in money terms and as a proportion of pay. Tax concessions that favour occupational schemes tend to institutionalise these inequalities.
- (e) **Other ‘hidden’ difficulties:** Space precludes an explanation of two other less obvious costs. First are the ‘deadweight’ losses to the economy of collecting the extra taxes needed to finance the more fiscally expensive, front-loaded EET environment. These costs reflect the value of the opportunities that are effectively lost when taxation diverts labour and capital from their best uses. Next, individuals face costs through a loss of flexibility. Savings might be better spent from a lifetime perspective on an earlier financial crisis (such as a health condition) or on a more productive investment, such as buying and building a business or reducing debt. Compulsory private provision at Tier 2 faces parallel difficulties.
- (f) **Do they work?** Given that all countries have tax concessions for retirement saving, we might expect studies that demonstrate the ‘value for money’ test. Do tax incentives actually increase savings? The answer is ‘possibly not’ despite very large sums that accumulate in tax-favoured schemes. It’s very difficult, perhaps impossible, to work out because we do not know what might have happened in the absence of the incentives; what economists call the ‘counter-factual’²¹. Some studies suggest the overall impact on the quantum of savings and national saving rates is doubtful²².

short-term savings (‘worse’). Expected after-tax returns on savings, from a timing perspective, should be for savers and investors to decide, not governments.

²¹ Spain introduced tax incentives for retirement saving in 1988. A report on household behaviour across their introduction conclude that “at most” only one quarter of the contributions were ‘new’ savings: see *The Effects of the Introduction of Tax Incentives on Retirement Savings* (2007), Juan Ayuso, Juan Jimeno and Ernesto Villanueva, Banco de España (accessible [here](#)). That analysis took no account of the cost to the tax system of lost revenue.

²² Alicia Munnell in *Current taxation of qualified pension plans: has the time come?* (1992) Federal Reserve Bank of Boston (accessible [here](#)) suggests that the costs of deferring tax on pension accumulations aren’t justified. Instead, the “taxation of benefit accruals should be shifted to a current basis.” In *Tax Incentives to Saving and Borrowing* (2003), Tullio Jappelli and Luigi Pistaferri say “...there is considerable empirical debate as to the effectiveness of tax incentives in promoting saving: most studies conclude that tax incentives affect the allocation of household portfolios, but the effect on the amount saved is less clear-cut.” In *The Effects of 401(k) Plans on Household Wealth* (2000), Eric Engen and William Gale suggest that, without regard for the

In fact, if households as a whole were *perfectly* rational, they would allow for the value of tax concessions when setting target retirement saving levels. The annual amounts required to meet a given target are less. We should therefore expect lower annual levels of household saving in a tax-favoured EET environment than under TTE because of the large value of the concessions in a lifetime's saving project. Given that tax breaks seem not to 'improve' the quantum of savings, the expensive, complex concessions in an EET environment arguably become pointless.

As a result, while tax policy (or a matching contribution that has similar characteristics to a concession) encourages contributions to a retirement saving vehicle (public, occupational or retail), we should expect EET-based incentives to have little effect on national saving. Paragraph 5.1 suggests an alternative use for the current cost of tax incentives.

Inter-country comparisons are very difficult but two such attempts (one between Australia and New Zealand²³; the other between Australia and Germany²⁴) suggest that individuals come to similar overall conclusions about private provision after allowing for state intervention of all kinds. Private responses tend to be a balancing act.

The comparison between Australia and New Zealand is particularly interesting. Australia has a complex set of policies that directly affect private saving behaviour with significant tax breaks, compulsion and an intricately income- and asset-tested Tier 1 benefit (the 'Age Pension'). New Zealand had, until the date of the comparison (2006), a TTE tax treatment of retirement savings, no compulsion and a universal Tier 1 benefit ('New Zealand Superannuation'). Despite these large differences, households as a whole had reached quite similar destinations as to the proportion of financial assets held in their balance sheets in 2006. That comparison did not include the value of Tier 1 benefits; had it done so, the resources expected to support households' future retirement incomes (both public and private) would probably have favoured New Zealand, given the means-tests on Australia's Tier 1.

Just as individuals adjust their behaviour in response to public policy interventions, so too do financial service providers. However, what's good for providers is not necessarily good for the country²⁵.

fiscal and regulatory costs, "between 0 and 30 percent of 401(k) balances represent net additions to private savings." If the fiscal and regulatory costs were also included, those percentages might turn negative.

²³ The 2006 household wealth comparison between Australia and New Zealand already referred to (*Household wealth in Australia and New Zealand* (2010), RPRC *Pension Briefing 2010-5* accessible [here](#)) suggests that across all households, Australians had 'financial assets' that were 50.5% of all net household wealth. Despite very different public policy settings in New Zealand, financial assets were 49.4% of total net assets.

²⁴ In *Living Standards in Retirement: Accepted International Comparisons are Misleading* (2011), Melbourne Institute, (accessible [here](#)) Joachim Frick and Bruce Headey conclude that "After many gyrations, our final estimate is that Australian and German retirees have almost exactly the same standard of living [in retirement]." The differences in public policy settings between these two countries could not be more marked.

²⁵ In *Reassessing the impact of finance on growth* (2012), Stephen Cecchetti and Enisse Kharroubi of the Bank For International Settlements (accessible [here](#)) suggest that "...the level of financial development is good only up to a point, after which it becomes a drag on growth. Second, focusing on advanced economies, we show that a fast-growing financial sector is detrimental to aggregate productivity growth." The tipping point seems to be about 6.5% of real GDP per worker. Australia's is more than 11%.

In 1992, New Zealand's Task Force on Private Provision for Retirement²⁶ decided that, of three main public policy levers that governments might apply to retirement savings:

- (i) **Tax incentives** were the worst, for the reasons already described (expensive, complex, regressive, distortionary, inequitable and ineffective).
- (ii) **Compulsion** was slightly better because it applied to everyone - at least, to all employees. However, compulsion shared many of tax incentives' problems (expensive, complex, distortionary and inequitable) but might increase retirement wealth²⁷.
- (iii) **Voluntary private provision** was by far the best strategy because it allowed savers to make the decisions that best suited their circumstances over time. The combination of all those individual decisions was more likely to produce better outcomes for the economy than the alternatives. If economic growth is central to a country's future capacity to cope with ageing populations (see paragraph 2 above) voluntary private provision was more likely to achieve that than either tax breaks or compulsion.

The government adopted the report's recommendations so for about 20 years (1987 to 2007), the policy focus was on helping New Zealanders to understand retirement saving issues²⁸. The TTE tax framework continued until 2007, when KiwiSaver²⁹ started. A series of reports suggests that New Zealanders responded quite rationally to that framework³⁰.

In the meantime, Australia's complex system has become progressively more complex with numerous reviews suggesting further controls, higher compulsory contributions or even that the whole structure may need more sweeping reform.

5. Key policy planks

The above analysis suggests governments should avoid policies that attempt to directly influence private saving behaviour. Instead, they should focus on the four key areas where governments have a unique capacity to change things (see paragraph 3 above).

5.1. Addressing poverty in old age - the Tier 1 pension: The government must first gather data on poverty levels amongst the old. Defining 'poverty' is not easy. Traditional definitions of relative poverty (measured against local average or median incomes, before or after housing costs) are less useful than deprivation measures – what the old cannot afford but need to pay for if they are to maintain a reasonable standard of

²⁶ I was a member of the Task Force. Its final report *Private Provision for Retirement – The Way Forward* (1992) is accessible [here](#).

²⁷ As an aside, it seems illogical for savings in compulsory Tier 2 schemes to be tax-favoured as in Australia. If citizens are forced to save at Tier 2, they do not need the 'encouragement' of incentives.

²⁸ The Retirement Commission (now called the Commission for Financial Literacy and Retirement Income) was established as part of that – see www.cflri.org.nz.

²⁹ KiwiSaver started on 1 July 2007. It was intended to be a simple, national, auto-enrolment, opt-out retirement savings scheme with only limited tax incentives (a \$1,000 'kick-start' and \$40 a year to pay for administration fees). However, seven weeks before it began, a significant layer of tax subsidies was added. Subsequent changes have reduced those somewhat.

³⁰ See for example: *Household Wealth and Saving in New Zealand: evidence from the longitudinal survey of family, income and employment* (2012) by Trinh Le, John Gibson and Steven Stillman, New Zealand Economic Papers (accessible [here](#)); *Saving Rates of New Zealanders: A Net Wealth Approach* (2009) by Grant Scobie and Katherine Henderson, New Zealand Treasury (accessible [here](#)) and *Are Kivis saving enough for retirement? Evidence from SOFIE* (2009) by Trinh Le, Grant Scobie and John Gibson, New Zealand Economic Papers (accessible [here](#)).

living. Deprivation measures will vary across countries and perhaps even across communities. Once we agree what the old need, public policy should aim to deliver sufficient income to meet those basic needs.

The only reliable way of meeting deprivation measures of poverty is a truly universal pension – this is an annual income paid to all the old. The simpler the pension and the easier it is to claim, the more likely is it to achieve universality. Any other strategy will mean that at least some of the old will be left in deprivation. That should be unacceptable.

The size of the pension will be the amount needed to eliminate deprivation. The cost to the country will be that annual amount multiplied by the number of the old entitled to receive it. If the resulting cost is thought to be too high, the controlling variable is the starting age (the ‘state pension age’). The initial calculations should use different ages to illustrate the fiscal implications and should look forward over decades to estimate the likely future cost trends. When the universal pension starts, citizens need confidence that the pension will be there when they reach the state pension age so they can build appropriate private provision at Tier 3. That financial planning must function over decades as individuals accumulate and then run-down their savings.

Building public confidence is an important part of the retirement income framework. Having established the ‘threshold’ needed to meet Tier 1’s objective, the annual amount should be linked to either prices or, preferably, average wages to preserve its real value between major updates.

The government decides the total it will spend on Tier 1, taking account of the political and economic issues covered in paragraph 2. That is a political decision. Survey data will suggest the pension’s minimum annual amount and the choice of the state pension age will drive the total cost. New Zealand Superannuation³¹ currently costs a net 4.1% of GDP, is expected to cost a net 6.7% by 2060³² and is probably the most expensive *universal* (Tier 1) pension in the world³³. Poverty rates amongst the old are low: in 2004, just 7% of the age 65+ population were below the relative income test based on 60% of the after-housing-costs, ‘fixed line’ threshold and only 4% of the over-65s using a deprivation test³⁴.

³¹ New Zealand Superannuation is a net 66% of the net national average wage for a couple (half each) grossed up for income tax to \$NZ33,200 a year before tax at 1 April 2014. A single person living alone receives about two-thirds of that: \$NZ21,932 a year. The pension is taxable income. New Zealand’s nominal GDP per capita was \$NZ45,769 at 31 March 2012 (see [here](#)).

³² The government’s latest estimates (from the May 2014 Budget) are contained in the *New Zealand Superannuation Fund Contribution Rate Model* that is accessible [here](#).

³³ The OECD’s *Pensions Outlook 2012* (at p.210) reports gross public pension costs (at Tiers 1 and 2) at 2010 and estimated costs at 2060. In many cases (as in Australia) gross costs are the same as net costs because pensions have different tax treatment from other, private, income. Of the 31 countries reporting for 2010, 23 of them already pay more in 2010 than the net cost New Zealand expects to pay in 2060. The OECD 28-country average for 2010 was 9.3%. This, however, is an under-estimate because government-mandated contributions to pre-funded Tier 2 accounts are deemed private, not public costs, even when, as in Mexico and elsewhere, ‘pre-funding’ must be used to buy government bonds (increasing the size of public debt).

³⁴ See *Household Incomes in New Zealand - Trends in Indicators of Inequality and Hardship 1982 to 2004* (2007), Bryan Perry, Ministry of Social Development (accessible [here](#)). By 2008, however, the income-based measure had worsened from 7% in 2004 to 14% (see *Household Incomes in New Zealand - trends in indicators of inequality and hardship 1982 to 2008* (2009), Bryan Perry, Ministry of Social Development (accessible [here](#)). By 2012, the position had improved again: to 6% of all over age 65 in “low income households” – see *Household Incomes in New Zealand - trends in indicators of inequality and hardship 1982 to 2012* (2013) Bryan Perry,

At the other end of the scale, a 2011 International Labour Organisation report suggested that “...the cost of abolishing extreme poverty in old age by providing a basic universal pension equivalent to US\$1 per day to all people over the age of 60 would amount to less than 1 per cent of gross domestic product (GDP) per annum in 66 out of 100 developing countries.”³⁵

If the government withdraws all tax incentives for retirement saving (see paragraph 4.2 above), the new universal pension may not increase the current fiscal costs of pensions to taxpayers and may even reduce them³⁶.

5.2. Other considerations: Space precludes a complete analysis of all the design issues associated with the universal pension at Tier 1. Here are some notes:

- a) **Setting the state pension age:** In setting the state pension age, the government should take other issues into consideration, not just the cost of Tier 1. For example, the state pension age affects labour participation rates and the retirement decision³⁷. Also, increasing the age will have consequential costs for the rest of the welfare system as it will inevitably increase the numbers needing income and other support in the years before the new age. The age should be directly set, rather than complicated by demographic indexation, as some suggest. Again, this is part of having a direct ‘line of sight’ for savers between the saving decision and the private retirement benefit, perhaps many decades out³⁸.
- b) **Income- or asset-tests:** Arguably, the new Tier 1 pension should not be paid to those who on any reasonable measure do not need it. As with other social welfare benefits, that suggests a means-test for the Tier 1 pension.

However, there are several problems with such tests: first, they are complicated and require an extensive, expensive bureaucracy to administer them. Next, means-tests invite avoidance activities and other rational responses so have many of the same consequences of tax incentives as pensioners aim to improve their spendable incomes by reducing the amounts ‘lost’ to the means-test³⁹. Thirdly,

Ministry of Social Development (accessible [here](#)). That volatility illustrates the close relationship between the 60% of income measure and the annual amount of New Zealand Superannuation; also that many old people have little private income. We should expect less volatility in deprivation-based measures.

³⁵ *Social Protection Floor for a Fair and Inclusive Globalization* (2011), Michelle Bachelet *and ors*, International Labour Organisation (accessible [here](#)).

³⁶ David Ingles and Richard Dennis, in *Sustaining us all in retirement – The case for a universal pension* (2014) The Australia Institute (accessible [here](#)), suggest that removing tax concessions in Australia for retirement saving (at Tier 2 and Tier 3) would finance a higher *universal* Tier 1 at a lower overall cost to taxpayers – “...almost 30% less than we spend on both the pension and the superannuation tax concessions.” Over time, as the ageing population increases the cost of Tier 1, the authors expect the change to be cost-neutral.

³⁷ Roger Hurnard analyses this in *The effect of New Zealand Superannuation eligibility age on the labour force participation of older people* (2005), New Zealand Treasury (accessible [here](#)).

³⁸ In New Zealand, for example, if we think that taxpayers of 2060 might balk at the expected future cost of New Zealand Superannuation at a net 6.7% of GDP (a quite reasonable doubt) then we need to work out now what might be acceptable, given that other NZS parameters remain the same. That means a later state pension age and a gradual process to reach that. Fixing a new age of, say, 70 and a 20-year phase-in from 2040 is one policy response that would provide the direct ‘line of sight’ that today’s savers need.

³⁹ Some years ago, an Australian financial planner told me that about 70% of his fee income came from helping his clients to avoid the income- and asset-tests that apply to Australia’s ‘Age Pension’.

means-tests increase the risk of failing to meet Tier 1's fundamental objective: to eliminate poverty in old age⁴⁰. Only a universal pension can reliably achieve that⁴¹.

Income-tests on the Tier 1 pension are really another form of taxation, one that applies just to people above the state pension age. Effective marginal tax rates (the combination of direct income tax and Tier 1's income test) can be high; enough to encourage ways to shelter or even hide 'income'.

Australia applies means-tests to Tier 1 and offers an object lesson for the practical implications of those⁴². As already described, the means-tests have unintended consequences for labour supply, the housing markets and debt levels. Australia also has what should be regarded as unacceptably high levels of poverty amongst the old⁴³. It is not alone in that regard.

- c) Contribution-based entitlements:** Many countries require employees (and sometimes employers) to make 'contributions' to an identified 'fund' and a complete contribution record is needed for the full Tier 1 pension⁴⁴. That is not a universal pension. The rules may apply to everyone but the pension does not so it cannot reliably deliver on the poverty-prevention objective. In fact, at the bottom end of the income distribution, contribution-based entitlements may increase poverty in retirement because of the patchy work records of the lowest earners.

Social security 'contributions' are also complicated and expensive to administer and tend to be regressive because of the qualifying pay normally used in such systems⁴⁵. Such contributions are really a tagged tax but it makes no more sense to have dedicated taxes for old age pensions than it does to have a police tax or an education tax. They should be folded into ordinary income tax collections.

- d) Universal pension taxable:** The Tier 1 pension should be taxed as income in the hands of the recipient. There is no tax reason to distinguish a public pension from other forms of income.

⁴⁰ Means-tests may even have adverse effects on pensioner mortality rates – see *Should Income Transfers be Targeted or Universal? Insights from Public Pension Influences on Elderly in Canada, 1921-1966* (2010), Herbert Emery and Jesse Matheson, University of Calgary (accessible [here](#)).

⁴¹ For a natural experiment on this proposition in a poor country, see *Achieving income security in old age for all Tanzanians* (2010) by Smart Daniel and others, HelpAge International (accessible [here](#)).

⁴² Despite the complexity of the means-tests, in 2009 59% of Australians over age 65 received the full pension: "Around 41 per cent of pensioners currently have their rate reduced by the means test – 32 per cent by the income test and 9 per cent by the assets test - with the role of the assets test increasing over time. However, for most pensioners, the reduction in the rate of the pension as a result of means testing is relatively small - around 73 per cent of pensioners receive over 90 per cent of the maximum pension rate and only 3 per cent receive less than 25 per cent of the maximum rate." *Retirement Income Strategic Issues*, (2009), Australian Government, accessible [here](#).

⁴³ In *Deep and Persistent Disadvantage in Australia*, (2013), Rosalie McLachlan, Geoff Gilfillan and Jenny Gordon, Australian Government Productivity Commission (accessible [here](#)) suggest that in 2009-10, 13.2% of the age 65+ suffer from relative income poverty (based on 50% of median equivalised household incomes, adjusted for housing costs); 8.5% of the old suffer "multiple deprivation" and 7.6% suffer from "deep social exclusion".

⁴⁴ In the United Kingdom, it used to be the case that a full Tier 1 pension was payable only if 'National Insurance contributions' had been paid for 44 years (men) and 39 years (women). Now it is 'only' 35 years.

⁴⁵ When the US Social Security arrangements started in 1935, President Roosevelt said: "We put those payroll contributions there so as to give the contributors a legal, moral, and political right to collect their pensions... With those taxes in there, no damn politician can ever scrap my social security program." Identified contributions seem not to have prevented subsequent governments from changing, and now reducing the value of the benefits payable. Paragraph 2 above explains that governments make the decisions about balancing competing public claims on economic output and that's as it should be.

- e) **No Tier 2:** Many countries are also heavily involved in Tier 2 schemes that are compulsory and mostly associated with work-based income⁴⁶. Tier 2 benefits are about helping retirees to maintain their pre-retirement standard of living. If a government has adopted the principles described in paragraph 3, it should not directly help citizens to build greater retirement incomes. Citizens will make those decisions themselves and at times and in ways that suit their circumstances.
- f) **Truly universal?** New Zealand's universal pension is not truly 'universal'. There are two categories of qualification: first, from age 65 (the state pension age), an applicant must have lived in New Zealand for at least 10 years after age 20 with at least five years after age 50⁴⁷. Residence in countries with reciprocal social security agreements counts as does residence after 65 if the test had not been met by that age. This is effectively an immigration rather than a pension policy issue but in an age when 'welfare tourism' worries some countries, they can justify some form of residence-based hurdle.

The other qualification in New Zealand is that if an applicant has a similar pension entitlement from another country, that is offset from 'New Zealand Superannuation' or folded into the pension. We have difficulties with the details of that rule but the principle is correct, given the universal, flat-rate nature of the Tier 1 benefit ('New Zealand Superannuation') and the benefit discontinuities that universality creates with the more usual accrual-based systems.

- g) **Other benefits needed:** Although Tier 1 should aim to eliminate poverty in old age, the universal pension cannot expect to meet all the needs of all the old in that regard. The human condition is too varied for that. New Zealand has a means-tested 'accommodation supplement' that helps mostly those who do not own their own home. There is also help for frequent users of medical services. If a country cannot afford a universal pension that eliminates poverty, the extent of those welfare-based interventions will be higher.
- h) **Behavioural economics:** Many individuals seem not to understand their retirement saving needs; nor how their savings should be invested to best effect. The principles of 'behavioural economics' suggest that schemes should be framed in a way that savers are 'guided' to actions that will be in their interests. However, this imposes someone else's view of what might be the best for savers, even if savers can 'opt-out'. Information and education is one thing; telling people what to do, no matter how 'softly' should not be part of public policy. Employers might justify that strategy for their staff; a bank might justify it for customers but behavioural economics have no place in the design and delivery of Tier 1⁴⁸.

If the government meets the responsibilities suggested in paragraph 3 above, it need have no direct interest in design aspects of Tier 3 schemes, like New Zealand's 'KiwiSaver'.

⁴⁶ The US 'Social Security' is at Tier 2 as was the UK's 'State Second Pension' (soon to be folded into the Tier 1 'Basic State Pension'). Most European countries have extensive Tier 2 arrangements, mostly of a defined benefit nature. Some Latin American countries (and many others) try to force their citizens to save in Tier 2, defined contribution schemes.

⁴⁷ Australia has a similar test: applicants must be resident in Australia at the application date and must have lived in Australia for at least ten years with at least five years in a continuous period (see [here](#)).

⁴⁸ New Zealand's KiwiSaver scheme (a national, auto-enrolment, opt-out, retirement savings scheme at Tier 3) was designed in a behavioural economics framework but was then 'captured' by tax incentives. Largely on that account, about half the eligible population have joined since it began in 2007. It would have been interesting to see what might have happened without the tax incentives.

- i) **Pre-funded or PAYG?** At Tier 1, the government does what governments should do – satisfies its poverty-prevention role while balancing the competing claims on today's economic output through its ability to tax and redistribute (see paragraph 2). That means it should not set aside financial assets to pre-fund future similar claims against tomorrow's economic output for tomorrow's pensioners. Tomorrow's taxpayers would reasonably see this as an attempt to constrain their ability to balance the then-competing claims on economic output. Tier 1 should be financed out of today's taxes on a pay-as-you-go basis⁴⁹.

On this basis, the principles of 'inter-generational equity' have no role in setting the size and shape of Tier 1. When present pensions started, the 'entitlements' of earlier generations did not bear on Tier 1's design, other than in a negative sense (it had not 'worked'). Similarly, if Tier 1 needs reducing today, that is not because the state needs to balance equivalent claims between today's and tomorrow's pensioners; it's because either today's pensions are 'unfairly' generous or that we expect *tomorrow's* taxpayers might think tomorrow's pensions are 'unfairly' generous. That signals what tomorrow's taxpayers might think acceptable and allows today's savers to make appropriate decisions at Tier 3.

There is another related public policy balancing act – a PAYG Tier 1 is more flexible than contributions-based 'promises' that try to mimic private, pre-funded equivalents. As economic conditions change, the government can adjust (up and down) the size of Tier 1 claims and that change can be implemented relatively quickly⁵⁰. However, Tier 1 needs to provide a stable planning basis over decades so citizens can build appropriate private provision at Tier 3. That requires relative, long-term certainty in the size and shape of Tier 1.

- j) **Occupational pensions:** Employers may want to help their employees save for retirement and have their own Tier 3 scheme, perhaps subsidised. That is a remuneration issue for employers. The state has no public policy interest in that decision other than with its tax and security regulation hats on (paragraph 3.2).

5.3. Other government responsibilities: Having established a universal Tier 1 pension along the lines described, the government's remaining responsibilities are described in paragraphs 3.2 (codes of conduct), 3.3 (impeccable data) and 3.4 (information and education programmes, including a regular, national review).

In all developed countries, there will be significant transition issues in moving to the suggested framework but, if the policy destination is clearly identified, the journey's roadmap normally becomes obvious.

If Tier 1 eliminates poverty in old age and if the government completes its other responsibilities, it should have no particular view on what individuals decide to do about their financial preparations for retirement. That is for individuals.

⁴⁹ In *Pre-funding a government's future financial obligations - the New Zealand Superannuation case study* New Zealand Economic Papers Volume 44 (Issue 1, April 2010): 91 – 111 (accessible [here](#)), I explain why the New Zealand Superannuation Fund unnecessarily complicates New Zealand's Tier 1 arrangements.

⁵⁰ For example, 'deprivation' measures that set the size of Tier 1 will increase with economic growth and, for social cohesion, pensioners should share in that growth. Similarly, if economic conditions worsen, pensioners' entitlements should be part of any required adjustment, recognising the greater vulnerability of the old and their relative inability to adjust to the new environment.

6. Some key questions

A country that looks at the issues raised in this article should ask the following questions to focus policy attention on the things that matter:

6.1. Poverty in old age: How many people of pension age are living in poverty? First, we must decide how to measure that. Then we need detailed, impeccable numbers by age, household composition and geographic areas, also covering those in the age groups before the state pension age. The results should be tracked over time. If there are ‘too many’ living in poverty, on whatever measure is agreed, current pension policies have failed.

6.2. Saving adequacy: Are people saving ‘enough’ for retirement? If we decide we need to know whether people are behaving appropriately, the only way to find out is through a longitudinal study of household wealth⁵¹. Apart from measuring wealth and its changes, such surveys can also show how households react to government policies. In this context, total *household wealth* is what matters, not just *pension* wealth nor even just *financial* wealth⁵². Surveys to find out what people *think* about retirement saving are pointless. Surveys to find out what people are *doing* are more useful.

6.3. Cost of tax incentives: How much do tax incentives for retirement saving currently cost? Who specifically benefits most from those concessions? Do they increase retirement savings? Do they increase overall savings? Do they increase a country’s national saving (the macro-economic number)?

6.4. Labour market data: When do people ‘retire’ (finish ‘careers’; stop all paid work)? What does the transition from full-time work to full-time retirement look like? How long does it take? What drives the transition?

Without all that information, a country cannot begin an informed debate on its long-term retirement income framework. *With* that information, the debate is likely to end with decisions along the lines of the framework suggested in this paper. That was my personal experience.

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⁵¹ Australia’s Household, Income and Labour Dynamics in Australia (HILDA) Study is a rare example - see [here](#). In theory, we do not need to know how individuals react to the suggested policy framework, once installed; in practice, gathering and maintaining that information is part of building citizens’ confidence in retirement income policies.

⁵² For example, a household’s *financial* wealth is set in context if we know the household lives in a debt-free home. ‘Trading down’ that home may add to financial wealth but with no change to household wealth.