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Understanding Retirement Income in New Zealand

insights from microdata and modelling

Abstract

This article brings together recent work from the New Zealand Treasury using microdata and microsimulation modelling to examine retirement incomes through four key lenses: intergenerational dynamics, income diversity, retirement transitions and work incentives.[1] It highlights how demographic, behavioural and economic changes are reshaping retirement realities in New Zealand, and explores how policy design interacts with people's lived experiences as they age.

Keywords retirement income, New Zealand Superannuation, microdata, microsimulation modelling, intergenerational dynamics, income diversity, retirement transitions, work incentives, demographic change, labour force participation

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New Zealand's retirement income framework assumes that New Zealanders will build retirement security through a combination of universal New Zealand Superannuation (NZS) provision, housing wealth and private saving (including KiwiSaver). Over the last few decades, there have been substantial changes in how people live as they approach 65 and then continue on into later life. Retirement incomes are increasingly supplemented by continued labour force participation. People aged over 65 are also increasingly diverse in their employment status, living arrangements and economic circumstances.

This article brings together a range of work from the New Zealand Treasury using microdata and microsimulation modelling to examine retirement incomes through four key lenses: intergenerational dynamics, income diversity, retirement transitions and work incentives. Given the summary nature of the article, we encourage readers to consult the original research and supporting references for more detailed analysis.

Key insights

This article explores how behavioural, demographic and economic dynamics are reshaping the realities of retirement incomes in New Zealand. Drawing on recent microdata analysis and modelling, four core insights emerge.

The fiscal footprint: intergenerational dynamics

New Zealand Superannuation creates substantial net fiscal transfers to seniors.

Treasury's fiscal incidence analysis reveals that seniors are significant net recipients of government spending, with the 65–79 age group receiving over $8 billion more than they pay in taxes and the 80+ group receiving over $5 billion net, primarily through superannuation and health services. This reflects a system in which working-age people (25–64) contribute significantly to government revenue through taxes, while older people receive more in services and support – similar to the pattern experienced by current seniors when they were of working age. However, as New Zealand's population ages, relatively smaller working-age populations will face increased difficulty maintaining these transfers to larger cohorts of seniors. This demographic shift could create tension in the social contract, particularly because these seniors themselves supported much smaller senior populations during their working years.

Economic diversity among superannuitants

Behind universal flat-rate payments lies substantial variation in senior economic circumstances, with distinct groups showing different patterns.

Microdata analysis reveals that outcomes for seniors are diverging dependent on their work status and living arrangements. While overall income inequality among senior households has decreased, inequality between different household types has increased. Critically, wealth differences – particularly housing wealth – create vastly different economic security levels among seniors with similar measured incomes. Traditional income-focused measures often miss these wealth disparities and the complex resource-sharing arrangements within senior households.

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Economic transitions: from work to retirement

Retirement has evolved from a fixed transition at 65 to varied pathways, with income composition shifting significantly even as total income remains stable.

Alongside significant demographic change in New Zealand's 65+ population, the labour force participation rate among people aged 65 and over has increased dramatically in recent decades and is now much higher than in many other OECD countries. This has resulted in a growing share of total labour income among people aged 65 and over, though the intensity of labour supply remains lower than that of the under-65 population.

Administrative data shows employment rates declining gradually from approximately 80% at age 60 to around 40% by age 70. While labour earnings decline steadily with age, average total income rises noticeably at ages 65–66 with the introduction of NZS, before gradually decreasing in later years. Many people reduce work before becoming eligible for NZS, with some potentially facing forced early retirement due to health or labour market factors, while others with significant wealth may choose early retirement.

Economic incentives: work incentives for older workers

New Zealand Superannuation creates a financial incentive to remain in work, especially compared with working-age benefits. But wealth and personal circumstances influence how older people respond to these incentives.

Unlike working-age benefits, NZS is not income-tested – people can keep their full payment while earning. This means there is no financial disincentive to remain in work, since NZS is not abated as earnings increase. Effective marginal tax rate (EMTR) analysis shows that most seniors face relatively low financial disincentives to earn additional income, while replacement rate patterns suggest that many treat NZS as a base income and work to top it up. The responsiveness of recently eligible NZS recipients to tax rate changes highlights how policy settings influence retirement decisions. While current settings do not provide a financial disincentive to work, factors such as health, caregiving responsibilities and personal preferences play a significant role in shaping when and how people transition out of work.

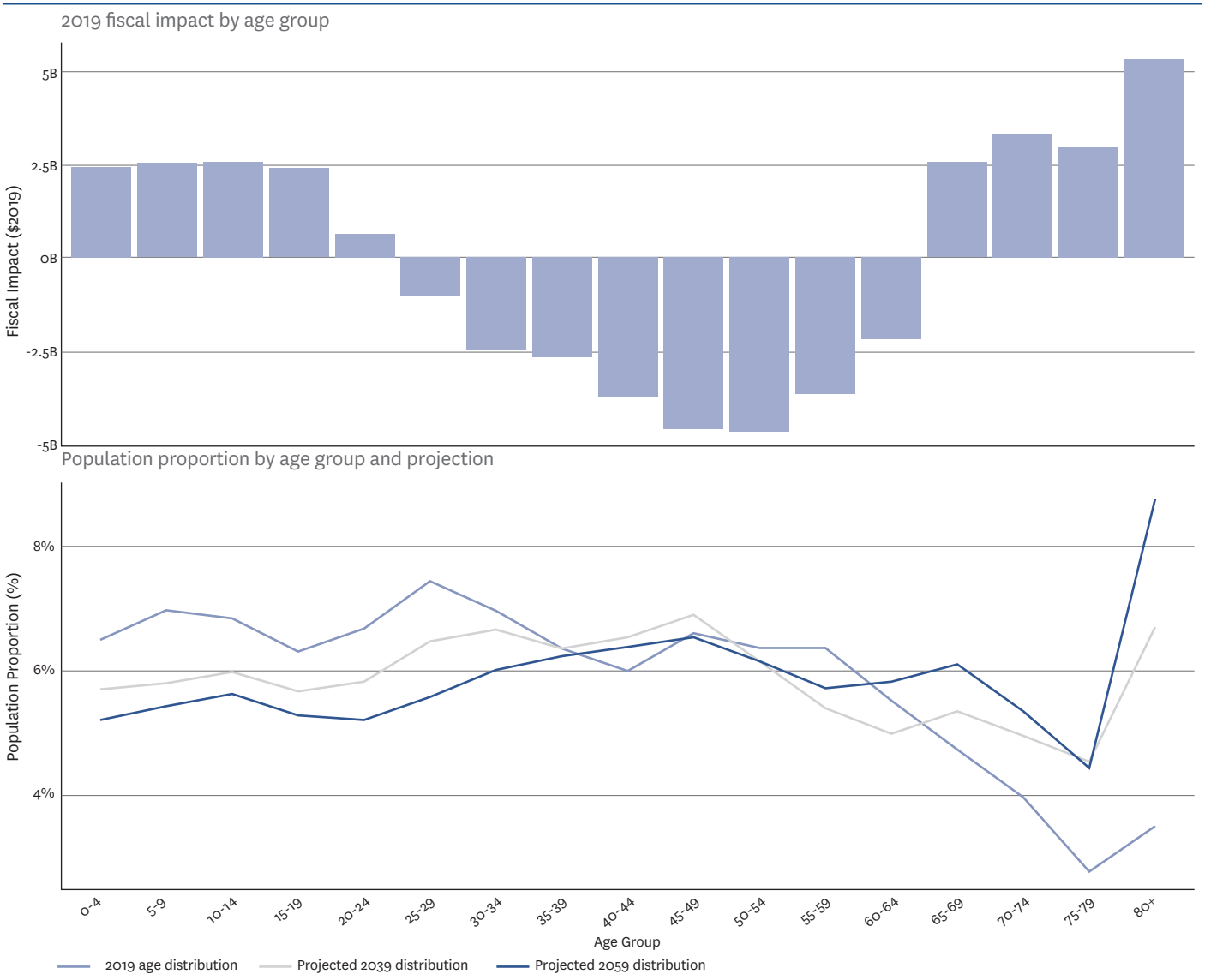
The remainder of this article elaborates on these four key insights.

The fiscal footprint: intergenerational dynamics

Current fiscal patterns

Treasury's fiscal incidence analysis (Wright and Nguyen, 2024) reveals clear age-based patterns in how government revenue and spending combine to redistribute resources across the population. Figure 1

Figure 1: Fiscal impact by age



shows the net fiscal impact by age group, which is the difference between what each age group pays in taxes and what they receive in government spending, including income support, housing subsidies, health services and education, for 2019.

Working-age New Zealanders are substantial net contributors to government finances, with those aged 25–64 contributing in net terms after accounting for all the services and transfers they receive. This pattern reverses sharply after age 65, as superannuitants become significant net recipients of government funds. Based on 2019 estimates, the 80+ age group received a total net amount of over $5 billion more in government spending (mainly superannuation payments and health services) than they paid in taxes. Similarly, the 65–79 age group received a total net amount of over $8 billion.

This age-based pattern of transfers reflects the design of New Zealand's finance system, where individuals contribute through taxes during their working years and receive support later in life through universal superannuation and health services. Rather than linking retirement income to prior earnings or contributions, the system provides a shared foundation in later life that supports wellbeing and a minimum level of financial security across the senior population.

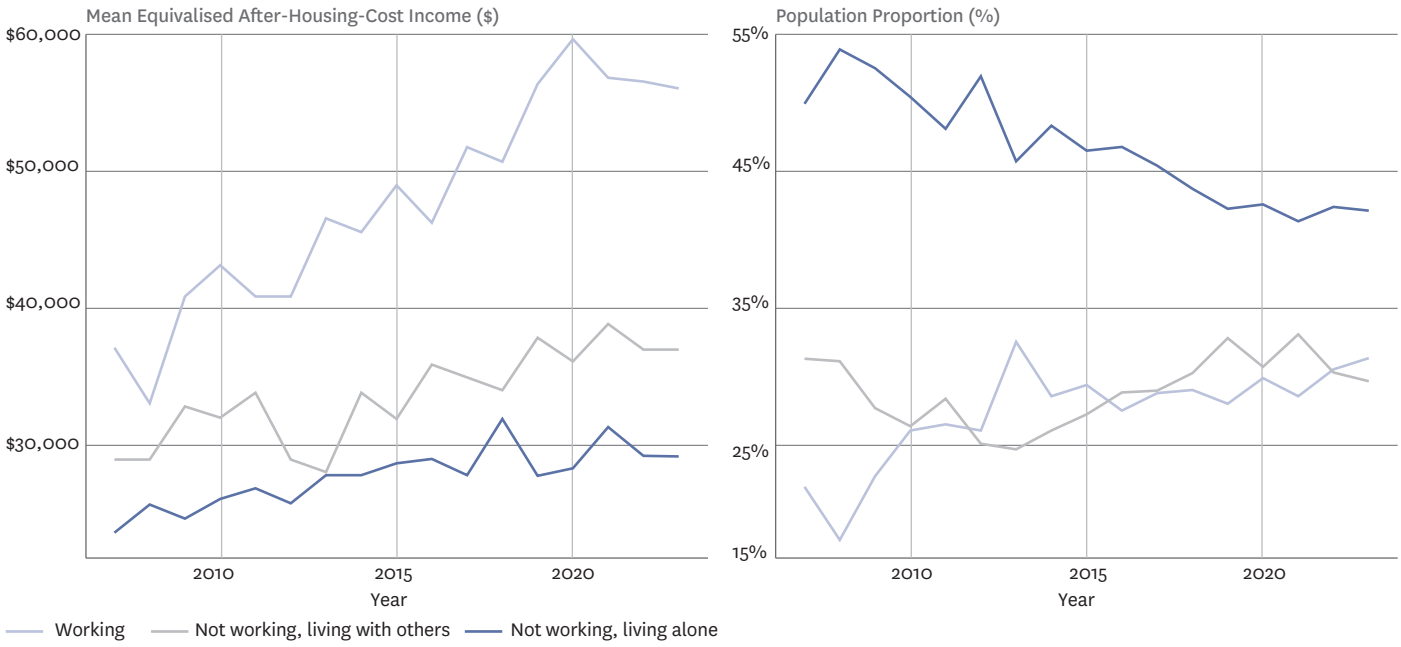
Demographic challenges

The fiscal challenge becomes apparent when considering New Zealand's rapidly ageing population. People aged 65+ were 17% of the population in 2024. They are projected to grow to around 26% by 2063 (Statistics New Zealand, 2025). The Treasury's 2021 Long-term Fiscal Statement highlights how this demographic shift is expected to increase pressure on government spending, particularly for superannuation and healthcare, while reducing the share of the population in the taxpaying workforce (Treasury, 2021). Figure 1 shows the net fiscal impact by age in 2019 (top panel) alongside projected population distributions (bottom panel). It highlights how fiscal pressures are expected to grow over time, as a smaller share of the population will be in the paying (negative) bars and a larger share in the receiving (positive) bars.

Navigating future uncertainty and intergenerational pressures

It is highly likely that current arrangements are not sustainable. Current seniors benefit from policy settings established under different demographic conditions: higher worker-to-retiree ratios, different

Figure 2: Senior population and income trends by group



life expectancies, and different wealth accumulation patterns.

Changing worker-to-retiree ratios could pose fiscal challenges for maintaining current patterns of support for older populations. People retiring today supported much smaller populations of seniors when they were of working age. As the worker-to-retiree ratio continues to decrease, future working-age populations may face higher tax burdens to support superannuation arrangements.

The Treasury's 2025 Long-term Fiscal Statement will explore the implications of ageing for New Zealand's fiscal sustainability and the choices available to successive governments to return to a fiscally sustainable path, including considering the economic and inter-generational distributional impacts of these choices.

Economic diversity among superannuitants

Beyond aggregate statistics

Superannuitants are not a homogeneous group. Although much of our analysis focuses on individual circumstances, examining household-level patterns is essential because many seniors share resources, housing costs and caregiving responsibilities within their households. The Treasury's income inequality analysis (Stephens and Cleveland, 2024) shows that while overall income inequality decreased for individuals in senior households, income inequality between seniors in different household types has increased.

Income-based analyses capture only part of the story. Analysis by Perry (2019) shows that while many seniors fall below income poverty thresholds, hardship rates for people aged 65+ remain among the lowest across age groups, reflecting protective factors such as mortgage-free homeownership and accumulated assets that don't appear in income statistics. This reflects that wealth and accumulated savings play crucial roles in economic wellbeing but don't necessarily appear in income inequality statistics, since assets like houses won't necessarily have a monetary or taxable return. Two seniors with identical incomes may have vastly different economic security depending on their housing wealth and accumulated assets – a dimension that complicates any policy approach focused solely on income measures.

Three distinct patterns emerging from the data

Treasury analysis (Stephens and Cleveland, 2024) reveals distinct trends among seniors based on employment status and living arrangements (Figure 2). Rather than a uniform group, the data reveals three observable patterns that create different economic dynamics.

Working seniors

Labour force participation among over 65s has increased from 13.7% to 25.9% since 2007 (Statistics New Zealand, 2024b). This increase represents the most significant demographic shift among senior households over this period. Even after adjusting for household size and deducting housing costs, households with working seniors have much higher incomes on average than households with seniors who are not in work, reflecting that working seniors receive full superannuation payments alongside their employment income.

Non-working seniors in couple or single households

This group represents about 40% of seniors (down from 50% in 2007) who live without employment income, relying primarily on New Zealand Superannuation and other non-employment sources. The average incomes for this group have been relatively stable over time. While inequality within this group is decreasing – suggesting NZS provides a relatively equal income floor – this income-based picture masks significant wealth differences.

Non-working seniors in shared households[2]

Around 30% of seniors share accommodation with adults other than their partners, a proportion that has remained stable despite other demographic shifts. These seniors consistently show higher equivalised after-housing-cost incomes than those living alone, suggesting economic advantages from

cost-sharing and resource pooling. These arrangements create complex economic dynamics where seniors who own homes may provide housing to younger family members, seniors without property may share accommodation to reduce costs, and extended households pool both current income and accumulated wealth, making individual economic circumstances difficult to separate.

The wealth dimension

Wealth differences create significant complexity across all three categories. Seniors may be drawing down substantial savings, including KiwiSaver, or living off asset returns not fully captured in income statistics. Housing is particularly important. Many seniors have low housing costs, contributing to reduced after-housing-cost inequality (Stephens and Cleveland, 2024). However, this creates even greater inequality when considering wealth differences between mortgage-free homeowners and renters (Symes, 2022). These wealth disparities mean that seniors with similar measured incomes may have vastly different economic security, making targeted policies that focus on savings and housing affordability especially important levers for protecting the living standards of all seniors.

Figure 3: Trends in the proportions of labour income over time, by age groups

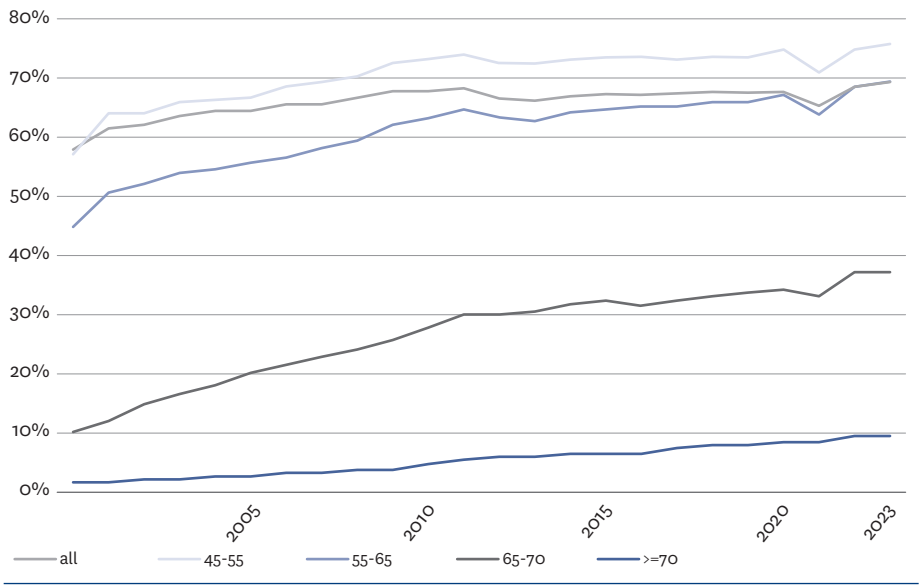
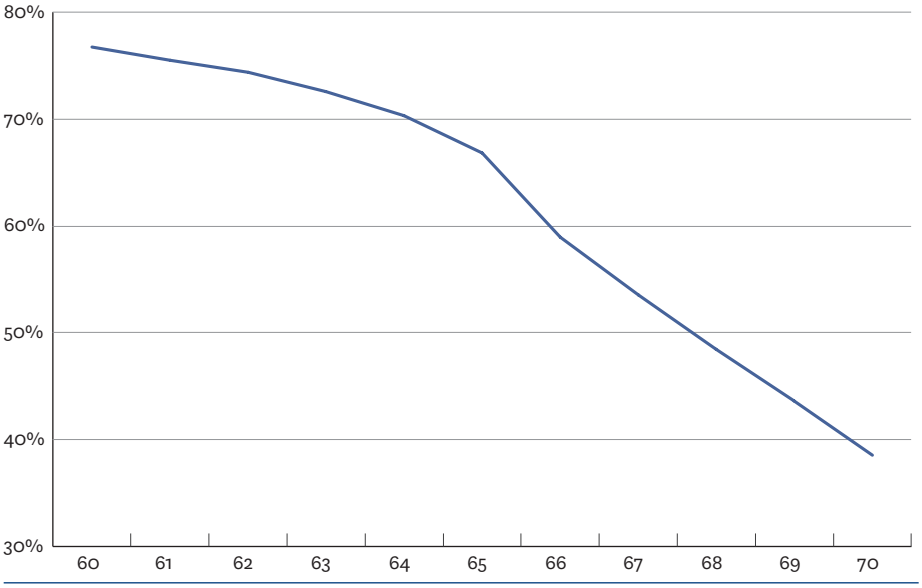


Figure 4: Employment rate by age



Economic transitions: from work to retirement

The New Zealand 65+ population has experienced significant demographic changes, increasing from 12.4% of the total population in 2007 to 16.5% in 2023. Similarly, New Zealand's labour force participation rate among those aged 65 and over has increased dramatically over recent decades and is now much higher than in many other OECD countries (Stephens, 2024). This suggests a distinctive pattern of work continuation past the age of eligibility for superannuation in New Zealand, as compared with international norms.

Rising senior participation and growing share of labour income

Forthcoming research (Domican and Zhang, forthcoming) shows that *increased labour force participation has led to a greater contribution by seniors to the tax base.* As shown in Figure 3, rising labour force participation by older individuals, particularly recent superannuitants (aged 65–70), has increased the proportion of senior income that is derived from labour and consequently increased the contribution of seniors to the tax base. The current design of NZS may support these behaviours because it is not abated with income, allowing people to keep their full payment even while working. Analysis of financial work incentives for workers transitioning into retirement is presented in the following section.

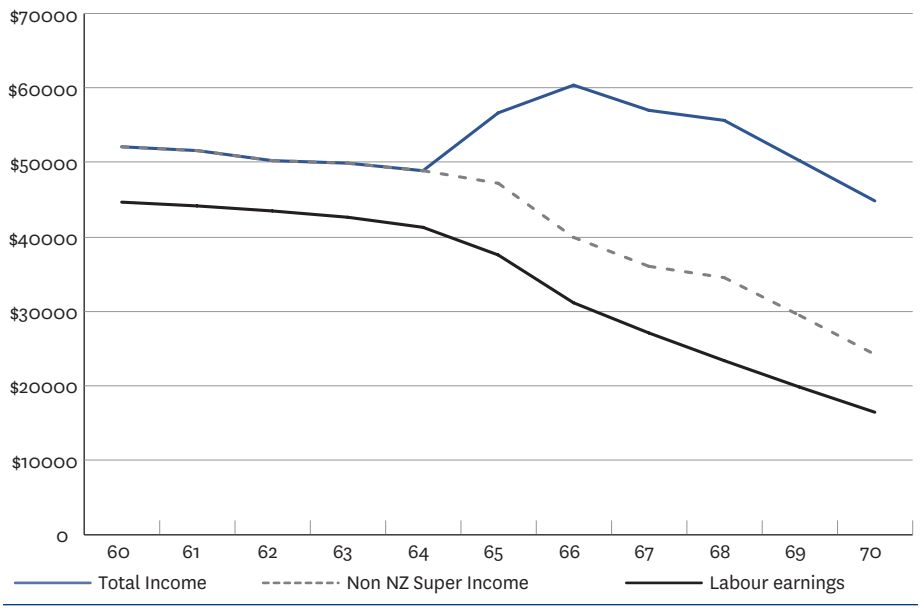
More seniors continuing to work past traditional retirement age, combined with fiscal drag, has helped mitigate some fiscal pressure on government in recent years. However, the lower intensity of work past 65 (Smith et al., forthcoming) suggests that this dividend from increased senior labour force participation may be limited due to fewer hours worked.

The new retirement reality

Figure 4 shows the proportion of the 1952 and 1953 birth cohorts who were in any wage/salary or self-employment during the tax years they turned 60 to 70. Employment rates show a gradual decline rather than a sharp drop-off at the superannuation eligibility age, falling from approximately 80% at age 60 to around 40% by age 70. This smooth transition contrasts with the traditional expectation of widespread retirement at exactly age 65.

Figure 5 shows how income sources change over the transition to retirement. Average total income materially increases

Figure 5: Average income by age (2022 NZ$)



in the years people turn 65 and 66, then declines gradually. Labour earnings decline steadily with age and NZS becomes an increasing important component of total income from age 65 onwards.

The data reveals that many people reduce their earned income over time, which has important implications for both individual economic security and system design, as it suggests that many people are managing a complex shift between different income sources rather than simply moving from work to complete retirement. Significant numbers also stop working before age 65 (Wright and Nguyen, 2024), highlighting that some face forced early retirement due to health, skills obsolescence or labour market conditions – a group that may struggle financially in the gap between leaving work and becoming eligible for NZS. However, for others – particularly those with substantial private wealth – early retirement may reflect greater financial freedom and personal choice rather than constraint.

Current microdata research by the Treasury is exploring transitions into retirement, including patterns of gradual versus complete work cessation. These insights help build a more nuanced understanding of how people move out of the workforce and how income sources evolve over time.

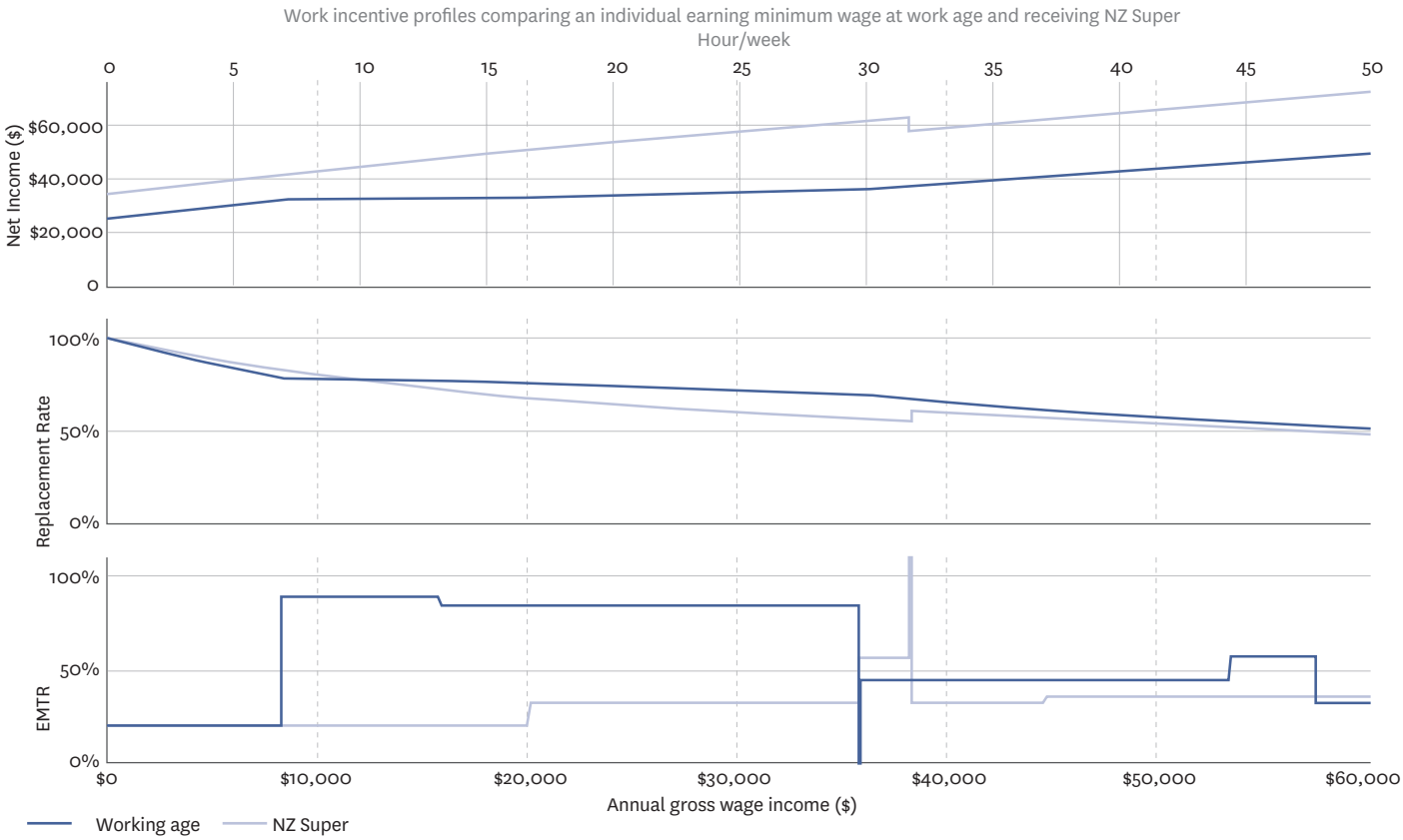
Financial work incentives for workers transitioning into retirement

Work, retirement and the tax–transfer system

Older workers occupy a unique position in New Zealand's tax and transfer system. Unlike working-age benefits, New Zealand Superannuation is not income-tested, so seniors can keep their full NZS payment while working.

To understand how this translates into financial work incentives, it's useful to examine two key measures that capture the financial returns to employment: Effective Marginal Tax Rates and replacement rates (Treasury, 2024a).

Figure 6: Budget constraints and EMTR/replacement rate profiles for an example person



Effective marginal tax rates (EMTRs) measure the proportion of additional income that is lost to taxes and benefit reductions as an individual earns more. Replacement rates measure how much working income would be replaced by government transfers if an individual stopped working. These estimates focus on the financial dimension of work decisions that are created by the tax–transfer system. They do not capture other important factors affecting labour force participation at older ages, such as health status, financial security or caregiving responsibilities. Importantly, these financial incentives interact with the wealth differences highlighted earlier. A senior with substantial assets may respond differently to the same EMTR than one relying entirely on NZS, even though the tax–transfer system treats them identically.

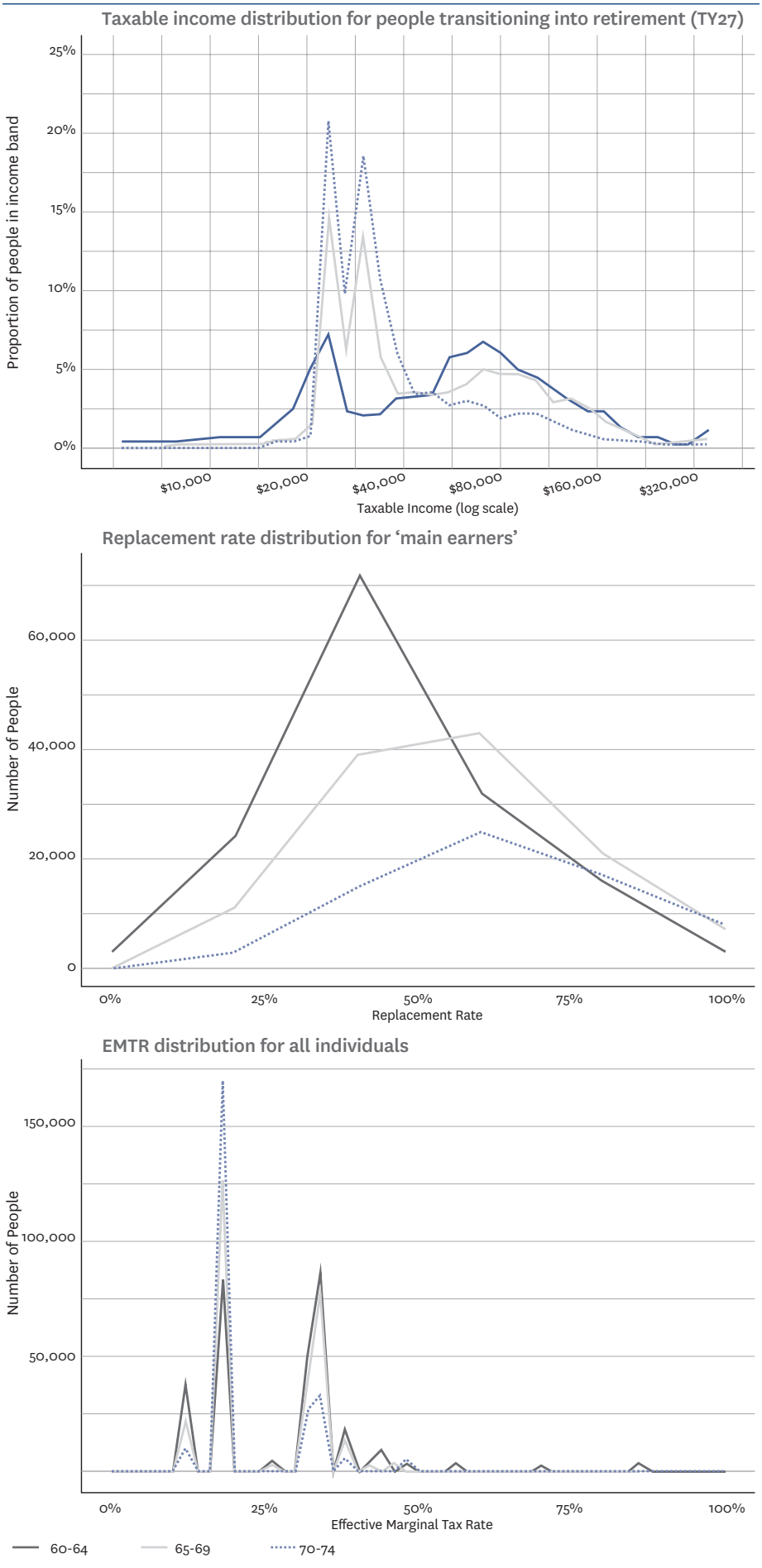
Understanding the difference in work incentives for an individual before and after the NZS age of eligibility

Figure 6 shows how the net income, EMTR and replacement rate profiles for an individual (earning the minimum wage, living alone, renting and with housing costs of $450 per week) differ depending on whether they are working age or at (or above) the NZS eligibility age. Note that these hypothetical examples do not include capital income earned from assets, which would further affect an individual's EMTR.

The top panel of Figure 6 shows how the universal provision of NZS results in significantly higher net incomes (for the same number of hours worked) than is received by an individual facing a combination of earned income and benefit support (which abates as earned income increases).

The middle panel of Figure 6 shows a steeper decline in replacement rate for the NZS individual, reflecting the higher net income they receive at 0 hours compared with the working-age example. Although both hypothetical cases maintain about 60% of their income at 40 hours of work per week, the NZS individual's net income is 37% higher. In this situation, this is because the NZS income remains unchanged at 40 hours of work as wage income increases, whereas the working-age

Figure 7: Work incentive measures for people transitioning into retirement (TY27)



individual's benefit income is abated as their earnings rise.

In the bottom panel of Figure 6, the EMTR profiles for an individual earning the minimum wage differ significantly depending on whether they are receiving NZS or not. Those under 65 and earning the minimum wage experience high EMTRs between 7 and 30 hours worked, with core benefits abating as more income is earned. In comparison, those earning NZS experience low EMTRs during that period and there is little to no financial disincentive to working more hours.

Estimating work incentive distributions for people transitioning into retirement

Using the TAWA model (Treasury, 2024b), we estimated the taxable income and work incentive distributions for individuals within different age groups (60–64, 65–69 and 70–74) in 2027. This analysis allows us to better understand the differences in work patterns and incentives between older working-age people and people who are eligible for NZS.

Taxable income distribution

The top panel of Figure 7 shows that the taxable income distribution of individuals aged 60–64 features two distinct characteristics: a sharp peak near the level of core benefit receipt and a broad range of incomes peaking at around $60–70,000, then gradually tapering off into a long tail. This indicates a marked contrast between those earning near benefit levels and those with substantially higher incomes. When comparing the 65–69 and 70–74 age groups, NZS-related peaks emerge and become more pronounced, reflecting the increasing number of people exiting the labour force as they age.

Replacement rates and financial incentives

We examined replacement rates for individuals with earned income who are identified as the main earner in their family. The distribution of replacement rates in the middle panel of Figure 7 reveals differences across age groups, demonstrating distinct work incentives. For people aged 60–64, the distribution peaks sharply at around 25–30%, with 87% having replacement rates below 50%, meaning they would receive less than half their current income if they stopped working. This creates strong financial incentives to remain in the workforce before becoming eligible for NZS.

The pattern changes for those aged 65 and over. The 65–69 age group shows a much flatter distribution with higher replacement rates, while those aged 70–74 have the highest replacement rates overall, with their distribution peaking around 50–60%. This reflects how NZS provides an income foundation, with many using employment income as a 'top-up' rather than the primary source of retirement security.

The distribution of estimated replacement rates shifts to the right – towards 100% – as earned taxable income decreases in older age groups and NZS becomes a bigger proportion of their total taxable income.

Effective marginal tax rates and work incentives

Work incentives, as measured by EMTRs, tend to improve as people move into retirement age. Lower EMTRs mean individuals keep more of each additional dollar they earn, reducing financial disincentives to earn more. The bottom panel of Figure 7 shows the distribution of EMTRs. There is little evidence of people aged 60–64 experiencing the very high EMTRs (above 50%) that typically affect working-age beneficiaries. This suggests that most in this age group who are receiving benefits are not also earning employment income, as we don't see the high EMTRs that would result from benefit abatement alongside wages.

Once people reach the age of superannuation eligibility, the picture becomes much clearer. Both the 65–69 and 70–74 groups have EMTR distributions concentrated around standard marginal tax rates (17.5%, 30% and 33%), reflecting how universal NZS eliminates benefit abatement and creates straightforward work incentives.

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Evidence of senior responsiveness to tax changes

Forthcoming research by Treasury provides evidence that superannuitants are responsive to changes in marginal tax rates. The research uses administrative data to study older workers' labour supply responses to tax changes when they turn 65, as NZS pushes some recipients into higher tax brackets. The analysis provides some evidence that superannuitants may be more responsive to marginal tax rates than other population groups, with implications for understanding how tax policy design affects employment decisions in the context of population ageing. Specifically, superannuitants may adjust their labour supply in response to tax changes – working or earning less if tax rates increase, and more if tax rates decrease.

Conclusion

The analysis summarised in this article reveals insights from microdata

about retirement incomes. For more comprehensive examination of these findings, we direct readers to the detailed analysis contained in the referenced studies and their underlying source materials. The analysis shows that New Zealand's superannuation system faces tensions between competing objectives. Understanding fiscal incidence, income distribution, transitions and incentive structures simultaneously reveals why these tensions exist and what trade-offs different approaches involve. This understanding is important when considering how to maintain a system that can balance competing economic objectives, while supporting diverse superannuitant populations through ongoing demographic change.

1 The results in this article are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI), which is carefully managed by Statistics New Zealand. The IDI is a large research database which contains administrative data about people and households. This data comes from government agencies and non-government organisations: for example, income and tax records from Inland Revenue and social benefit records from the Ministry of Social Development. The results are based in part on tax data supplied by Inland Revenue to Statistics New Zealand under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes and is not related to the data's ability to support Inland Revenue's core operational requirements. Access to the survey data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the authors, not Statistics New Zealand or individual data suppliers.

2 A limitation to consider when using the TAWA model (which is based on the Household Economic Survey) to study seniors is that it targets the usually resident individuals of private dwellings. It does not include people who live in homes for the aged. Statistics New Zealand (2024a) estimates that, in 2023, 91,480 people lived in non-private dwellings. Moore et al. (2024) report that around 32,000 New Zealanders live in aged residential care facilities. These figures should be compared with an estimated 65+ population in 2023 of 868,700 (Statistics New Zealand, 2022) and a 2023 population of 1,159,000 people living in households that contain people 65+ in our data.

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