

# THE LONGER TERM IMPACTS OF JOB DISPLACEMENT ON LABOUR MARKET OUTCOMES

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## INTRODUCTION

Job loss hurts workers  
low employment and earnings  
even with support.

The process of job destruction typically involves involuntary job loss, unemployment, and loss of earnings, for affected workers in the short term. However, knowledge of the longer term impacts of such losses is critical for understanding the extent of adjustments costs borne by affected workers.

The Ministry of Business, Innovation and Employment (MBIE) contracted Motu to analyse the longer term impacts of involuntary job loss for New Zealand workers, looking specifically at subsequent employment, earnings, and income support.

The research also examined the effects on workers that were displaced during the global financial crisis of 2008-2010, compared to workers displaced during the earlier economic expansion.

## METHODOLOGY

Our analysis uses data from the Survey of Family, Income and Employment (SoFIE) to identify the sample of workers who reported an involuntary job loss associated with being laid off, made redundant or dismissed (a displacement) over the period 2001–10. The SoFIE sample of displaced and non-displaced workers are then matched to administrative data from Statistics New Zealand's Integrated Data Infrastructure (IDI) covering the period 1999–2015, to facilitate at least five years of post-displacement observations.

In order to focus on involuntary job losses that occur for economic reasons, we focus on workers who had been employed for at least one year before their job displacement.

As the data available for this analysis does not allow consistent measurement of self-employment earnings, or other second-tier income support payments, such as Accommodation Supplements or tax credits, these have not been included. We also show an increase in benefits received by workers' spouses after job-displacement. Both of these issues imply that the first-tier benefit receipt by displaced workers only partially covers the full extent of income support likely received following displacement.

Marital status can't be consistently measured over the full period of analysis as it is only available in the SoFIE survey. In addition, it is possible migration affects the estimated displacement impacts, which we have not been able to control for given the data available for the analysis.

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DISCLAIMER: Access to the anonymised data used in this study was provided by Statistics New Zealand in accordance with security and confidentiality provisions of the Statistics Act 1975, and secrecy provisions of the Tax Administration Act 1994. The results in this paper are the work of the authors, not Statistics NZ, and have been confidentialised to protect individuals and businesses from identification.

### APPROACH

This paper provides three alternative approaches that vary in the comparison sample of non-displaced workers selected and/or the analytical method used to estimate the effects on the displaced workers over a five year period:

1. Graphical event studies that show the monthly trends in workers employment rate, log(earnings) conditional on being employed, benefit receipt rates, and conditional log(benefit income) and log(total individual income), for displaced workers and three alternative samples of non-displaced workers.
2. A regression-adjusted approach to estimate the impacts of displacement on these outcomes, which controls for a variety of observed and unobserved worker characteristics.
3. A propensity score matching approach to estimate the impacts, by comparing the average outcomes of displaced and similarly-matched non-displaced workers.

### RESULTS

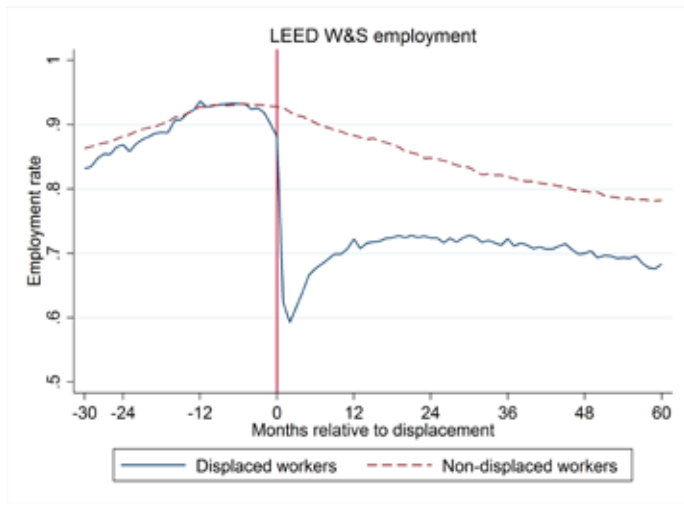
The estimated impacts across the three alternative approaches are remarkably similar, and summarised as follows:

We estimate that workers who experienced an involuntary job loss had 20-25% lower employment rates in the year following displacement compared to similar workers who did not lose their jobs. Although displaced worker’s employment improved gradually over time, their employment rate remained around 10% lower than comparable workers five years later.

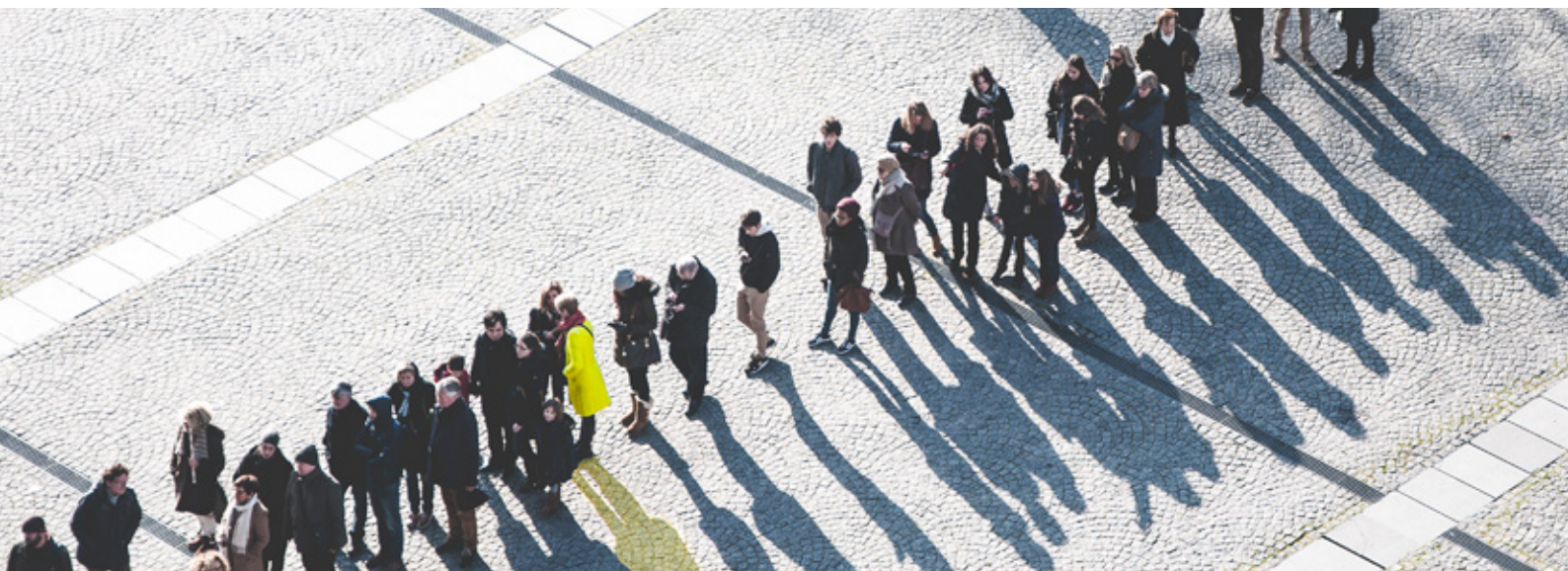
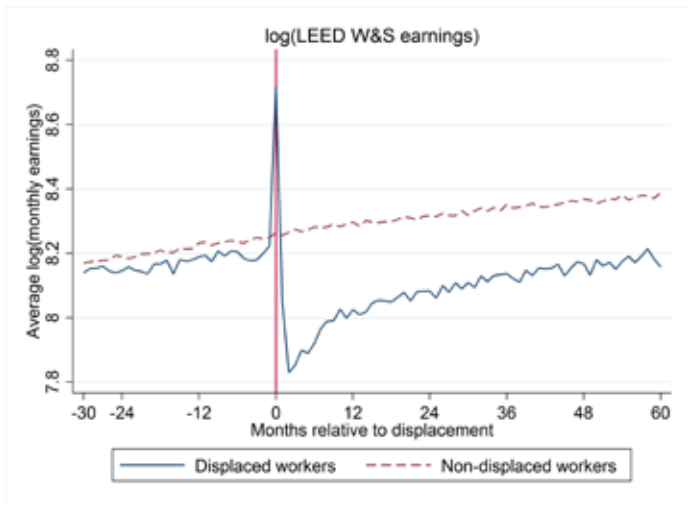
The impacts were about 5% larger for workers who were displaced from jobs during the great recession from 2008.

Among workers who were employed, displaced workers’ earnings were around 25% lower on average in the first year after being displaced, and around 15% lower after five years.

**Figure 1: Monthly employment rate – Workers with 1+ year tenure (random comparison full sample)**



**Figure 2: Monthly wage and salary earnings – Workers with 1+ year tenure (random comparison full sample)**

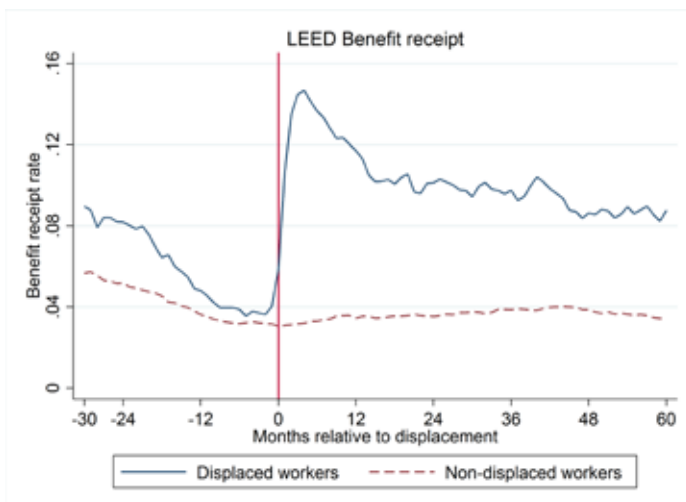




The adverse employment and earnings effects of job-displacement were partly counterbalanced by higher levels of welfare benefit receipt and income support. Displaced workers first-tier benefit receipt was 6-11% higher in the first year after than comparable workers, and 3-4% higher after five years.

The larger employment impacts for workers displaced during the great recession from 2008, were also counterbalanced by 3-5% higher rates of benefit receipt. However, despite such income support, displaced workers' total individual income was about 30% lower than comparable workers during the first year after displacement, and about 20% lower after five years.

**Figure 3: Benefit receipt and income – Workers with 1+ year tenure (random comparison full sample)**



Impacts were greater for older than younger workers. For example, for workers under 30, although the first-year employment and earnings impacts are sizeable (-18pp and about -20% respectively), the longer term effects of displacement are close to zero. In contrast, displaced workers over 50 have 31pp lower employment rates (and about 35% lower earnings) in the first year, and 11pp lower employment (and about 25% lower earnings) after five years on average.

## CONCLUSIONS

Involuntary job loss has large and lasting negative impacts on workers subsequent employment and earnings. Government income support partially counterbalances the labour market impacts, but total incomes of displaced workers remain substantially lower than non-displaced workers.

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