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Forewarned is forearmed

What will happen to Canterbury's labour force as the rebuild winds down?

3 August 2015

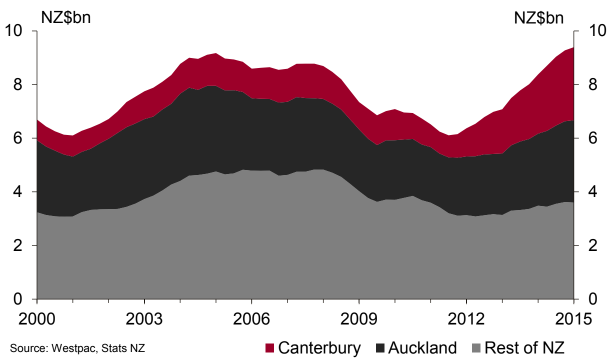
- The Canterbury rebuild has peaked.
- Demand for construction workers in Canterbury is expected to fall from late 2016.
- Around 14,000 construction jobs could be lost in Canterbury over the next few years.
- Our analysis suggests that most of the workers added to the industry in Canterbury since the earthquakes were Cantabrians entering the labour force, rather than migrants.
- This means we need to plan now to manage the impact this downturn will have on Canterbury construction employment and the wider regional economy.

The Westpac Economics team recently published a report highlighting the fact that Canterbury rebuild work has plateaued, and is set to fall over the next 18 months or so, particularly as residential rebuild work falls away[1]. This bulletin assesses the implications for Canterbury's labour force and sets out some points for action.

Where we are building

Overall construction activity in New Zealand, measured by consent values adjusted to real dollars, is higher than at any point in the last 15 years.

Consent values, March 2000 dollars



[1] See http://www.westpac.co.nz/assets/Business/Economic-Updates/2015/Bulletins-2015/Update-on-the-Canterbury-Rebuild-July-2015.pdf

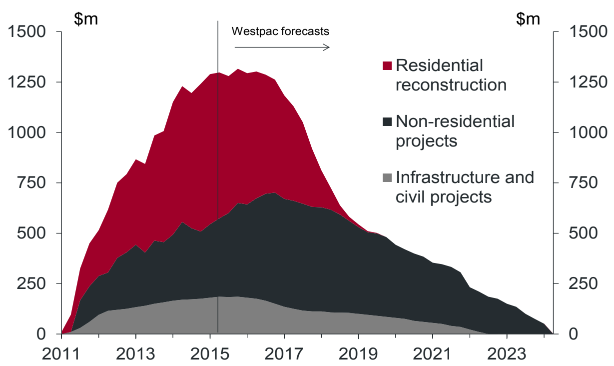
This activity is overwhelmingly centred on Auckland and Canterbury. Canterbury's contribution to total consent value has risen from an average of 13% in the 12 years to March 2011, to 24% of total consent value in the 4 years since the February 2011 earthquake. Nevertheless, it is important to keep some perspective by acknowledging that Auckland activity has been higher than Canterbury's at all times over the last 15 years, rebuild notwithstanding.

Between them, Canterbury and Auckland have accounted for more than 50% of all consent activity in New Zealand since March 2012.

The ride is over, nearly

But for Canterbury, the boom in construction activity as a result of the devastating earthquakes is plateauing. Activity is expected to start falling from the 3rd quarter of 2016, as residential rebuild activity in particular falls sharply. By 2022, the non-residential and non-building components of the work are expected to wrap up as well.

Reconstruction work put in place



This will mean a surplus of workers in Canterbury, which creates a real risk of a downturn in the region.

Over the 3 years following the February 2011 earthquake, a total of 22,000 additional workers were employed in Canterbury. Business demography data suggests around 14,000 of these (63%) were in the construction industry. The size of the construction industry all but doubled, reaching around 30,000 workers.

It is worth noting that prior to the earthquakes, employment in Canterbury construction was around its long-term level. This suggests that as rebuild activity subsides, the jobs of 14,000 people who have been put to work rebuilding the region will be harder to maintain. Theoretically, by 2022, the jobs of all these workers may have disappeared.

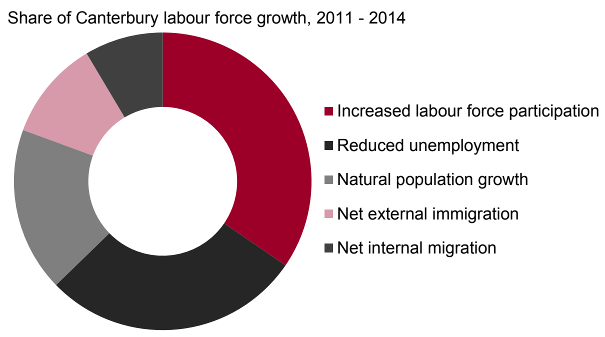
We're not going anywhere

To many outsiders looking in, it may appear that, despite the scale of these numbers, there is no need to worry. Just as the work-rate ramped up in Canterbury, it can scale down, some would argue. Anecdotes abound that thousands of people moved to the region from overseas and from the rest of New Zealand, and that these people could just as easily relocate back home or elsewhere after the rebuild.

The numbers tell a different story.

Pinpointing exactly where the new ***construction*** workers in Canterbury came from is particularly challenging, but we can identify where the bigger pool of 22,000 new workers across all industries in Canterbury came from. Working back from there provides some indication of where the construction workers are likely to have come from and more importantly, where they might go.

Growth in Canterbury labour force



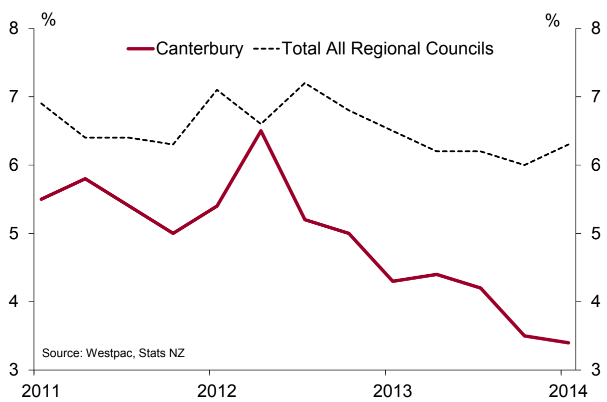
Source: Westpac, Stats NZ

The vast majority of workers appear to have come from Canterbury itself, through increased labour force participation, reduced unemployment, and natural growth.

1. Canterbury's reduced unemployment

Household Labour Force Status data shows not only a massive reduction in the Canterbury unemployment rate since March 2011, but a large fall in the absolute number of unemployed people. Between March 2011 and March 2014, the unemployment rate fell from 5.5% to 3.4%, even as it remained far stickier at a national level (falling from 6.9% to 6.3%).

Unemployment rates



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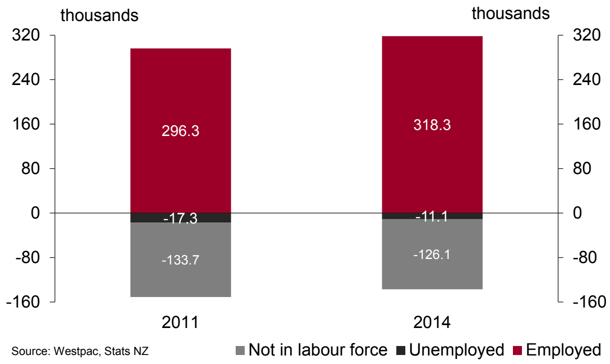
In absolute terms, unemployment fell by 6,200. In other words, all else held constant (see more on this below), ***6,200 people*** living in Canterbury who did not have jobs in March 2011, had found jobs by March 2014. This accounts for 28% of all job growth in the region over that time.

2. More Cantabrians entering the labour force

Even more impressive than the shift of unemployed people into jobs, was the number of working age people who previously were not even in the labour force (i.e. were not employed nor seeking work) who found jobs.

Canterbury labour force changes



In percentage terms, the labour force participation rate grew slightly, to 72.3% from 70% prior to the quakes. But in absolute terms, the number of people joining the labour force grew significantly. Approximately ***7,600 people*** who were not in the labour force in March 2011, had joined it by 2014. This accounts for 35% of all new workers in Canterbury.

It is unlikely that the reduction in the number of unemployed and people not in the labour force is due to a gross outflow of these people without jobs and an even larger gross inflow of people with jobs lined up. While some groups, such as retirees, were more likely to leave, this is at the margins. A previous Westpac study highlighted the fact that people who move after a disaster tend to move close to home, and thus would likely have remained in the Canterbury region[2]. We would further argue that the unemployed or those thinking about joining the workforce would have been particularly unlikely to leave for other parts of the country as the scale of the rebuild and its job opportunities were revealed.

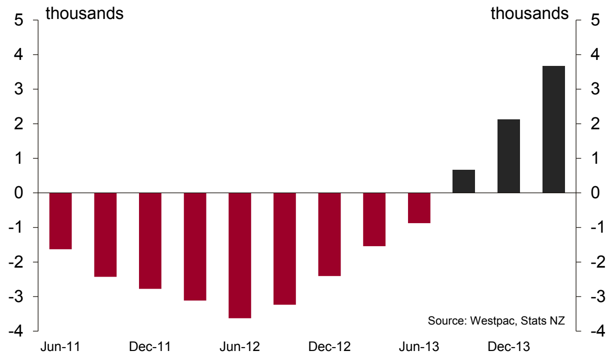
3. Natural population growth

One further natural source of growth in Canterbury is from natural population growth. The working age population in Canterbury is estimated to have grown by 6,900 over the three years between 2011 and 2014 (births less deaths, excluding migration). This implies around ***3,900 new workers*** added in Canterbury as people reached working age and entered the workforce. This accounts for 18% of all new workers, assuming participation rates in line with the working age population overall.

4. Overseas migration

In the 3 years to March 2014, net ***overseas*** migration into Canterbury was 3,700. This included a net outflow of 3,600 in the 9 months immediately following the February 2011 quake, and a net inflow of 7,300 in the 21 months following that.

Cumulative net overseas migration to Canterbury



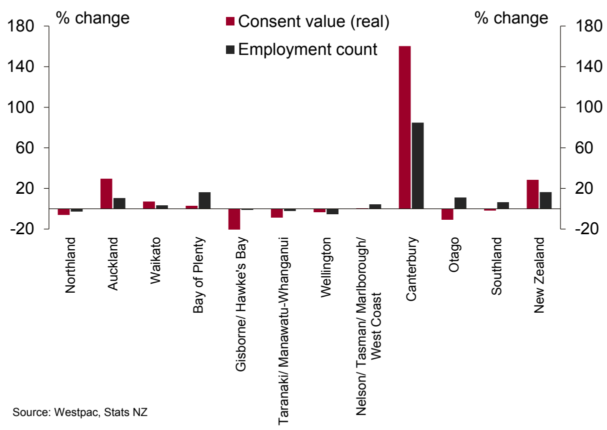
Assuming an 85% working age breakdown (in line with external migration data), and 80% labour force participation rate (slightly above regional average of 70% in the 3 years prior to February 2011), this suggests ***2,500 new workers from overseas,*** or 11% of all new jobs created in Canterbury since the quakes.

5. Workers from across New Zealand

These calculations leave only a net 1,800 workers (8% of all new jobs) that likely came from other parts of New Zealand. Of course many more Cantabrians may have left and been replaced by people from other parts of New Zealand on a gross level, but the focus here is on the net gain by Canterbury of workers from elsewhere in New Zealand.

Looking at construction activity and employment across New Zealand reveals that there is low mobility of construction workers between regions.

Consent and construction employment changes



[2] See http://www.westpac.co.nz/assets/Business/Economic-Updates/2011/Disasters-in-history.pdf

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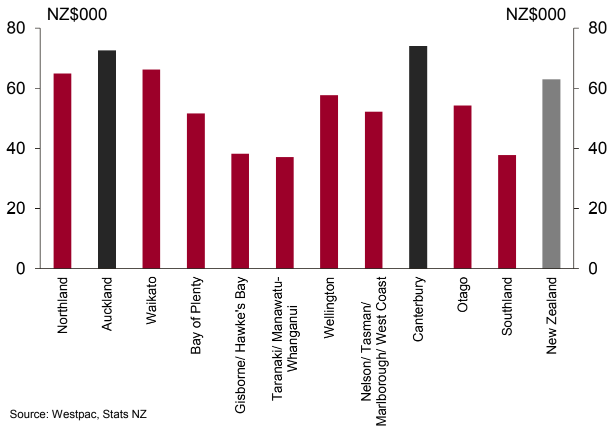
Parts of the country with little construction growth or even declines still had employment growth, rather than the fall in construction employment we would expect if workers migrated to where activity was higher. In other words, this data confirms the point that relatively few of the new construction workers in Canterbury are likely to have come from elsewhere in New Zealand.

The data also suggests that workers in Auckland and Canterbury are producing far higher levels of output than in parts of the country where consent growth has been weaker. The consent value per worker generated in these two regions is twice as high as that for Taranaki / Manawatu-Whanganui, for instance.

Construction productivity by region



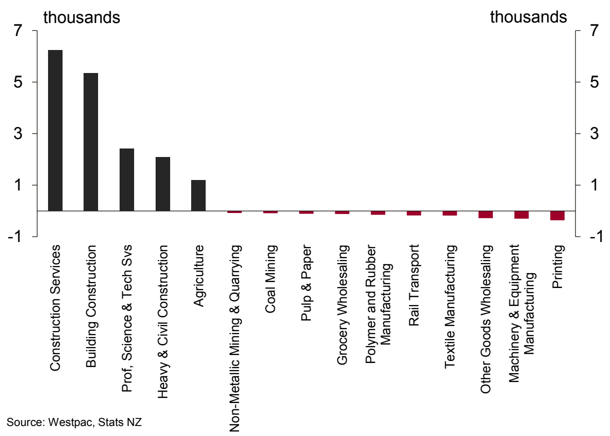
Source: Westpac, Stats NZ

Again, this points to poor mobility despite widely varying workloads.

6. Shifts between industries

Shifting our focus from the entire Canterbury labour market to construction in particular, we must consider the possibility that construction workers redeployed from other industries. But the data on industry level employment suggests that shifting into construction from other industries is limited.

Canterbury shifts between industries



Source: Westpac, Stats NZ

Strong growth in construction employment has been offset by declines in wholesaling and manufacturing employment. This is consistent with what was until recently a strong dollar that hurt manufacturing jobs.

What does this mean for Canterbury?

We don't know with certainty what proportion of new construction workers in Canterbury came from outside the region, or how likely they are to leave again when the boom is over. But we can make some assumptions to estimate a minimum number of workers in construction who may be at risk as the downturn hits:

- Canterbury has nearly 14,000 more construction workers today than it is likely to need after the rebuild.
- A small portion of these workers may relocate. Even if we assume all 4,300 migrants from outside Canterbury work in construction and are able to relocate, we are left with 9,400 workers without jobs.
- A small number of the 14,000 construction workers may be able to shift back into other industries, but given the limited redeployment observed on the upside, this is not likely to be more than a few hundred

This still leaves around 9,000 construction industry workers who will not have jobs as construction activity returns to longer-term averages, and are unlikely to relocate if current mobility trends continue. This outcome would create significant downward pressure on Canterbury economic growth, as several thousand income earners lose their jobs.

The good news

The good news is that the Canterbury rebuild pipeline is relatively clear. This means that unlike in most other instances, we have good visibility of what to expect in the next few years. This offers the rare opportunity to plan for the end of the boom, a gift that should not be undervalued. But plan we must, and quickly:

- **Business planning for the downturn:** Canterbury construction-related businesses in particular need to plan now for how to deal with the slowdown.
- **Diversification:** Central and local government agencies need to work with local industries to encourage other inward investment and develop other industries. Christchurch will in many ways be a brand new city when the rebuild is complete. Now is the time to look to other industries to develop, with what will be an attractive, highly liveable city. e.g. the ICT sector, which was strong in Christchurch even before the earthquakes.

- **Labour force mobility:** Government agencies and the private sector should be taking practical steps to increase worker mobility, both geographically and occupationally. Practical measures include upskilling or job fairs where regions short of workers are able to recruit staff. We also need to think about how we can make it easier for workers to relocate to areas of high demand, such as Auckland, particularly with regard to housing.

Our follow-up report due out soon considers the extent to which demand for new housing in Auckland can be sustainably delivered, and constraints to meeting that housing demand. While there is the possibility that some workers will move from Canterbury or overseas to help build capacity in Auckland, the Canterbury experience suggests that most workers will be locally sourced.

Meanwhile, however, presented with this data on the expected impact of the construction slowdown, planning must begin to prevent a major slowdown in the Canterbury economy.

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