Prepared for the Welfare Expert Advisory Group

Exploring a new approach to wellbeing measurement: Are people who move from benefit to paid employment better off?

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What happens to people as they move from welfare to work?

In 2017 almost 90,000 people left benefit and went into paid employment.

This represents around 20% of the people who were on a means tested main benefit during the year.

Transitions to employment are a key focus of welfare policy, but we don't have a lot of New Zealand evidence about how this transition affects peoples lives.

This research aims to investigate whether people moving from benefit to paid employment end up being better off. For example:

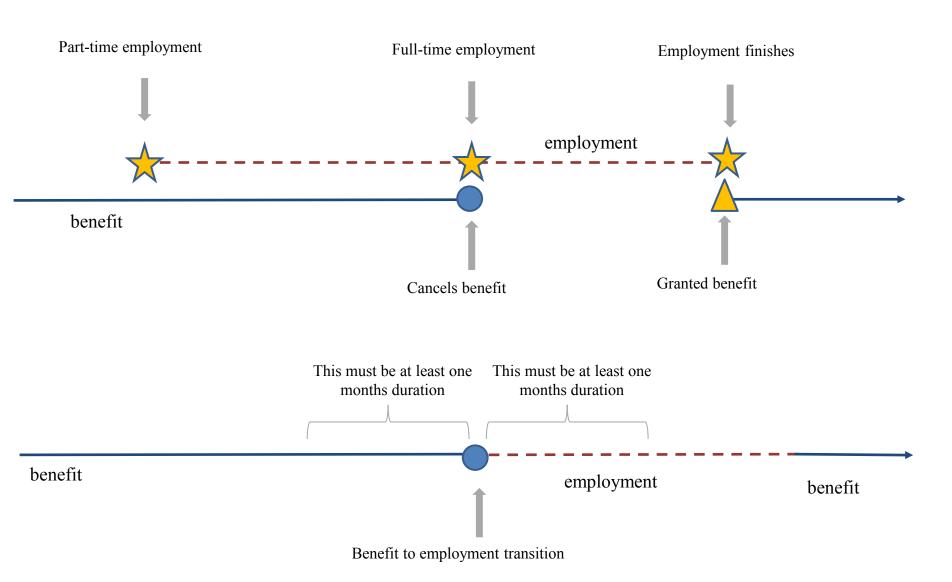
- do incomes increase?
- are people able to improve their housing circumstances?
- do people have less time for children, family and friends?
- is the transition good for mental and physical health?
- are people more satisfied with their lives?

Many aspects of the transition from welfare to employment have been extensively studied

- transitions off benefit and into employment are sometimes short lived (Hyslop et al., 2004; Dixon and Crichton, 2007)
- there is considerable heterogeneity in the 'quality' of employment, and important questions about the value of low paid, short term and insecure employment (Pacheco and Plum, 2018)
- earnings and income growth often occurs but this can be relatively modest (Grogger and Karoly, 2005; MSD, 2018)
- there are contradictory findings on employment and parenting (Gennetian et al., 2002)
- on average employment appears to have a positive effect on mental health (OECD, 2015). However there is also evidence that insecure, low paid and stressful workplaces may do the opposite (Butterworth et al., 2011)
- these is some evidence that employment might also be good for physical health (Waddell, 2006; Curnock et al., 2016), but it also depends on the safety and nature of the workplace (Siegrist, 2009)
- a number of studies have shown that transitions to employment are associated with gains in life satisfaction (Layard, 2004; Grūn et al., 2010)

This study uses the IDI and the linked NZ General Social Survey

Our base data is the welfare and earnings records of individuals in the IDI.



We also use information from the New Zealand General Social Survey in the IDI

The New Zealand General Social Survey is a household survey carried out by Statistics New Zealand and collects information on the wellbeing of the New Zealand population.

Respondents to the survey have been matched to the IDI spine.

We use data from the 2008, 2010, 2012 and 2014 waves.

Table 1: Sample size of linked GSS				
NZGSS wave	Response rate	Achieved sample	Link rate to IDI	IDI sample
2008	83%	8,721	82%	7,176
2010	81%	8,550	81%	6,942
2012	78%	8,462	81%	6,861
2014	80%	8,795	77%	6,780

Source: NZGSS 2008-2014

Research design

The base data is the administrative records of everyone aged 18 to 63 years who made a transition off benefit and into paid employment

We use the survey to construct a random sample of those leaving benefit for employment, constrained to being surveyed in a window \pm 6 months either side of the transition.

We further restrict the sample to those who were on benefit or employed during the window (and use inverse probability weights to account for differences in the probability of sampling)

Our method relies on there being an equal chance of being surveyed at any point before or after the transition. If this testable assumption is correct, the data provides an unbiased estimates of outcomes before and after the transition to employment.

We use a range of different measures from the NZGSS to assess the difference in peoples circumstances after moving into employment.

We look at differences in outcomes prior to and after the transition using both graphical and regression analysis.

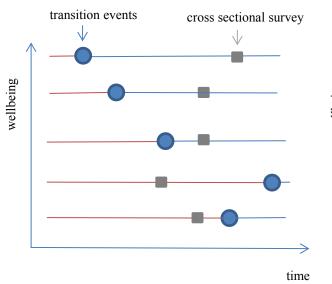
This is a work in progress and we are still considering some of the detail of our methods.

Administrative data

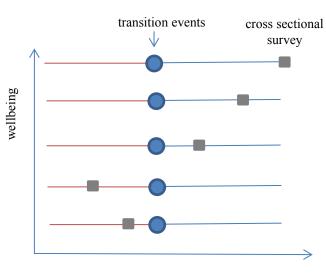
transition events

Administrative data captures longitudinal information about individual and events (often associated with receipt of government services). It often does not include information about peoples self assessed wellbeing

Administrative data with linked cross sectional survey data



When a cross sectional survey about wellbeing is linked to the administrative data it has the potential to provide more information about a random sample of individuals



time relative to event

The sample is representative of how wellbeing changes before and after transition events if the date of being surveyed is 'random' (ie not correlated with the transition event)

Description of our sample

The total sample has 423 people who made a transition off benefit and into employment within a \pm 6 month window:

- equally distributed across the four waves of the survey
- average age of 39 years
- 56% women
- 37% single with no children, 30% sole parents, 25% couple with dependent children
- 66% European, 27% Maori and 8% Pacific (total count ethnicity)
- high proportion with few qualifications
- 24% in tertiary education in past 12 months
- 50% renting from private landlord
- roughly 50% were on an unemployment benefit prior to transition, and 26% were receiving a sole parent benefit

Over 90% were employed part-time prior to leaving benefit.

After making the transition to employment 21% were back on benefit within 6 months.

Sample balance

A critical assumption is that individuals have been surveyed at date which is orthogonal to the date of transition.

As a result the before and after subsamples should be the same (ie balanced).

We examine differences between the subsamples across a range of dimensions:

- 207 people on benefit prior to the transition, and 216 employed after the transition
- on average people were surveyed 69 days prior to the transition, and 79 days after the transition
- the numbers in each week were relatively constant
- the average age was 39 years for the pre subsample and 38 years for the post subsample
- women make up 56% of the pre subsample and 59% of the post subsample
- sole parents made up 32% of the pre subsample and 26% of the post subsample

There were only a few statistically significant differences across most dimensions measured.

We think these were the result of our small sample as opposed to a systematic bias (although we need to do more testing on this).

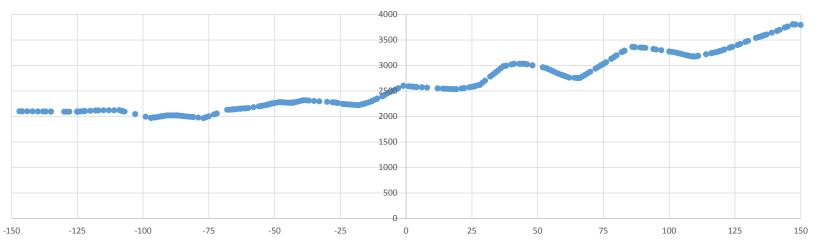
How does wellbeing change before and after the transition?

Pooling across the four waves of the GSS allows us to measure:

- monthly income at survey date (from administrative data)
- enough income to meet everyday needs for such things as accommodation, food, clothing and other necessities
- enough free time
- sufficient bedrooms
- house free of mould or dampness
- is your house or flat colder than you would like in winter
- feel safe walking in neighbourhood after dark
- easy to be yourself in New Zealand (cultural identity)
- very good or excellent self rated health
- SF12 physical health score
- SF12 mental health score
- in the last four week have not felt lonely
- overall life satisfaction

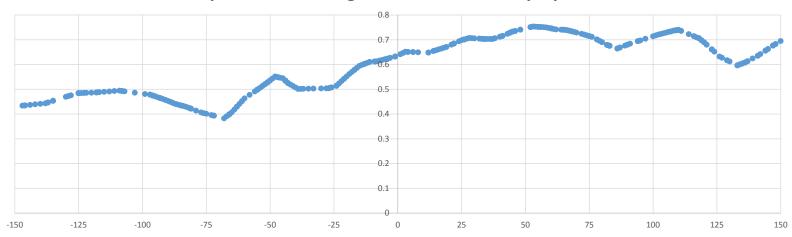
Visualising the trajectories with LOESS curves

Monthly income



Days relative to date of transition off benefit

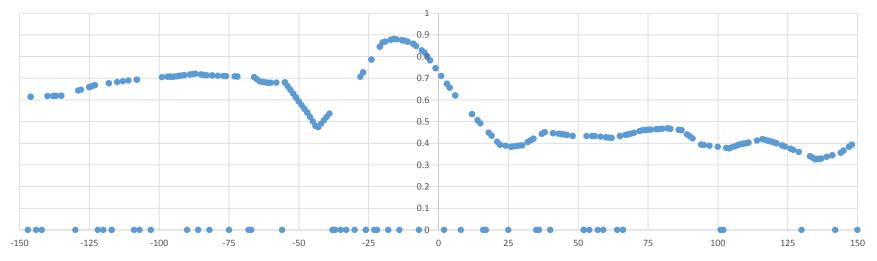
Proportion with enough income to meet everyday needs



Days relative to date of transition off benefit

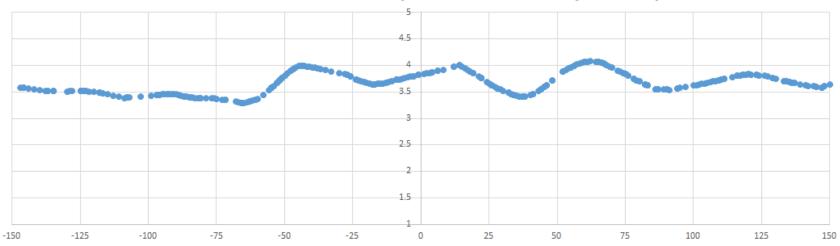
Visualising the trajectories with LOESS curves

Proportion with enough free time



Days relative to date of transition off benefit

Life satisfaction index (1=not satisfied 5=very satisfied)



Days relative to date of transition off benefit

Quantifying changes in wellbeing after moving off benefit and into paid employment

Our strategy is to compare average wellbeing measures before and after transition. We also regression adjust these comparisons to account for differences in year and demographic composition. Initial results suggest:

- income increased by around \$900 per month
- the proportion indicating they have enough income to meet everyday needs increased from 50% to 70%
- the proportion with 'enough free time' dropped from 70% to 44%
- the proportion living in crowded housing was unchanged (9% of respondents were in crowded homes after moving into work)
- the proportion with mouldy or damp homes was also unchanged (22% of respondents were in homes that were not mouldy or cold after moving into work)
- once in work people appear to indicate that their house or flat is colder than they would like in winter (from 26% to 36%)
- there was no change in perceptions of neighbourhood safety
- there was no change in cultural identity (roughly 78% indicating that it was 'easy to be myself in New Zealand')
- there was no change in self rated health or mental health, but a small improvement in physical health
- there was no measured change in loneliness
- there was a small increase in overall life satisfaction, but this was not generally statistically significant.

Important to understand that these changes are not necessarily 'caused' by employment. In some instances there will be reverse causality, and we plan to analyse pre transition trajectories to account for this.

Some limitations, caveats and future work

- our analysis is experimental and is still a work in progress
- the analysis has a very small sample size
- our analysis focusses on the average experience only, and we have not looked at differences for sub groups (because of the small sample size)
- we are analysing transitions off benefit as a result of employment, rather than any transition to employment
- we are measuring the experience of beneficiaries who left benefit for employment, and this experience might not be generalizable to all beneficiaries (it is likely that those who find work have better earnings prospects)
- the analysis is only measuring short run changes
- we are still trying to work out how best to deal with differences in the length of employment (heterogeneity)
- an important focus of the future work will be how the quality of employment influences wellbeing outcomes

What can you take away from this draft research?

- our analysis is still a work in progress, but is highlighting the value of the linked NZGSS data in the IDI
- the <u>initial</u> analysis of transitions off benefit and into employment show increased incomes, and more people indicating they have sufficient money to meet their daily needs.
- however people have less free time, and our data suggests that people experience colder houses after making the transition
- we also observe very small improvements in physical health, and increased life satisfaction, although these are often not statistically significant
- the underlying rates of poor outcomes (eg inadequate incomes, poor health, household crowding) are high both before and after transitions