Jason Raven

Financial Incentives to Work

the size of the margin between benefit and in-work incomes

This article uses case studies and international comparisons to study temporal trends in financial incentives to work in New Zealand. It then tests those trends using a sensitivity analysis. The article concludes that the gap between benefit rates and incomes from work (i.e. paid employment) is relatively large, at least in a historical context. However, while the size of the gap may be large, it has been fairly stable for families with children since 2006, even in the face of rising before-tax and after-transfer incomes. This is due to a range of factors, including the abatement of Working for Families (WFF) and other payments as incomes rise, and the non-adjustment of some transfer payments for changes in consumer prices.

Introduction

Financial incentives to work are an important consideration for policy makers in the realm of welfare and tax policy. Dominating one corner of the classic 'iron triangle' used by policy advisors to illuminate trade-offs between incentives to work, income adequacy and fiscal cost, poor financial disincentives to work can contribute to 'trapping' people in poverty. Further, as modern welfare systems have become increasingly 'active', with a strong focus on work and increased independence from the state, positive financial incentives have increasingly come to be seen as an important precondition for the effective operation of the welfare safety net.

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Background

Economists commonly use two main measures of financial incentives to work:

- incentives at the 'intensive margin', which consider the financial incentive to work a little more, or a little less – to earn another dollar or work another hour;
- incentives at the 'extensive margin', which consider the financial incentive to make the big decisions – to

work at all or not to work, to work part-time or full-time. The usual measure of the extensive margin is the 'replacement rate', which looks at the proportion of a person's in-work income that could be replaced if they moved instead onto a benefit: essentially, the size of the gap between benefit and work incomes.

Although both approaches are important, this article concentrates on financial incentives to work at the extensive margin, and asks the question: how have the incentives to work versus remain on a benefit changed in New Zealand over the course of the last decade or two?

The factors that affect the size of the gap between benefits and income from work are the remuneration and transfer payments available when in work versus the support available while out of work. In New Zealand the key supports available for those out of work include the main benefits, the family tax credit for the care of children, and the accommodation supplement.[1] Additional ongoing hardship assistance is available for some people through temporary additional support, and one-off grants and loans are also available for specific costs. For people in employment, remuneration in the form of wages and salaries is usually the primary source of income, but transfer payments from the government, including the accommodation supplement and WFF,[2] also form a significant part of the package for many people.

In this article the basic income definition includes income from benefits, wages, the accommodation supplement and WFF. I call this 'take home' income to reflect that it is disposable income after adjusting for taxes and transfer payments. Later in the article I also look at income after housing costs are deducted: this measure is simply the 'take home' income with housing costs removed. Following the initial analysis, I add certain other income sources to test the sensitivity of the main findings.

Before launching into the analysis, it is important to put the role of financial incentives in their proper context. Financial incentives are only one factor that influences employment decisions. Many other factors, such as the availability and suitability of child care, in-work costs, personal preferences, availability of work, health status, other barriers to work, and the structure of the transfer payments themselves, also play a role. Financial incentives are not the only factor that affects employment decisions; nor are they necessarily the most important factor. But they are nevertheless an important policy consideration, for two reasons:

- A weak financial incentive to work risks creating poverty traps, where people are better off remaining on benefits than engaging in employment or human capital development.
- A strong financial incentive at the expense of inadequate benefit payments may mean the level of hardship among beneficiaries is unacceptable, with consequent impacts on a range of other social and economic outcomes.

Whether any particular margin is good, bad or indifferent is a normative question, and requires an expressed value set to answer. This article does not seek to speak to the adequacy of the margin between benefits and wages, but instead uses a comparison over time to understand the relative size of this margin in the context of New Zealand history, and tests these findings by making comparisons with other nations in the OECD.

Measuring the size of the income difference between on-benefit and in-work incomes

The financial (dis)incentives faced by an individual (as measured by the gap between in- and out-of-work incomes) vary according to many factors, including family type, benefit type, wage levels, hours worked, geographic location, type of assistance received, and number of children. While this means that exact measures of work incentives cannot be generalised to large groups of the population, many of the high-level trends can. This article concentrates on these generalisable findings. It takes the approach of using three central scenarios to illustrate general trends, before zeroing in on the sole-parent case to conduct a sensitivity analysis to ensure that the high-level trends observed can reasonably be generalised.

> While incomes increased substantially for people with children as a result of the WFF changes between 2004 and 2007, take-home incomes for working people with children in these scenarios have remained largely static in real terms since then.

Method

The time period for most of the analysis is 2003–14, due to the availability of data. Most of the output is drawn from the Ministry of Social Development's 'effective marginal tax rate model', augmented by the author's own calculations where necessary. For convenience a distinction is made between people 'on benefit' and working zero hours, and 'in work' (working non-zero hours). The scenarios highlight people working 0, 30 or 40 hours. Those working 30 or 40 hours are in some cases receiving a main benefit.

The analysis is based on families renting in South Auckland, and in the base case receiving the maximum accommodation supplement for that region (a sensitivity analysis is undertaken to explore the impact of this assumption). All children are assumed to be aged under 13 years.[3] In addition to receiving benefit and no market income, three in-work scenarios have been used to establish the size of

Figure 1a: Take-home income for a couple with two children

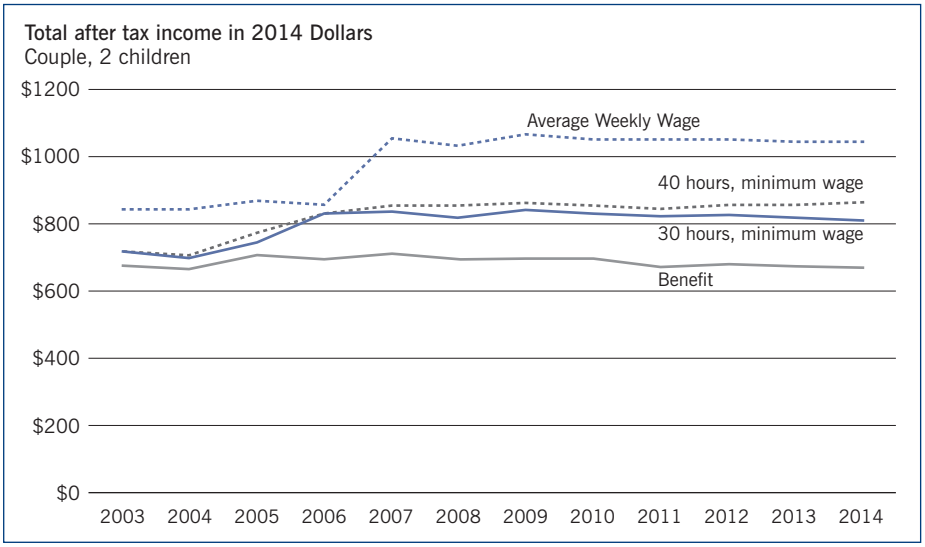


Figure 1b: Take-home income for a sole parent with two children

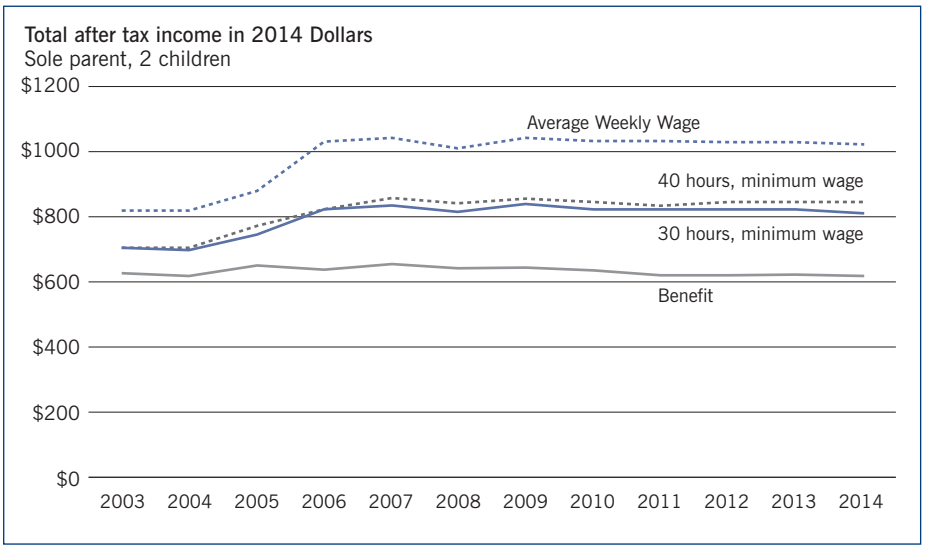
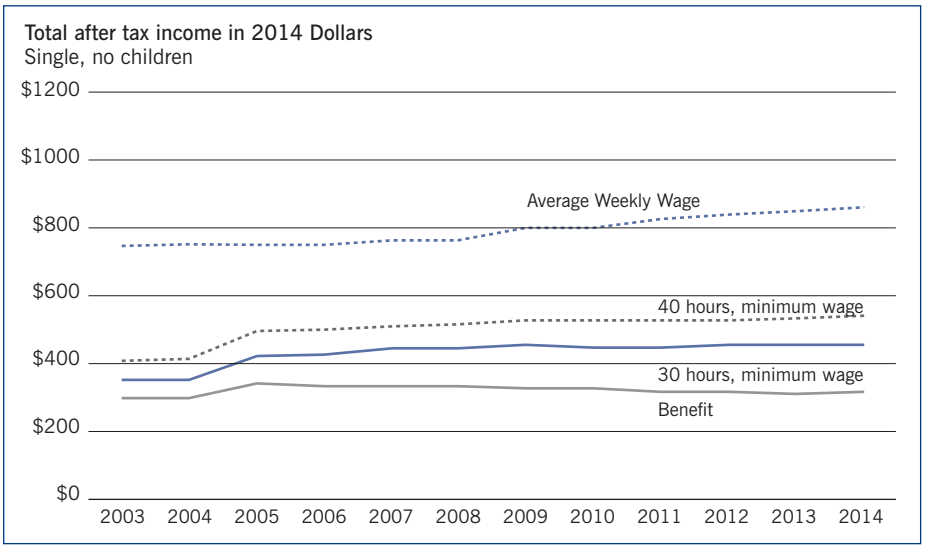


Figure 1c: Take-home income for a single person with no children



the 'gap' or margin between in- and out-of-work incomes: working 30 hours per week at the minimum wage; working 40 hours per week at the minimum wage; and working 40 hours per week and earning the average ordinary-time weekly wage. For couples it is assumed that the hours are worked entirely by one partner. Incomes are before housing costs unless otherwise stated. Hours less than 30 per week result either in it being more beneficial for the family to remain on a benefit (in the case of couples), or exactly the same level of in-work income as for the 30-hour case (in the case of sole parents) due to the operation of the minimum family tax credit.

While this analysis is scenario-based, the high-level trends they demonstrate are generalisable, and sensitivity analysis has been conducted to ensure that these high-level findings are robust. The high-level findings hold true for most family types, and for a range of full-time employment levels and wage rates. However, the modelling is notably sensitive to:

- the transfer payments that the family is entitled to (for example, not meeting the qualifying criteria for WFF payments will have a notable impact on the size of the gap);
- whether the family is accessing all of the payments they are eligible for;
- the level of housing costs faced;
- any in-work costs faced by the family, in particular childcare, which can erode the returns from employment.

Each of these factors is explored further in the section on sensitivity analysis.

Results

The size of the gap between benefits and wages

Figures 1a–1c shows take-home income over time for three family types. The figures are CPI (consumer price index) adjusted and displayed in 2014 dollars. The graphs indicate that in these cases the take-home incomes of minimum-wage and average-wage workers with children have increased since 2003, with a marked increase following the Working for Families changes.

While incomes increased substantially for people with children as a result of the WFF changes between 2004 and 2007, take-home incomes for working people with children in these scenarios have remained largely static in real terms since then. There are a number of factors that contribute both positively and negatively to the flat trajectory for in-work take-home incomes since 2007. Tax cuts and periods of real growth in after-tax average and minimum wages over the

period contribute to widening the gap. On the other hand, while the changes to WFF payments increased the gap, they then served to constrain the growth in those incomes through the abatement regime and the non-indexation of some payments (i.e. the accommodation supplement and in-work tax credit). In particular, for families earning the average wage the increases in the average wage have been eroded by abatement of WFF and the accommodation supplement, and by the erosion of the real value of the accommodation supplement and in-work tax credit[4] component of WFF.

For those earning the minimum wage and receiving the minimum family tax credit,[5] increases in minimum wages do not flow through into higher real take-home incomes due to the 100% abatement rate for this payment. The very small difference between the take-home earnings of someone on the minimum wage working 30 hours per week or working 40 hours per week also demonstrates this effect. In fact, a sole parent working 20 hours a week at the minimum wage would also have a similar take-home income.

The case of the single person without children further illustrates the point. After 2006, take-home incomes for single people in work in Figure 1 increase more quickly than for those with children, due to the absence of WFF payments, and the absence of the non-indexed accommodation supplement in the average wage case. In the sole parent example explored in Figure 2, the gap has more than doubled in real terms in all cases, increasing by $211 for the average wage case and $142 and $108 respectively for the 40- and 30-hour minimum wage cases.

The net effect of these various factors is that take-home in-work incomes for people without children have steadily grown in real terms, while they have remained basically flat since 2006 for people with children. Out-of-work incomes, on the other hand, have eroded slowly in real terms due to the non-indexation of the accommodation supplement. The net result of a stable or slowly growing gap is illustrated in Figure 2 for the sole-parent case.

Figure 2: Real value of the difference between work at various levels, and benefit

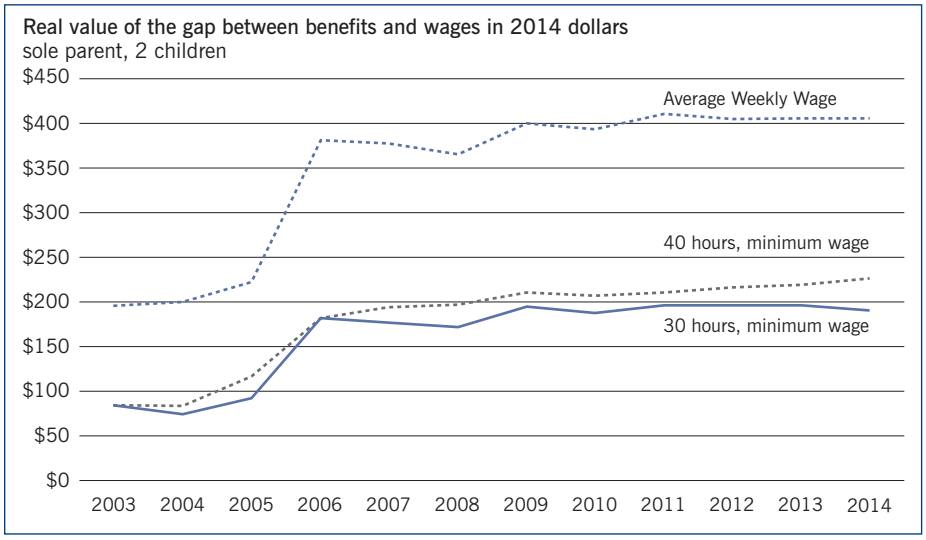


Figure 3: Impact of the Budget 2015 child material hardship (CMH) package

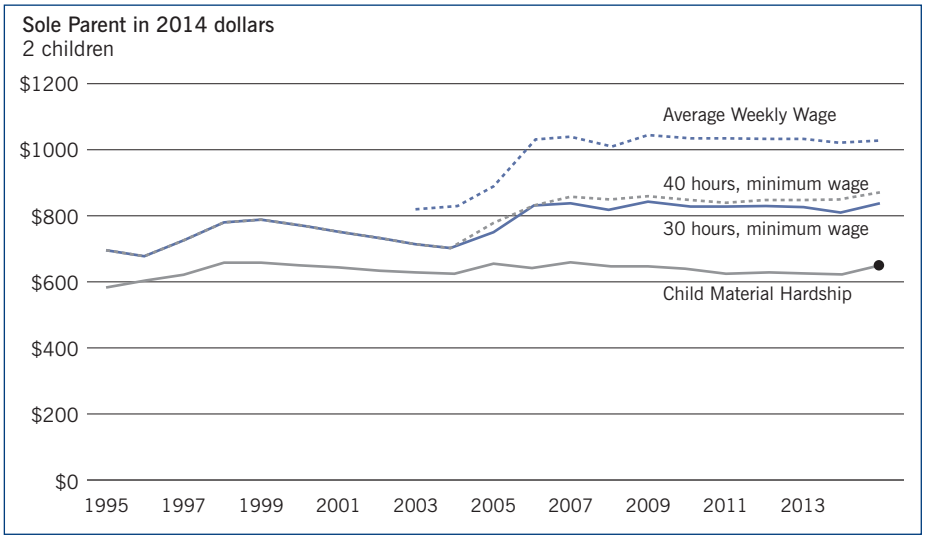


Figure 3 shows the size of the gap between benefits and wages for the sole-parent scenario used above over a longer time period. It confirms that the current gap between benefits and wages is relatively large within this extended historical context.

Impact of the Budget 2015 child hardship package

From April 2016 the Budget 2015 child material hardship package will increase benefit rates and some WFF payments (i.e. the in-work tax credit and minimum family tax credit) for families with children. Figure 3 shows the impact of this package, which will arrest and partially reverse the decline in real incomes (before housing costs) for beneficiaries. However, in the absence of further policy change the longer-term decline in beneficiary incomes will reassert itself. The package will not have a significant impact on financial incentives to work at low wages, and will only very slightly erode the gap at higher earnings levels.

Sensitivity analysis

The high-level findings above have been tested for a range of other family types, low wage levels and rent levels. The high-level trends are robust to a broad range of different assumptions. However, the modelling is notably sensitive to:

- the level of housing costs faced;
- the transfer payments that the family is entitled to, and whether they are actually accessing those payments;
- in-work costs faced by the family, in particular child care, which can erode the returns from employment.

These sensitivities are explored further below, using the sole-parent scenario as a test case.

Figure 4: After-housing-cost incomes at lower quartile (LQ) rents

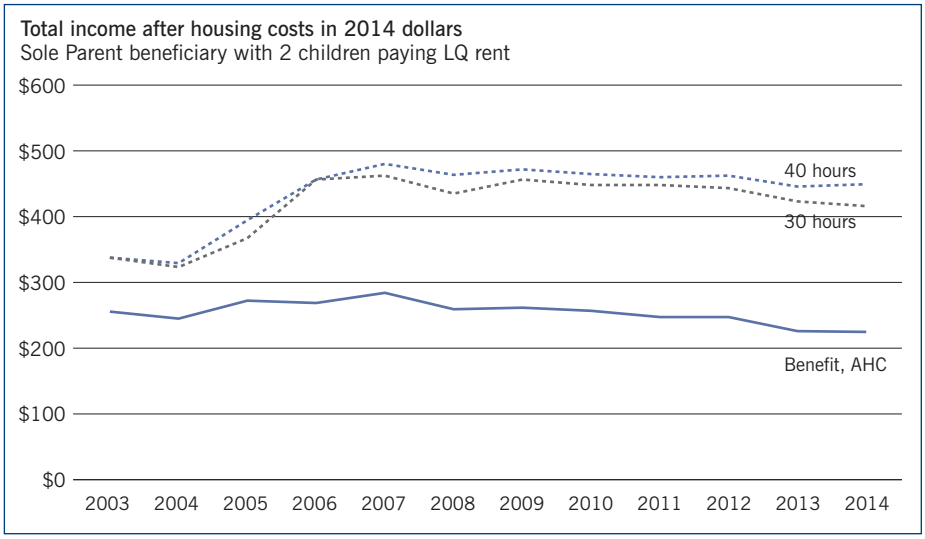
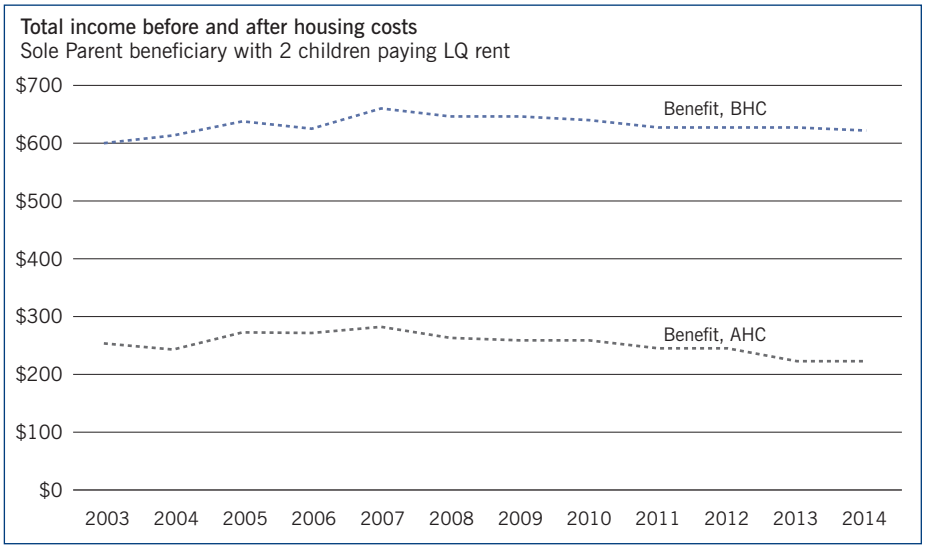


Figure 5: Before-and after-housing-cost beneficiary incomes at lower quartile (LQ) rents



Housing costs

Housing costs and housing benefits are a very important component of a family's financial situation. So far the analysis has assumed that in each scenario the person pays the rent that triggers the accommodation supplement maxima for accommodation supplement area 2. While this is a common situation (29% of accommodation supplement renters were in area 2, and 45% of them received the maximum rate as at June 2014), a sensitivity analysis is needed to ensure that the high-level trends are not overly sensitive to this assumption, and to understand the trends in incomes after housing is paid for.

Figure 4 shows our sole parent paying the lower quartile rent for a three-bedroom home in South Auckland, and the resulting disposable income after housing costs are accounted for.[6] The graph indicates that while the exact size of the gap between on-benefit and in-work incomes is sensitive to the accommodation cost assumption, the same trends are evident when using this altered methodology. With this rental assumption, a downward trend in the disposable incomes of beneficiaries and low-income working people is more clearly evident, and the increase in the financial incentive to work over time is more marked. For lower rental cost locations that have experienced lower rental inflation over the time period, these trends will be less pronounced, but for almost all variations of family type, location and rent level, the downward trend will persist.

Figure 5 shows the impact of looking at incomes after housing costs compared to before housing costs (or 'take home'). It shows a gradual widening of the gap between before- and after-housing-cost incomes over time as rents rise and the accommodation supplement formula provides only partial compensation (due to its maximum rates, co-payment and lack of indexation).

The example above is for a sole parent in South Auckland. Altering the geographic location and family type affects the level and slope of the lines in Figure 5, but the features of the accommodation supplement formula (i.e. the different maximum rates for different family types and regions) mean that the overall downward trend persists, while the height of the lines varies considerably (higher-cost locations such as Auckland and Christchurch having considerably lower after-housing-cost incomes than lower-cost locations).

Addition of other transfer payments

The analysis in this article uses a broad but not exhaustive definition of total income, and over time New Zealand has seen a shift towards greater reliance on other supplementary payments. As a result, there is a range of relatively common additional assistance available to people which also affects the size of the gap between benefit and work incomes. The most important financial assistance that is excluded from my analysis and its impact on the basic findings is summarised below:

- Disability allowance: paid to 110,838 beneficiaries at the end of August 2015, the disability allowance has a 'cliff-face' abatement at relatively modest income levels (above the income levels for the minimum wage scenarios in this article, but below the average wage scenarios), but is available to beneficiaries regardless of income. Approximately 28,000 families with children receive the disability allowance. Including the disability allowance in the analysis would slightly reduce the gap in the average wage scenarios.
- Income-related rent subsidy: people in social housing receive the income-related rent subsidy rather than accommodation supplement. For subsidy recipients, assistance levels have risen in line with market rents, which reverses the downward trend

in real after-housing-cost incomes for this group. However, the abatement regime for the income-related rent subsidy is sharper, resulting in a smaller gap between benefit and work incomes for social housing tenants, higher effective marginal tax rates over a longer income range, and higher incomes for those on benefits.

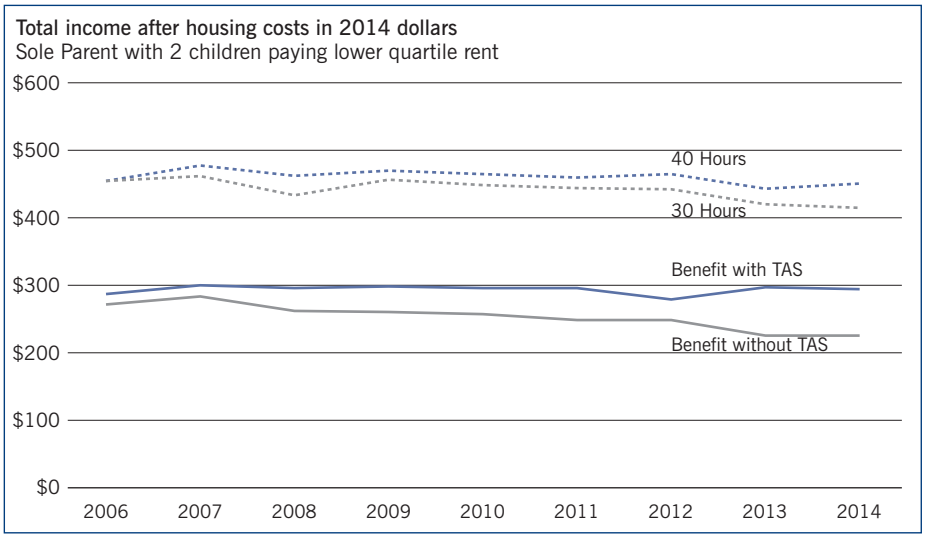
- Special needs grants and recoverable assistance: these payments effectively increase the financial help available to beneficiaries and very low income earners relative to workers on slightly higher incomes. For this analysis, these payments have a similar impact as the disability allowance on financial incentives.

Temporary additional support warrants special attention as it has a specific role in topping up incomes for people facing high essential costs such as accommodation costs. Temporary additional support is an ongoing, non-taxable supplementary payment intended as a last resort to help people with their regular essential living costs when these cannot be met from their own resources. It has a maximum rate equal to 30% of the relevant rate of main benefit. Temporary additional support is granted for a period of 13 weeks at a time, but can be renewed indefinitely.

Temporary additional support was received by 58,389 people (about one in five beneficiaries) at the end of July 2015. Accommodation costs are the largest driver of receipt of temporary additional support, followed by disability costs. Temporary additional support increases the income available for those receiving a benefit relative to people in work, and does so most significantly for those with high accommodation costs. It therefore reduces the gap between benefit and work incomes (by up to $71 per week in the example below), and increases effective marginal tax rates for very low income people.

Figure 6 incorporates temporary additional support into the calculation, for a sole parent with two children.[7] By and large, the impact of including temporary additional support is to eliminate the downward trend in after-housing-cost incomes for beneficiaries.

Figure 6: After-housing-cost incomes with and without temporary additional support (TAS)



This phenomenon is what some policy advisors refer to as the 'squeezing the balloon' effect, whereby reductions in financial assistance in one corner of the welfare system (in this case the declining real value of accommodation assistance) results in increased assistance elsewhere due to a combination of the interrelationships between different types of assistance. Effectively, temporary additional support improves the incomes of a subset of people with very limited means to support themselves, but is received by only a relatively small portion of beneficiaries.

In-work costs

The analysis above identifies trends in the size of the gap between benefits and wages, but does not give an indication of the sufficiency of the resulting gap. Crucial to this judgement are individual preferences regarding the non-financial benefits of work and the costs associated with being in work (transport, child care and clothing, for example). These costs, particularly child-care costs in the case of sole parents, are often the critical factor in determining whether there is a return from employment at all, and the size of that return.

The absence of analysis of the impact of in-work costs on the size of the gap is an important deficiency in this article that deserves further exploration.

International comparisons of replacement rates

International comparisons of financial incentives to work are difficult to make due to different labour markets and policy settings. In particular, differences in the way payments are structured can mean that international comparisons are misleading, and significant variations in wage levels and social welfare policy settings also contribute to making between-country comparisons problematic. However, the OECD does provide data in its online database[8] which suggests that New Zealand's position in the OECD rankings is unremarkable, and a trend of increasing incentives to work over time is evident.

Figures 7 and 8 show replacement rates for the OECD summary measures in 2012. This is a similar approach to the discussion of the work–benefit 'gap' developed in this article. The OECD provides two measures which are replicated here, before- and after-housing benefits and social assistance measures. The measure used is the summary net replacement rate (NRR) – the average of net unemployment benefits' (including social assistance and cash housing assistance) replacement rates for two earnings levels, three family situations and 60 months of unemployment.

Using the measure *excluding* social assistance and housing benefits (primarily WFF and the accommodation supplement in New Zealand), New Zealand sits in a group of countries towards the higher (i.e. lower incentive to work) end of the OECD, with countries like Germany, Australia and Sweden. The measure after accounting for housing benefits and social assistance (notably adding in WFF

Figure 7: OECD summary measures of net replacement rates (NRR) excluding housing benefits and social assistance

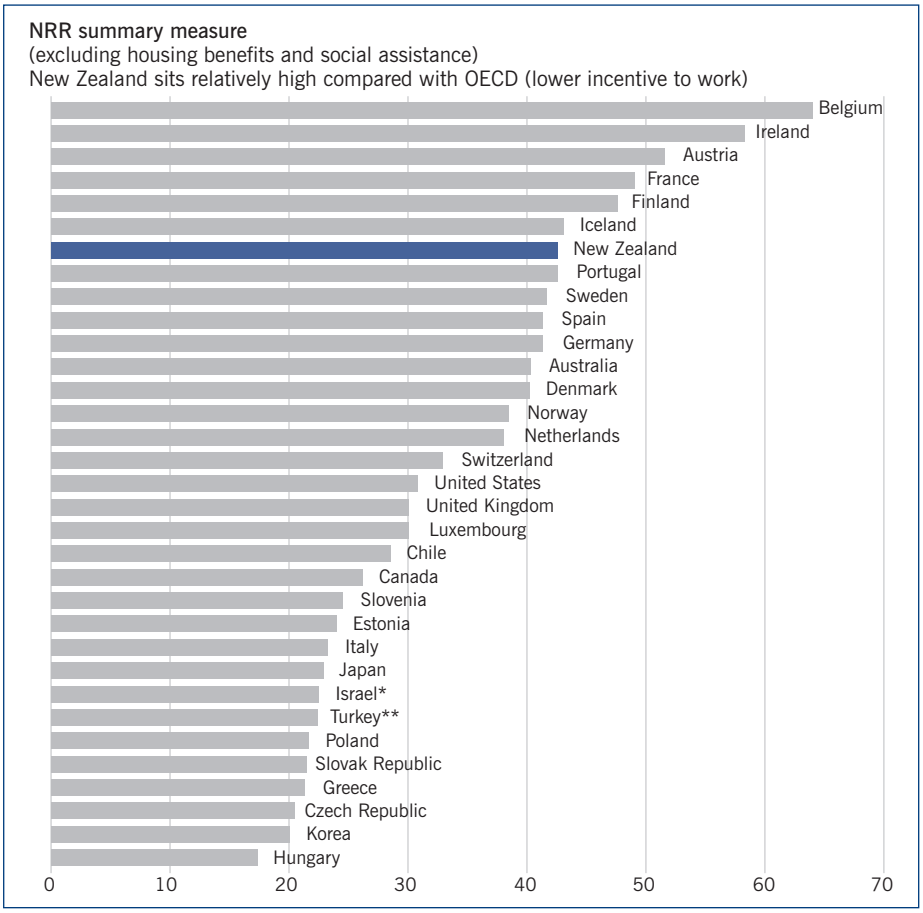
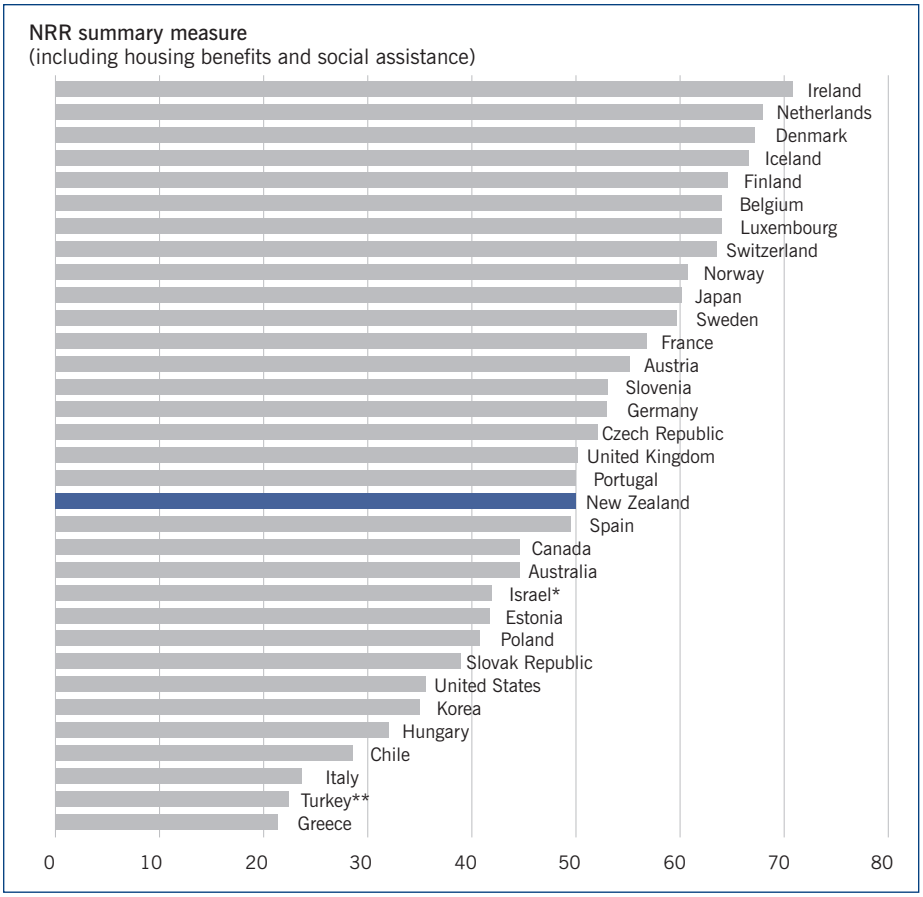


Figure 8: OECD summary measures of net replacement rates (NRR) including housing benefits and social assistance



and the accommodation supplement in the New Zealand context) shows New Zealand sitting towards the middle of the OECD, alongside the United Kingdom and slightly higher than Australia. The shift in relative ranking demonstrates the impact of WFF, and to a lesser extent the accommodation supplement, in New Zealand in lifting in-work incomes relative to out-of-work incomes.

Trends in replacement rates

Figure 9 shows New Zealand trends for gross and net replacement rates from the OECD's benefits and wages database. A lower replacement rate implies a greater income gap between benefits and work. The generally reducing replacement rates since 2001 on these OECD summary measures indicates a strenghtening incentive to enter into or remain in employment, and is consistent with the New Zealand analysis earlier in the article.

Conclusion

This article has examined the gap between the income levels of people who are receiving a benefit and those in paid employment. The primary finding is that the size of this gap is relatively large within the historical context of the last two decades, and is slowly growing as a consequence of static or slow growth in in-work incomes (for families with children) and slowly declining out-of-work incomes.

Two factors act to temper parts of this main finding:

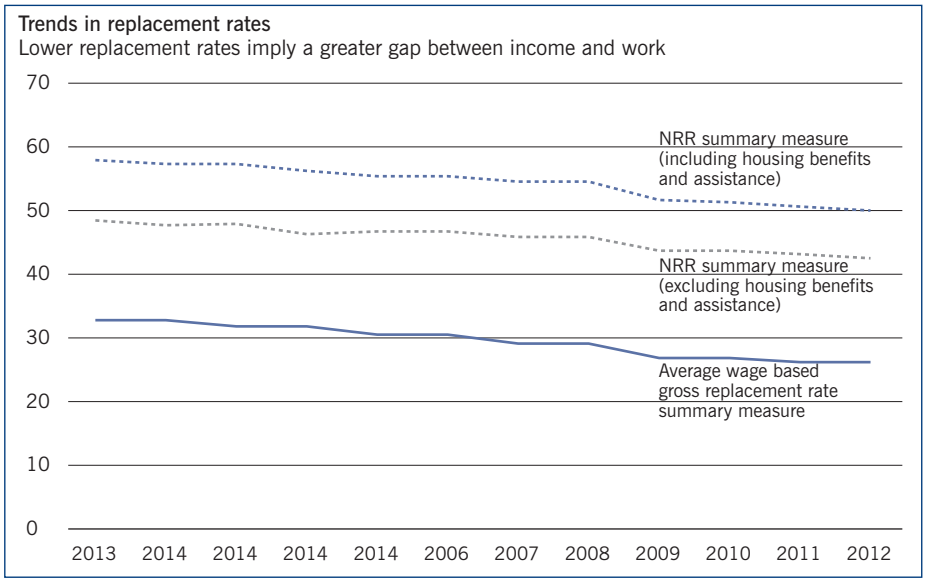
- The increases in benefit, minimum family tax credit and in-work tax credit rates announced in Budget 2015 arrest and partially reverse the downward trend in benefit incomes, but maintain the gap between benefit and work incomes at lower wage rates. Without further policy change, however, the underlying policy settings will see a return to the longer-term trends.
- The existence of other forms of financial assistance, such as income-related rents for social housing tenants and temporary additional support, prop up incomes for the beneficiaries who receive them, and

reduce the gap between benefits and wages.

Alongside the primary finding, this article also casts light on two other matters relating to the form and function of New Zealand's tax–welfare system. First, while WFF payments played a key part in increasing the gap, for minimum wage workers receiving the minimum family tax credit, increases in minimum wages do not flow through into higher take-home incomes. For average wage earners, a combination of non-indexation of the in-work tax credit and the accommodation supplement, and abatement of WFF payments, yields a similar result. Second, the fact that New Zealand's primary income support for housing costs is not regularly adjusted to address changes in the housing market means that there has been a widening gap between incomes before and after housing costs for beneficiaries and low-income renters over the last decade. As a result, the increase in the financial incentive to work over time is more marked when looking at after-housing-cost measures.

Finally, I would like to acknowledge that a key shortcoming of the analysis in this article is that it does not address the question of in-work costs. The costs of working, especially child-care costs for families with children, are a key factor in determining whether the margin between in- and out-of-work incomes is sufficient to incentivise behavioural change. The issue of the levels and trends of in-work costs is an area that warrants further investigation.

Figure 9: Trends in replacement rates, OECD



1 The accommodation supplement provides a partial subsidy of housing costs (rent, mortgage or board) up to a maximum. The maximum payment varies according to region and household size. While the payment is available to mortgagors and boarders, this article concentrates on the more common situation of renting.

2 Working for Families is made up of four main payments. The family tax credit is available to both working and beneficiary families. The in-work and minimum family tax credits are available only to families who are not on a benefit and who work a required number of hours per week, and the parental tax credit is available for to parents of a newborn child for ten weeks following birth.

3 The number and age of children in the family affects the family's take-home income, but generally does not affect the size of the gap between benefit and work incomes. For larger families with four or more children, however, the in-work-tax credit increases by an additional $15 per child, which increases the gap for these families. The base rate of the in-work-tax credit is $60 per family, and this has not been adjusted since its introduction in 2006.

4 The accommodation supplement maximum rates were last adjusted in 2005, while the base rate of the in-work-tax credit of $60 per family has not been adjusted since its introduction in 2006.

5 According to the Budget 2015 factsheet (http://www.beehive.govt.nz/sites/all/files/I2c-english-tolley-fact-sheet-3-changes-to-working-for-families.pdf), around 4,000 families receive the minimum family tax credit at any point in time.

6 Notably, from 2006 onwards someone paying lower quartile rents in this locality and situation is at the accommodation supplement maximum anyway.

7 Note that data is available only from 2006 as temporary additional suppory was introduced that year, replacing the more discretionary special benefit.

8 The information in this section is drawn primarily from the OECD's Directorate for Employment, Labour and Social Affairs, Benefits and Wages statistics, accessed from http://www.oecd.org/els/benefitsandwagesstatistics.htm on 9 September 2014.

Acknowledgements

The author would like to sincerely thank Michael Fletcher, John Marney, Tony Burton, Eric Crampton, and the Ministry of Social Development's forecasting and costing team for comments and assistance in preparing this article. The views expressed in this article are those of the author, and do not represent the ministry. Any errors remain the responsibility of the author alone.