

## Estimating the impact of the Families Package changes in financial incentives

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### Executive summary

The provision of income support typically involves a trade-off among three main competing objectives:

- achieving income adequacy or poverty reduction
- maintaining work incentives
- limiting the fiscal cost of the support.

Although labour supply decisions are influenced by more than simply financial incentives, understanding the role of financial incentives in income support settings is important for policy development. If a policy substantially reduces employment and causes higher rates of income support receipt, then achieving poverty alleviation goals will come at a higher fiscal cost.

The available evidence on labour supply responses to financial incentives in income support policy settings is mixed and surprisingly muted. There is only a small amount of specific New Zealand evidence on the actual nature of the empirical relationship for those in receipt of income support.

### Research approach

In this report, we use a novel approach to examine one aspect of the changes in financial incentives after the introduction of the Families Package in 2018 to determine whether these changes impacted recipients' labour supply responses. The 2018 Families Package introduced a variety of changes to existing policy parameters as well as initiatives that provided additional support for low- and middle-income families with children. While a number of the Families Package changes had implications for the financial incentives recipients face, the focus of this report is primarily on recipients' labour supply responses to the Family Tax Credit changes, though we also examine responses to other Working for Families tax credits (i.e., the Minimum Family Tax Credit and the In-Work Tax Credit).



The research design used to analyse these changes explores people's tendency to choose (where possible) their level of earnings based on how much their earnings contribute to disposable income. For example, the Minimum Family Tax Credit is designed to top up recipients' incomes to a fixed amount; therefore, once an individual qualifies to receive it, every additional dollar they earn above that amount reduces their tax credit by the same amount. Hence, there is little financial incentive to marginally increase one's earnings beyond this initial amount. To the extent that people respond to these incentives in similar ways, one would expect to see a clustering of individuals, subject to the same programmatic requirements, with similar earnings at a rate that maximises their disposable income. Our approach therefore looks for clusters of individuals 'bunching' around key points (or 'kink points' as they are known in the literature because of the discontinuities or kinks they cause) along the income schedule which were affected by the Families Package changes.

Our analysis focuses on the more salient kink points associated with the Family Tax Credit policy changes. Specifically, we focus on the change in the Family Tax Credit earnings abatement thresholds, examining whether there is any evidence of bunching at these points or any change in bunching aligned with the policy changes.

This analytical approach was pioneered to examine labour supply responses to the United States (US) Earned Income Tax Credit where researchers found significant labour supply responses to that tax credit.

### **Responses to threshold changes**

The Families Package increased both the Family Tax Credit abatement threshold (from \$36,350 to \$42,700) and the abatement rate from (22.5% to 25%). In terms of financial incentives, the change in the threshold allows families to earn more before their maximum credit begins to be reduced, but the increased abatement rate also reduces the value of each dollar earned beyond the threshold, making it more costly to marginally cross the threshold. We expected to see a shift in bunching from the old thresholds to the new thresholds as people correspondingly adjusted their earnings.

Unlike the results found in the US, we find no evidence of a labour supply response to the Working for Families tax credits using this approach. We do find clustering around the 20 hours-per-week work requirement for sole parents receiving the Minimum Family Tax Credit, but this may be more a function of the group eligible for the tax credit (given their low minimum income level) than an indication of a behavioural response. This seems further supported by the lack of clustering in Minimum Family Tax Credit dollar amounts received by this group or in the clustering of hours seen for In-Work Tax Credit and Family Tax Credit sole parent recipients – clustering in these groups was primarily around 40 hours per week.

In contrast to the lack of bunching around the Working for Families thresholds, we see clear evidence of bunching around the top two marginal tax rate thresholds (\$48,000 and \$70,000) as well as at twice these amounts by coupled parents. This suggests the methodology is able to identify such behavioural responses if they exist. Even so, the contrast between the degree of bunching around the marginal tax thresholds and the lack of bunching around the Family Tax Credit abatement thresholds is somewhat surprising given the much smaller change in the marginal tax rates at the tax thresholds (12.5% and 3%) compared to the tax credit (22.5% to 25%). This means crossing the tax credit threshold is more costly for families than crossing the marginal tax thresholds.

## **Explaining New Zealanders responses**

Given our results are in stark contrast to the evidence on bunching seen with the US tax credit, it is worth considering why this is the case. We believe there are various contributing factors. One difference is that the US tax credit policy is explicitly stated and administered on an annual tax-year basis. In contrast, despite the expression of New Zealand's Working for Families tax credit policies in annual terms, the administration of eligibility for and receipt of Working for Families payments may be on a partial, within-year basis. As a result, if recipients are responding to the financial incentives on an intra-year basis, the effects may not be evident in terms of their annual earnings. Moreover, the US tax credit has no hours-of-work requirement and is strictly based on annual earned income in the tax year, whereas both the Minimum Family Tax Credit and the In-Work Tax Credit had a weekly hours' requirement during our analysis period. This meant that the entry threshold for these credits in income terms could vary markedly for different families. This makes bunching more difficult to detect and our estimated entry threshold for the in-work tax credits becomes more of a reference point than a strict threshold.

Another difference is that in the US, the response to the tax credit was seen most clearly from those with self-employment earnings. However, in New Zealand, self-employment earnings do not count towards the hours-of-work requirement for the Minimum Family Tax Credit. This requirement can only be met using hours and wages offered by employers.

It's also material that the tax credit in the US is the main income support policy for most families, while New Zealand has a plethora of overlapping income support policies for different sub-populations. The effect of this is that any behavioural responses for the whole population may be diffused across a range of points rather than concentrated in a few areas as in the US case. Given this, income thresholds may also be difficult for recipients to ascertain. For example, the In-Work Tax Credit only begins to abate once the Family Tax Credit has fully abated, and since the Family Tax Credit depends on the number of children in the family, the In-Work Tax Credit abatement threshold may not be easy for a family to determine.

## **Findings**

In summary, we find little evidence of a labour supply response to the Working for Families tax credits despite fairly strong financial incentives. While theory predicts that there should be some behavioural response at any kink point, previous research has found that in practice bunching generally happens only in specific cases and not necessarily at every affected point. The commonalities for kink points where evidence of bunching has been previously found include high visibility and easily understood thresholds which have large impacts on disposable income. It is possible that the kink points that we examine do not share these characteristics.