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# Beyond PAYGO and Debt

## five reasons to keep discussing SAYGO

### Abstract

It is often debated whether New Zealand should follow the lead of Australia, Singapore and others with greater pre-funding of the future costs expected from population ageing, climate change and miscellaneous shocks. Those in favour suggest doing so would have economic benefits and would promote intergenerational equity. The simplicity of a PAYGO system worked well in the 20th century, but in this article I suggest five reasons why greater pre-funding could be better suited to 21st-century realities, with high levels of global population movement, plummeting fertility, growing insecurity, increasing climate-related risks and falling social cohesion.

**Keywords** pre-funding, ageing, climate change, pensions, social cohesion

The design of New Zealand's welfare state is unique in relying almost solely on a pay-as-you-go (PAYGO) structure, whereby taxes collected in one year are spent in that year. This design has important advantages, such as simplicity. For example, in the few places where future costs are partly or fully pre-funded, as with ACC, the Natural Hazards Commission and the New Zealand Superannuation Fund, this creates complexity in the management of accumulated funds.

Historically, New Zealand's unique design of its retirement income system has served it well. The system has been simple, well understood, and effective at preventing elder poverty at relatively low fiscal cost compared with systems in other countries (Retirement Commission, 2025). Yet it has also been long understood that population ageing will place the sustainability of our PAYGO-funded system under stress. The Treasury has regularly projected rising health and pension costs, and has more recently identified the need to make stronger provision for regular shocks as well (Treasury, 2006, 2025a, 2025b).

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There will always be a foundational role for tax-funded, PAYGO supports, especially to achieve poverty reduction and distributional goals. And as Nicholas Barr and Peter Diamond often emphasise, there is no first-best design of a welfare state, with pros and cons with both PAYGO and save-as-you-go (SAYGO) approaches (Barr, 2021; Barr and Diamond, 2008). A particular difficulty is the challenge of transitioning from a PAYGO system to one with greater pre-funding, which requires at least one generation to ‘pay twice’, forgoing consumption now in order to fund the needs of older people today and to save for their own future consumption.

Nonetheless, the potential benefits of shifting to a system with a different balance between PAYGO and SAYGO elements in New Zealand are regularly noted by various people, often in the pages of *Policy Quarterly*. The second issue included an article about pension policy by Richard Hawke. He identified that our PAYGO approach to funding pensions gave an ‘appearance of stability [that] is deceptive; the system results in an inter-generational transfer which is large and increasingly burdensome for the working-age cohort’ (Hawke, 2005, p. 22). Hawke argued that a transition to a system with greater individual pre-funding of retirement incomes would not just improve sustainability; it would also improve economic growth via higher capital formation and work incentives, and by countering some of the problems created by the tax advantage of housing. Andrew Coleman and Adrian Katz, more recently, have made similar arguments, and also suggested that compounding returns to capital investment in a pre-funded system would reduce the overall cost of support (Coleman, 2024; Katz, 2025).

Compounding returns are dependent on risky investment returns, and so are not guaranteed – especially if population ageing were to depress returns to capital (Barr and Diamond, 2008). Any returns may also be subject to political redirection to other purposes, although Hawke (2005) suggests that this risk is lower for individual savings than for collective savings. On the other hand, pre-funding also allows for greater diversification in future revenue sources than a PAYGO system. PAYGO

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relies on taxing the proceeds from domestic economic performance, whereas pre-funding can benefit from higher growth elsewhere via investment offshore.

Writing as a young person for the recent special edition of *Policy Quarterly* on retirement income policy, Eliana Heo (2025) also suggested that pre-funding would be more equitable from an intergenerational perspective, because it would avoid an increasing burden of funding being placed on younger generations. If used in combination with greater means testing of support, as suggested by Shamubeel Eaqub (2018), then it could be seen as more equitable from an intra-generational perspective too, by restricting public support to people most in need of it. In suggesting that in future, KiwiSaver balances could be used to partly purchase New Zealand Superannuation as an annuity, Michael Cullen (2013) also spoke to equity concerns, promoting the idea as a way to reduce the cost of NZ Super without reducing the standard of living of the elderly.

While the argument for pre-funding often focuses on pensions, this is not the only area where it has potential relevance. Susan St John and Claire Dale have argued for intra-generational funding of aged care costs, for

example (St John and Dale, 2011). Their argument was that compulsory purchase of aged care insurance could be justified based on significant market failures in this area, given the practical difficulties of means testing support, and the large role that luck plays with a means-tested approach in determining how much someone can bequeath. Jonathan Boston and Judy Lawrence (2018) also argued for greater pre-funding of climate adaptation costs, based in part on an intergenerational equity argument that the costs of adaptation should be partly borne by those responsible for the pollution. And drawing on the argument from compounding returns, Robert MacCulloch has gone even further, advocating for a large-scale transition to a savings-based approach to welfare state functions, including health, in a variant of the Singaporean model (MacCullough, 2019).

The purpose of this article is not to offer a definitive blueprint for change, nor to offer a comprehensive assessment of the different options. The purpose rather is to contribute to the ongoing conversation about different reform options, by offering some additional reasons why we might want to consider greater use of individual and/or collective pre-funding in the future.

Such arguments are not decisive, and retaining our current tax-funded approach would have benefits such as simplicity and continuity, avoiding the risks inherent in any major reform. Yet, as outlined in the Treasury’s 2025 long-term fiscal statement (Treasury, 2025a), retaining a tax-funded approach in the face of structural demographic change will inevitably result in much higher taxes, lower support, or both. The case for compulsory savings or similar mechanisms needs to be considered relative to that future counterfactual, not to today’s unsustainable status quo.

#### An argument from a transnationalism perspective

While some welfare state expenditure is directed towards those in the middle of their lives, most is skewed towards young and old in the form of education, health, aged care and retirement spending. In a PAYGO system, each year’s costs are met mostly by those in the middle of their lives, who pay most the tax (Wright and Nguyen, 2024).

For people who live their entire lives in New Zealand, this design can be considered an implicit intergenerational contract. Each generation during its working years funds the needs of generations above and below them, in recognition of the public investment made in them as children, and in expectation of having their own needs met later in life by subsequent generations.

However, most people who live in New Zealand do so for only part of their lives. By the age of 30, 25–30% of people born in New Zealand are living overseas, with annual investment in New Zealand-born emigrants being about \$4 billion (Hughes and Crichton, 2025). These emigrants are replaced by migrants from other countries, with these migrants shouldering a large and disproportionate share of the tax burden. In 2024, the 32% of New Zealand residents born elsewhere contributed 38% of all personal tax (Hughes, 2026).

In these circumstances, a PAYGO system resembles rather less an intergenerational funding mechanism, and more a transnational one, in which foreign-born migrants are increasingly the ones funding the needs of younger and older New Zealanders. Where migrants stay permanently and benefit in old age from New Zealand's health, aged care and retirement systems, this may be appropriate as a (partial) intergenerational contract. Yet most migrants leave, either as a requirement of their temporary visas or because they choose to (ibid.).

The Australian Treasury has estimated the full life-course balance of taxes and expenditure for new arrivals relative to people born in that country (Varela et al., 2021). The authors show that the average migrant is a net contributor, and the average Australian-born is a net recipient. In other words, migrants subsidise the public entitlements of the native-born.

Similar modelling has not yet been produced in New Zealand, but the conclusions would likely be similar. This raises an obvious question of justice that I do not address here. It also raises practical questions about migration incentives. Fertility rates are falling rapidly across the world (United Nations, 2024), and we can expect competition for migrants to grow over time. For now, New Zealand has no trouble attracting as many highly qualified

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migrants as we want. But as populations continue to grow older around the world, retaining a PAYGO system where those of working age bear much of the burden could make New Zealand increasingly unattractive compared with countries with portable, contributory entitlements, for both New Zealand-born and foreign-born people considering their options. New Zealand could become especially unattractive if higher PAYGO taxes in future reduced growth and lowered net wages, as recent modelling by the Treasury (2025a) suggested they would.

The most highly qualified and highly paid people are the most internationally mobile and also pay the most tax (Hughes and Crichton, 2025; Wright and Nguyen, 2024). Keeping New Zealand attractive to such people is important in both fiscal and broader senses. For example, 33% of New Zealand's nurses and 42% of doctors are foreign-trained (OECD, 2025). Demand for healthcare professionals is only going to grow worldwide as populations grow older, likely exacerbating competition between countries. If a continued PAYGO approach lifted tax rates, especially higher in the income distribution, this could make it more difficult to attract and retain the people we will need in future, affecting the quality and availability of healthcare, not just the balance of tax and spending. The most productive countries may be able to sustain high net wages even with high tax

rates, but New Zealand's productivity has long been among the lower half of the OECD.

#### An argument from changing fertility preferences

PAYGO welfare states like ours were established in the middle of the 20th century, when fertility rates were high and voluntary childlessness rare. In these circumstances, PAYGO systems are sustainable indefinitely, as each subsequent generation is larger than the one that preceded it. It is this insight that prompted Paul Samuelson's famous remark that a PAYGO welfare state is a 'ponzi scheme that works'. With child-rearing being almost universal, such a scheme can also be justified on the basis of solidarity, with each generation collectively choosing to bear the costs of raising a subsequent generation, and collectively benefiting from that successor generation's economic activity as adults.

The situation now is very different. The total fertility rate was 4.3 births per woman in 1961; in 2024 it was 1.52, and it is quite possible it will fall further in future. Voluntary childlessness is also becoming more common. Using data from the 2006 census, Boddington and Didham (2009) reported that childlessness at age 40 increased from about 8% of women born in 1935 to 15% for women born in 1965. Data from the 2023 census shows that childlessness at ages 40–44 had increased to 18% for women born between 1979 and 1983.

From a fiscal perspective, it is the interaction between low fertility and a PAYGO funding system that produces unsustainable finances. With a PAYGO scheme, low fertility means the intergenerational burden of funding the welfare state is placed on an ever-shrinking pool of people over time. The term 'ageing population' is misleading in this sense: the shifting ratio between young and old is being driven not so much by longer lifespans, but rather by a large fall in the number of children being created.

In redesigning our welfare state for the 21st century, low fertility is the main thing we need to adapt to, and potentially quite quickly if it continues to fall rapidly. Fertility could potentially increase again,

but in no society has fertility ever increased above 2.1 after falling below it (Runciman, 2025). This suggests that we are experiencing a permanent shift to a higher ratio of old to young, rather than a temporary surge associated with any one cohort.

There may be reasons to promote high or low fertility in general, but I do not consider these in this article. I am merely suggesting that welfare institutions should endeavour to be broadly neutral to fertility choices, and robust to both high and low fertility. And a PAYGO system is not neutral in that it is robust to high-fertility choices but not to low-fertility choices.

By contrast, the intra-generational nature of pre-funding is neutral to fertility choices between generations, in that levels of savings or levies naturally adjust to higher or lower fertility, without requiring other generations to change their tax paid or services received to maintain fiscal balance. Intra-generational funding is also neutral to diversity in fertility preferences within each generation, especially choices to have no children at all, by avoiding any implicit expectation that a generation has collective responsibility to raise a new generation.

Lower fertility also provides a counter-argument to the idea that shifting to pre-funding would be inequitable by requiring one generation to 'pay twice', making good their PAYGO obligations to an older generation while also saving for their own needs. Earlier generations with higher fertility rates incurred greater collective costs in raising the younger generations who then supported them in their senescence. Low fertility means more recent generations are implicitly avoiding much of these costs – especially members of more recent generations who have no children at all. Part of the additional cost of pre-funding future entitlements could be seen as a redirection of the savings associated with lower fertility rates, rather than a double payment.

#### **An argument from secure prosperity**

When thinking about our older years, two questions loom large. One is how to ensure that the economy we find ourselves living in is prosperous – i.e., well positioned to produce the goods and services that we need, including healthcare, aged care, and

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all the basics such as energy, food and so on. Nicholas Barr often emphasises that this as the fundamental question, noting that the future economy is one that both young and old will live in (Barr, 2021). Younger generations are those who will be providing most of the goods and services needed by themselves and by older generations, and so prosperity is in their interest as well.

The second question is how people who will be old in future can guarantee themselves access to the goods and services they need. This question is really one of how to ensure that those of working age are willing to provide the goods and services needed by older people. In a pre-funded system, those of working age convert some of the income they earn across their lives into wealth by saving it (individually or collectively). They then draw down that wealth and/or use the capital income it provides to compensate younger people in future for the goods and services they provide.

A PAYGO system, by contrast, obliges younger generations to both supply and fund the goods and services needed, via

their tax payments. There is a degree of insecurity in such an arrangement, in that future generations can choose to amend the scope of support they agree to fund at any time. This applies not just to superannuation, but also to health, aged care, and everything else funded by general taxes. An unsustainable policy arrangement is inherently unstable, undermining the security of support that people need to plan their retirement with confidence.

When Australia introduced its compulsory savings system in 1992, it chose to call it the Superannuation Guarantee, implying that pre-funding future needs would offer greater security than is possible with a PAYGO system. Both PAYGO and SAYGO systems come with risks, so it would be an exaggeration to say one system provides a guarantee that the other doesn't. For example, Barr and Diamond (2008) note that there are mechanisms available to reduce the value of pre-funded supports, even in individual accounts, such as changing tax treatment of returns and on consumption.

Cullen (2013) also noted that some guarantee of ongoing support can be provided in a PAYGO system by the growing electoral dominance of older age groups, who will be well placed to protect their interests at the ballot box. But guaranteeing a generation's share of economic production via electoral dominance may be self-defeating if that guaranteed share is of a less prosperous economy. The extent to which pre-funding may affect productivity via increasing national savings and investment is much debated, with no simple, unambiguous answer.<sup>1</sup> But there are several broader reasons to suspect that pre-funding might be more consistent with long-term prosperity in the face of demographic and climate change than PAYGO.

One is the transnational point already made. If older generations use electoral dominance to entrench a tax-based system that places a growing burden on younger generations, these younger generations can always vote with their feet. Younger New Zealanders can leave for other countries, and young prospective migrants can choose to go elsewhere. Since the most highly qualified are the most mobile and most in demand, this could reduce our

prosperity via a human capital, not just a physical capital, route.

Another is that PAYGO tends to slide into debt (borrow-as-you-go) when crisis strikes, because there are limited pools of savings and insurance funds to draw upon. For example, New Zealand was one of only a few countries to use a wage subsidy in response to the Covid-19 pandemic; many other countries drew upon unemployment insurance and savings funds instead. If successive crises overwhelm the ability to maintain surpluses in between, this can lead to ratcheting up of government debt. The interest payments on this debt are a subsequent drain on alternative uses, crowding out further investment we might wish to make in healthcare, for example. And if accumulated crisis debt crowds out the potential to use debt for other purposes, such as financing productivity-enhancing infrastructure and investments in human capital, this can hamper future prosperity.

Perhaps the most important point is that of Arthur Grimes and Shine Wu (2021), who reminded us of Adam Smith's observation that ultimately it is consumption that matters, not productivity. And income is what allows access to consumption. In an open economy, we can source the capital we need from overseas investment if we are not saving ourselves, and thus improve the economy's productivity. But to the extent that we rely on capital from elsewhere, we limit ourselves to the labour share of income accruing to productivity gains, with the capital share of income accruing to overseas owners of that capital. The more we save, in contrast, the more that capital income accrues to us. Furthermore, the more we save, the more we can diversify our sources of income, including by investing offshore. As much as we all might want higher productivity, there is no clear or obvious evidence that this can be guaranteed with different choices. Diversifying investment across different countries provides a hedge against continued disappointment in domestic productivity.

#### **An argument from moral hazard and cost shifting**

Many welfare state functions have been adopted as methods of pooling risk, generating individual security and

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reducing uncertainty by spreading costs across a large group. Superannuation protects against longevity risk (we know some of us will die younger than the average and others older, but not who among us will live a shorter or longer time). Collective healthcare guards against medical risk (we know many of us will experience serious illness, but not who or when). And so on. In this sense, many of our taxes can be thought of as insurance premiums by another name.

If this risk pooling were provided by private providers, their solvency and profitability would require an actuarial link between premiums and benefits guaranteed. Yet there is no such requirement in a PAYGO scheme, which allows for a great deal of implicit subsidisation (by younger generations) of the insurance coverage provided.

Not only this, but the subsidised insurance of, for example, health and

retirement supports is supplemented by essentially free insurance in the face of many shocks and disasters, as discussed above. In recent decades, about 10% of GDP has been handed out each decade in response to disasters, covering wage subsidies, buyouts of earthquake and flood-affected properties, repair of uninsured local infrastructure, and so on (Treasury, 2025b). Given that core Crown revenue is typically less than 35% of GDP, without the accrual of regular surpluses, debt is often the only feasible mechanism to finance discretionary responses.

Especially given the need to adapt to climate change, such free insurance can create moral hazard, dulling incentives for local communities to make difficult changes to their land use patterns. This is not to say that there is no argument for socialising some of the costs of climate change. But pre-specifying and pre-funding any such commitments is more consistent with encouraging adaptation than is discretionary post hoc support. Pre-funding rather than debt financing such support is also more consistent with the polluter pays principle, to the extent we wish to adopt it for climate-related costs (Boston and Lawrence, 2018).

This tendency for PAYGO to slide into debt funding for unanticipated shocks also has the effect of shifting the cost of those shocks into the future. If the boundaries of the community were fixed and stable, this could be justifiable as a pragmatic approach to managing idiosyncratic and unpredictable risks. However, given the high levels of transnationalism and declining fertility rates discussed earlier, this approach creates the potential for those provided post hoc free insurance to benefit and then leave the country, with the costs of repaying the associated debt falling onto new members of the community (be they migrants or children).

#### **An argument from social cohesion**

The first four arguments all underpin the fifth, which is that continuing our PAYGO and debt-financed approach poses a growing risk to social cohesion, which is already falling.<sup>2</sup>

When New Zealand's welfare state was established last century, it was plausibly a mechanism to reinforce solidarity and

cohesion, in that nearly everyone contributed and everyone benefited, with the redistribution that took place within this general design justified by the widely shared egalitarian principles of the time. Yet that mechanism was established on foundations such as high fertility and a stable climate which have not endured. The welfare state still takes from most and most still benefit, but given changes in transnationalism, the climate and fertility levels, it also facilitates increasingly ad hoc redistributions that are hard to find a consistent, principled basis for (between foreign-born and New Zealand-born people, between high-fertility families and low-fertility families, between smaller generations and larger generations, and so on).

In these circumstances, it would be natural if people began to see the state less as a mechanism of positive-sum solidarity and security, and more a mechanism for zero-sum extraction by those with the appropriate influence. It would be natural, too, if younger generations felt insecure in the supports they can expect later in life, without a broadly agreed plan to keep government revenue and expenditure in balance over time.

Social cohesion is easy to take for granted, but its absence couldn't be more serious. The language of social capital reinforces that it is a type of wealth that underpins our prosperity as much as physical, natural and human capital do. There are close, mutually reinforcing connections between interpersonal trust, pro-social norms, effective governance and economic performance (Frieling, 2018). And in recent years, the long-measured

slide in interpersonal trust in countries like the United States has been followed by a visible deterioration in governance, including a loss of fiscal control that will have serious consequences in the future.

France provides another important example of where there is increasing distrust, especially among the young, about whether the country is being governed in their interest. The rapid spread of the 'Nicolas' meme across Europe provides an insight into the kind of social tensions that can arise in a system that asks ever more of younger generations, with consequential impacts on governance and fiscal control (Economist, 2025).

The issues discussed in the Treasury's recent stewardship reports should be considered in this light as a serious warning not just about the government's finances, but about our future ability to resolve collective action problems for everyone's benefit. There is still time to act, but we have already waited many years. The longer we wait, the harder reform will become.

### Conclusion

I have offered five reasons why we should take the idea of intra-generational funding seriously, not as a complete replacement for our existing tax-funded system, which has a central role in preventing hardship, but as a complement to it. As noted in the introduction, there are important counter-arguments and questions of detailed policy design that I have not had space to cover in this short article. But I contend that these counter-arguments and details are reasons to continue, not end, the conversation about contributory systems, which appears to be growing.

As Coleman (2025) notes, the potential for compulsory savings was closed off in 1976 by Robert Muldoon, and again two decades later by referendum. Yet an intergenerational compact can never be considered set in stone (Evans and Quigley, 2013). Coleman suggests that all those too young to vote in the 1997 referendum should have the right to revisit that decision as it applied to them. Generations Y, Z and Alpha, perhaps some in Generation X too, should exercise their right to debate the obligations they wish to impose on one another and to accept, respecting but not feeling bound to continue the arrangements agreed to by earlier generations. And such discussion would do well to take seriously the several arguments for moving away from such a heavy reliance on tax and debt.

<sup>1</sup> Law and Scobie (2014) concluded that the introduction of Kiwisaver had not increased overall saving, merely redirected it. However, Law (2013) reported on modelling that suggested compulsory savings, if combined with means testing of NZ Super, could be expected to increase national savings. The extent to which national savings would then increase domestic investment depends in turn on the availability of international capital, plus any home bias in investment decisions.

<sup>2</sup> Since the question was first asked in the General Social Survey in 2014, the percentage of adults with a score of 7/10 or higher for trust in other people in New Zealand has fallen each survey wave, from 68% in 2014 to 59% in 2023.

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