

Reserve Bank of New Zealand Analytical Notes

Not a jobless recovery, just a slow one AN 2012/06

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NON-TECHNICAL SUMMARY¹

We compare the current recovery in the New Zealand economy with the recoveries from the previous two recessions, focusing on the developments in the labour market. By way of comparison, we contrast the New Zealand situation with that of the United States, during its current and previous two recessions.² Our main findings are:

- The current recovery in New Zealand has been slower than following previous recessions.
- During this period the labour market has been subdued.
- However, growth in employment (and hours) has been higher than would normally be expected, given the rate of GDP growth.
- This implies a lack of productivity growth.

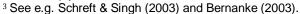
1. INTRODUCTION

The 1990-91 and 2000-01 recessions in the United States have been described by many economists, market analysts and policymakers as "jobless", due to the extended period of unusually low (or zero) employment growth while output recovered.³ However, a recent study by Galí, Smets and Wouters (2012) insists that the "jobless" label is inappropriate, as the recoveries from those two recessions and from the current one have been characterised not only by unusually low employment growth, but also by unusually low GDP growth. They therefore suggest that they be relabelled "slow recoveries" rather than "jobless".

The "slow recovery" label also appears to be appropriate for the current situation in New Zealand. GDP growth during the current recovery has been particularly low, while growth in employment and hours paid, though low, have actually been higher than expected given growth of GDP and historic relationships.

The remainder of this note is organised as follows. In the next section we compare the present recovery with previous cycles in New Zealand and the United States. We then consider whether the labour markets in both countries have been in line with economic activity during the current recoveries. We highlight the importance of growth in hours and consider the implications for productivity growth.

² We have chosen to compare developments in New Zealand with those in the United States simply because most literature and media comment is focused on US issues.





¹ The authors are grateful for helpful comments and critique from John McDermott, Michael Reddell and Leo Krippner.

THE PRESENT RECOVERY COMPARED WITH PREVIOUS CYCLES: NZ AND US

In this section we highlight the subdued nature of the New Zealand labour market in the current recovery compared with the recoveries following the 1991-92 and 1997-98 recessions, and contrast this with the situation in the United States. 4

The current recovery is much more gradual than those of the previous two recessions. New Zealand's GDP and employment growth have been subdued, especially when compared with the recoveries from the 1991-92 and 1997-98 recessions (figure 1). The unemployment rate is virtually unchanged since late 2009 and the employment-to-population ratio has improved only a little and remains below its late 2007 level (figure 2). This is in marked contrast to the previous recoveries, when both series began to recover within a year after the trough in the level of GDP. Meanwhile, the labour force participation rate has remained roughly constant throughout the recent recession and recovery, as it also did during the previous two recoveries.

In comparison, the US economy has been growing slightly faster (although from a deeper trough) since the recession, while employment has been very sluggish (until recently). The level of employment remained below its 2009 Q2 level until late 2011 (figure 1). The US unemployment rate remains elevated but has been falling over the past two years. The employment-to-population ratio has been at very low levels and virtually unchanged since late 2009, while the participation rate has been on a downward trend (figure 2).

Similarities in New Zealand's profile in the current recovery with that of the US are that the unemployment rate remains at a high level and the employment-to-population ratio remains low (figure 2). But there are differences. The US participation rate has been declining while that for New Zealand has remained roughly constant throughout the recession and recovery. Meanwhile, the New Zealand unemployment rate has remained virtually unchanged since 2009, while the US rate has been declining. The different unemployment pattern for the US is partly due to the greater depth of the US recession and the continued decline in the participation rate, as well as reflecting different labour market practices.

The most notable difference between New Zealand and the US in the current recovery can be seen in the profiles of GDP and employment for each country and the implications for productivity growth. This will be considered in the following two sections.

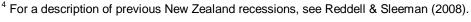
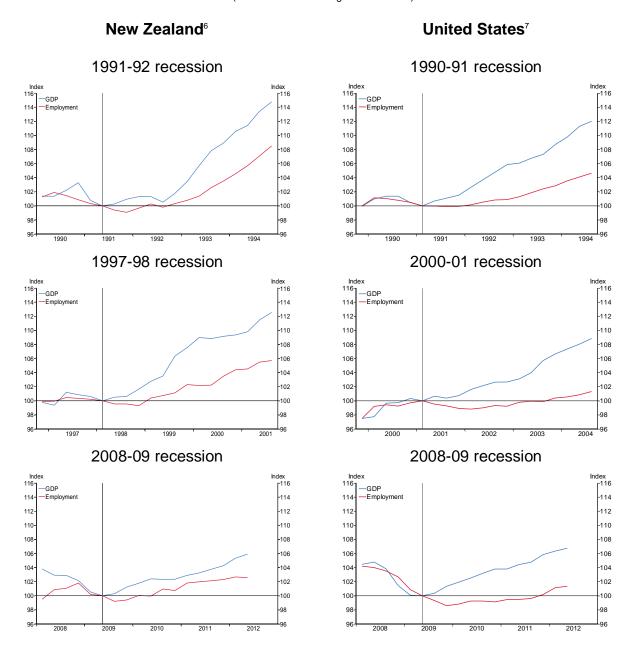




Figure 1: GDP and employment: NZ and US⁵ (Vertical lines are trough of GDP level)



Data sources for all charts in this Analytical Note: Statistics New Zealand, Haver Analytics, and RBNZ estimates.

Note that the dates of past recessions in the United States differ from those for New Zealand. New Zealand experienced a recession in 1997-98 associated with the Asian downturn, while the United States did not, and New Zealand did not experience a recession during the 2000-01 IT-related downturn in the United States.



⁵ Graphs covering 1980 to 2012 for series in figures 1 and 2 are shown in the appendix.

⁶ The New Zealand GDP series is real total production GDP.

Figure 2: Changes to unemployment, participation & employment rates: NZ and US (starting point is the previous trough of the unemployment rate)

New Zealand United States 1991-92 recession 1990-91 recession -Unemployment rate -Participation rate -Employment-to-population ratio -Unemployment rate -Participation rate -Employment-to-population ratio 1997-98 recession 2000-01 recession -Unemployment rate -Participation rate -Employment-to-population ratio Unemployment rate Participation rate Employment-to-population ratio 2008-09 recession 2008-09 recession -Unemployment rate -Participation rate -Employment-to-population -Unemployment rate -Participation rate -Employment-to-population ratio

Employment-to-population ratio is employment as a percentage of working age population (NZ: 15 years and over; US: 16 years and over)



3. HOW THE LABOUR MARKET HAS DEVELOPED RELATIVE TO OVERALL

ECONOMIC ACTIVITY

In this section we consider how the labour market in New Zealand has developed relative to economic activity, comparing this with the evidence from the United States. We find that, as for the United States, the current recovery is best described as "slow" rather than "jobless".

What characterises the three most recent US recoveries, including the current one, is how sluggish the growth in employment has been for an extended period (figure 1). This is in marked contrast with previous recessions (1974-75 and 1981-82), which saw employment picking up quite rapidly.

Given the similarity of the profile of the current US recovery with the previous two recoveries, with flat employment for an extended period while GDP is picking up, it might be tempting to describe the current US recovery as "jobless". However, as Galí, Smets and Wouters (2012) have demonstrated, the recoveries from the three most recent recessions (including the present one) have been characterised by unusually low growth in *both* GDP and employment. Given the unusually low GDP growth, it seems preferable to describe these recoveries as "slow" rather than "jobless".

For New Zealand, we can see that for the recoveries following the 1991-92 and 1997-98 recessions, employment growth was sluggish for some time followed by a growing divergence between the paths of employment and GDP (figure 1). However, the current recovery has a different profile: very low GDP growth and very low employment growth. Allowing for a lag in employment with respect to GDP, they appear to be moving together.

How unusual are the GDP and employment profiles of the current recovery? Extending our comparison to recoveries from 1960, we see that GDP in the current recovery has been rather subdued (figure 3). At four quarters into the recovery, the current track of GDP was not unusual. However, subsequently (especially from seven quarters after the trough), GDP has been particularly sluggish in comparison to previous recoveries. It is almost as subdued as the recovery from the 1974-77 recession, which was marked by much weaker population growth and particularly large net migration outflows.



96

Index Index 116 116 1967-69 114 114 1974-77 1979-82 112 112 1991-92 110 110 1997-98 2008-09 108 108 106 106 104 104 102 102 100 100 98 98

Figure 3: New Zealand GDP in the past six recoveries

Comparing the track of employment in these six recoveries, we see that employment in the current recovery does not appear unusual (figure 4). It follows a similar track for up to nine quarters following the trough as the previous three recoveries. However, it has continued to grow slowly in recent quarters.

10 11

3 4 5 6

Quarters before/after trough of GDP

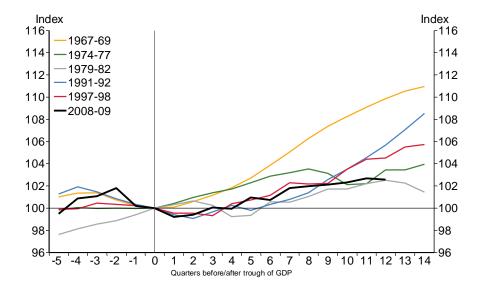


Figure 4: New Zealand employment in the past six recoveries

What level of employment growth we would expect given the level of GDP growth? A simple regression of employment on lagged GDP (from 1960 to the trough of GDP in 2009 Q2) suggests that employment growth in New Zealand has been at or just above what we would expect given GDP growth during 2010 and 2011 (figure 5).8

⁸ The starting date for the regression is 1960, using an estimated backdated HLFS quarterly employment series. A similar result is obtained when regressing hours paid on lagged GDP.

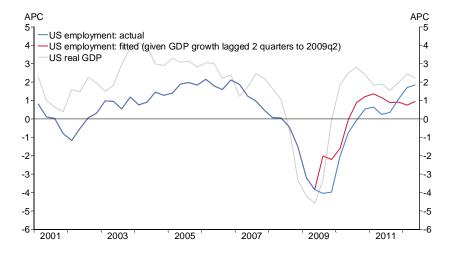


In comparison, a similar regression reveals that actual US employment growth was only slightly lower than what would be expected from GDP growth through the recession until late 2011 (figure 6). For both New Zealand and the United States, these regressions do not suggest that employment has been low relative to GDP to warrant a label such as "jobless".

APC APC Employment: actual 6 Employment: fitted (given GDP growth lagged 2 quarters to 2009q2) 6 GDP 5 4 3 -3 2 0 0 -1 -1 -2 -2 -3 -3 -4 2001 2003 2005 2007 2009 2011

Figure 5: Annual growth of employment and real GDP: New Zealand





Schreft and Singh (2003) suggest that firms' substituting more flexible labour inputs (part-time workers, temporary employment and overtime hours) for less flexible ones

⁹ The recent pick-up in US employment has been mentioned by Bernanke (2012) as a puzzle in the US labour market data. He suggests that the recent pick-up in the labour market in 2011 may have been a catch-up from larger-than-usual job losses during the recession.



-40

2008

is a distinguishing characteristic of jobless recoveries. They show that for the United States, temporary and part-time workers increased more than full-time during the recessions they describe as "jobless".

1991-92 1997-98 QES jobs filled (s.a.): difference from 1991Q2 QES jobs filled (s.a.): difference from 1998Q1 000s 70₁ 000s 000s Full-time 60 60 60 Part-time 50 50 50-50 40-40 40-40 30-30-30 30 20 20 20-20 10 10 10 10 10 -10 -10 -10 -20 -20 -20 -20 -30 30 -30 -30 -40 1993 1998 1992 1994 1997 1999 2001 2008-09 QES jobs filled (s.a.): difference from 2009Q2 Full-time 60 50 40 30 20 10 10 -10 -10 -20 -20 -30 -30

Figure 7: Full-time and part-time jobs filled (QES): New Zealand

What do the New Zealand data reveal? The recoveries following the 1991-92 and 1997-98 recessions showed strong growth in part-time jobs filled, above that of full-time jobs (figure 7). Surprisingly, that is not the case in the current recovery. The last chart in figure 7 reveals minimal pick-up in part-time work during the current recovery, with little difference between this and full-time. The gradual increase in full-time jobs filled appears to be in line with the gradual increase in employment that we see in figure 2. It is interesting that firms have been relying less on part-time workers (than in the previous two recoveries) during a time when economic activity has remained so subdued.

2010

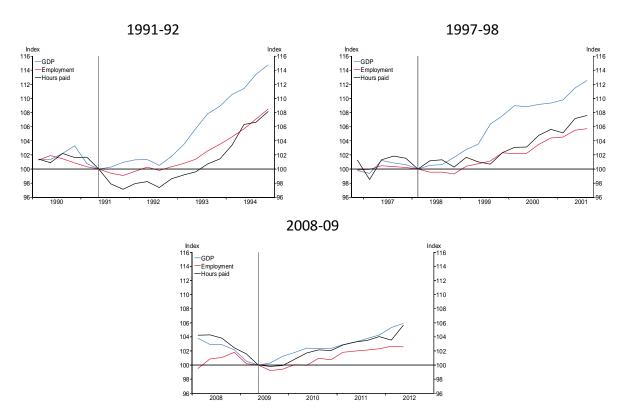
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To resolve this puzzle, we need to look at hours worked. Unfortunately, we do not have a breakdown for hours worked as overtime or by temporary employees. However the aggregate series is instructive. In figure 8 we have added hours paid, from the Quarterly Employment Survey (QES), to the GDP and employment series of figure 2. What is immediately striking about these charts is the pick-up in hours above that of employment during the current recovery in comparison to the previous two recoveries. So it appears that the current modest recovery is being supported by a gradual increase in employment and a faster pick-up in hours. This suggests that



firms may have been relying more on overtime than taking on new staff – which is consistent with the dampening effect of continuing uncertainty on investment and hiring.

Figure 8: New Zealand in the current recovery: GDP, employment and hours paid (s.a)

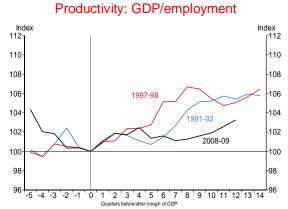


The current subdued economic growth in New Zealand given the stronger-thanexpected track of employment and hours implies a lack of productivity growth in New Zealand in recent years. In marked contrast with the previous two recoveries, productivity has changed little since the trough of the recent recession. This is most evident in the GDP/hours measure of productivity (figure 9). Meanwhile in the United States, growth in productivity per worker has been similar to that of the previous two recessions, while productivity per hour has been flat for the past two years.



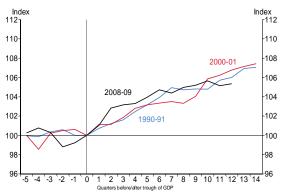
Figure 9: Productivity in recent recoveries

New Zealand

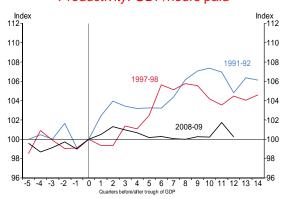


United States

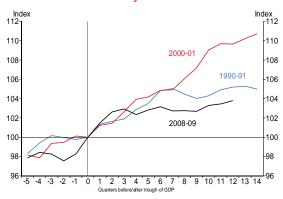
Productivity: GDP/employment



Productivity: GDP/hours paid



Productivity: GDP/hours



4. CONCLUSION

Growth in economic activity in New Zealand has been very slow since the 2008-09 recession. While employment growth has also been sluggish, it has actually been stronger relative to GDP growth than in previous recoveries, and growth in hours worked has outpaced employment growth. The growth in employment and hours worked relative to the subdued GDP growth imply particularly low productivity growth during this period.



REFERENCES

Bernanke B S (2003). "The jobless recovery," speech at the Global Economic and Investment Outlook Conference, Carnegie-Mellon University, November 6, 2003.

Bernanke B S (2012). "Recent Developments in the Labor Market", speech to the National Association of Business Economists, Washington DC, March 26, 2012

Galí J, F Smets & R Wouters (2012). Slow recoveries: a structural interpretation. NBER Working Paper 18085.

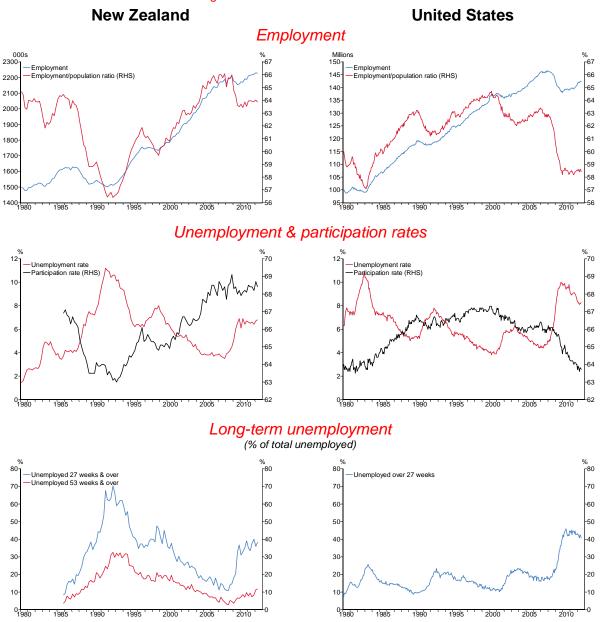
Reddell M & C Sleeman (2008). Some perspectives on past recessions. *RBNZ Bulletin*, 71,1 (June).

Schreft S & A Singh (2003). A closer look at jobless recoveries, Federal Reserve Bank of Kansas City, *Economic Review*, Second Quarter, pp. 45-72.



APPENDIX

Figure A1: Labour market: NZ & US



Notes:

US labour market series are for the civilian labour force, 16 years and over. Employment-to-population ratio is employment as a percentage of working age population (NZ: 15 years and over; US: 16 years and over).

