



## HOW BAD IS THE CURRENT RECESSION? LABOUR MARKET DOWNTURNS SINCE THE 1960s

### Executive summary

The New Zealand economy experienced a fall in real GDP over the five quarters to March 2009 and further falls are likely in the June and September quarters. It is appropriate to look at past recessions to provide context for the outlook for the labour market.

#### *Key points:*

We consider six recessions, including the current one, since the 1960s. The previous five recessions have shown that:

- On average, unemployment more than doubles during each recession and it increases for around two years. It is evident that, in terms of the rise in unemployment, the longest recessions are not always the most severe.
- When there is a downturn it is usually those with no or low qualifications, youth, Maori, Pacific peoples and those in low income, lower skilled occupations that are the most affected.
- The labour force participation rate tends to fall during downturns as people are discouraged from looking for work and turn to other activities such as study. The average fall is around 1 percentage point. A falling participation rate tends to limit the extent to which the unemployment rate rises.
- Net migration usually declines during a downturn as more New Zealanders go overseas to find work. However, when a domestic downturn coincides with deteriorating global conditions, the opposite may occur, and net migration can rise. The current global downturn has already resulted in net migration rising strongly in New Zealand and it is expected to continue increasing in the short-term.
- Wage growth is usually one of the last indicators to turn during a recession and lags changes in the unemployment rate by 1-2 years. Wage growth is expected to ease over the next two years as the demand for labour falls and unemployment rises.
- The current downturn in the labour market is expected to be significant and lengthy, but based on projections it does not appear to be unusually severe. Even assuming a wide range of forecasts, the rise in unemployment is expected to be less than that recorded in the 1987-91 recession and no more severe than that recorded in the 1966-67 and 1976-78 recessions.
- Uncertainty around the extent of the current labour market downturn is high given that the global economy is going through its most significant and synchronised downturn since World War II. There is also considerable uncertainty about the timing and speed of the recovery.
- One key difference compared with most downturns over the past half century is the labour market is now more flexible, with a higher proportion of part-time workers and more people in temporary employment. This may mean unemployment rises sharply during the current downturn but also falls sharply during the recovery. On the other hand, the greater labour market flexibility may be helping wages and hours worked to adjust more quickly as firms seek to decrease their labour costs. This would reduce the need for firms to lay off workers and result in less upward pressure on the unemployment rate.



## HOW BAD IS THE CURRENT RECESSION? LABOUR MARKET DOWNTURNS SINCE THE 1960s

### Purpose

The purpose of this note is to briefly examine what happened to some of the key labour market variables during recessions in New Zealand since the 1960s. We will focus on employment and unemployment, but will also cover labour force participation, migration and wages.

### Introduction

With the New Zealand economy having experienced a fall in real GDP over the five quarters to March 2009 and with further falls expected in the next two quarters, it seems appropriate to examine past recessions. While history does not necessarily repeat itself, it can provide some assistance in forming a view of what may happen in the labour market over the next two years. However, every recession is different and the drivers of the current downturn are different than those in previous recessions. Care must therefore be taken when comparing what is going on now to other recessions.

The data used in this paper has primarily been sourced from Statistics New Zealand and the New Zealand Institute of Economic Research (NZIER). The official survey of employment and unemployment, the Household Labour Force Survey (HLFS), began in the mid-1980s and only picks up recent downturns in the labour market. However, NZIER have produced backdated estimates of key HLFS variables on a number of occasions. The first was Chapple (1994)<sup>1</sup> and the latest was an update of Briggs (2003) by Bailey in 2007<sup>2</sup>. The backdated estimates of the HLFS were based on data from the Census of Population and Dwellings, the Half-Yearly Employment Survey, the Quarterly Employment Survey, and unemployment benefit data from administrative sources. The longer time series offers more downturns with which to compare the current recession<sup>3</sup>.

The recessions considered in this paper have been identified from work by Hall and McDermott (2006 and 2007)<sup>4</sup>. However, while they, and others<sup>5</sup>, have identified two or even three separate recessions between 1987 and 1991, for the most part we treat this period as one continuous downturn, given that unemployment rose almost uninterrupted over those four years. We therefore consider six recessions, including the current one, since the 1960s: 1966-67, 1976-78, 1982-83, 1987-91, 1997-98 and 2007-present. The shaded areas in *Figure 1* and *Figure 2* represent the six recessions.

---

<sup>1</sup> Chapple, S. (1994). "HLFS-consistent labour market data", NZIER working paper 94/16.

<sup>2</sup> Briggs, P. (2003). "Looking at the numbers: a view of New Zealand's economic history", NZIER Research monograph 69, updated 2007 by Peter Bailey.

<sup>3</sup> NZIER backdated estimates of HLFS data have been seasonally adjusted by the Department of Labour.

<sup>4</sup> Hall, V.B. and McDermott, C.J. (2006). "The New Zealand Business Cycle", Working Paper 21/2006, Canberra: Center for Applied Macroeconomic Analysis (CAMA), Australian National University and Hall, V.B. and McDermott, C.J. (2007). "A Quarterly Post- World War II Real GDP Series for New Zealand", Motu Working Paper 07 to 13, Motu Economic and Public Policy Research.

<sup>5</sup> See The Treasury (2009). "May 2009 Monthly Economic Indicators".



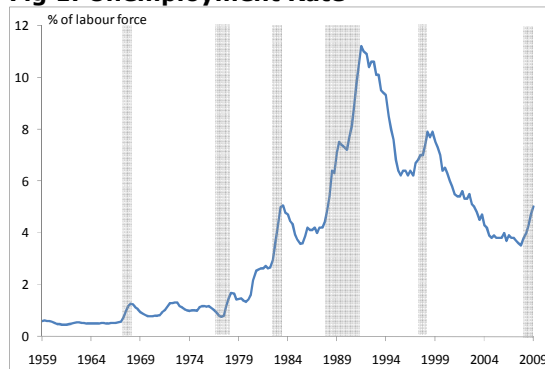
## Recessions and the labour market since the 1960s<sup>6</sup>

Unemployment was near zero during the 1960s and early-1970s. The only recession over this period was between 1966 and 1967. The downturn was associated with the collapse of the wool market and real GDP in New Zealand was estimated to have fallen by 2.5% between the December 1966 and December 1967 quarters<sup>7</sup>. Employment fell by around 1.3% and by March 1968 the unemployment rate had reached 1.3%, up from 0.5% at the beginning of the recession. While unemployment remained low in absolute terms, there was still a noticeable increase, with it increasing from around 6,000 to nearly 14,000.

Unemployment began to trend up markedly from the late-1970s. In the lead up to the 1976-78 recession, New Zealand suffered a drought and oil prices more than doubled causing the world economy to enter recession. The terms of trade fell, the current account deteriorated and inflation rose strongly. Between mid-1976 and early-1978, the economy contracted by just over 4% and employment growth stalled. As a result, the number of people unemployed doubled and the unemployment rate increased from 0.8% to 1.7%.

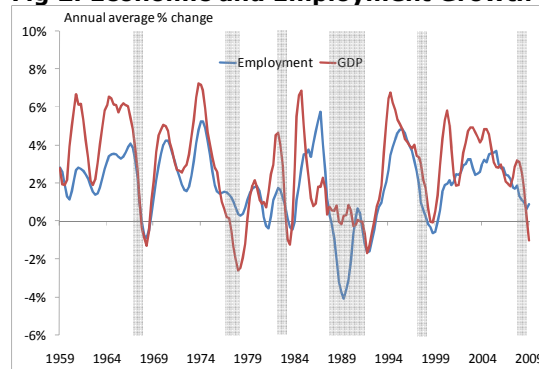
Economic growth in New Zealand had only just begun to recover from the 1976-78 recession when it was hit by the second oil price shock. While growth continued to be positive on an annual average basis, it remained weak until 1981 and the unemployment rate rose from 1.3% in late-1979 to 2.6% in 1981 at a time when there were considerable net migration outflows. New Zealand entered recession in the September 1982 quarter and the economy contracted by 3% in three quarters. As a result, the unemployment rate increased sharply from 2.7% to 5.1% in little over a year.

**Fig 1: Unemployment Rate**



Source: NZIER, Statistics NZ.

**Fig 2: Economic and Employment Growth**



Source: NZIER, Statistics NZ.

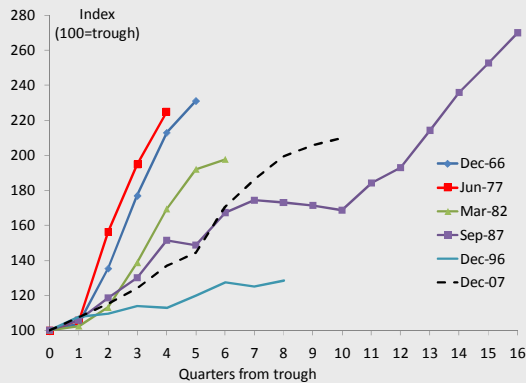
<sup>6</sup> For a more in-depth discussion of the drivers and characteristics of previous recessions in New Zealand, see Reddell, M. and Sleeman, C. (2008). "Some perspectives on past recessions", Reserve Bank of New Zealand Bulletin, Vol. 71, No. 2, June 2008.

<sup>7</sup> Hall, V.B and McDermott, C.J (2007). "A Quarterly Post- World War II Real GDP Series for New Zealand", Motu Working Paper 07 to 13, Motu Economic and Public Policy Research.



### The extent of labour market downturns

The graph below shows the rise in unemployment in the six recessions since the 1960s. Using the Reserve Bank of New Zealand's (RBNZ) forecasts from their June 2009 Monetary Policy Statement we can also project how high unemployment might rise during the current downturn.



Source: NZIER, Statistics NZ and RBNZ.  
Note: Starting points refer to the trough in unemployment.

The first thing to note is that unemployment can continue rising, even when the recession has technically ended and economic activity has begun to increase. In general, labour market

recoveries tend to lag the wider economy.

If unemployment were to peak in the June 2010 quarter, as expected by the RBNZ, the current labour market downturn would be the second longest since the 1960s, with the longest being in 1987-1991. On average, each downturn has lasted around two years.

However, in terms of the rise in unemployment, it is evident that the longest downturns are not always the most severe. This provides important context for the current recession. Both the 1966-67 and the 1976-78 recessions saw a slightly more severe but shorter rise in unemployment than is projected for the current downturn.

During the five recessions preceding the current one, the average rise in unemployment was around 110%. If the current recession proceeds as projected by the RBNZ, the increase in unemployment would be of a similar magnitude to the average of past recessions.

Peak to trough in GDP	% change in GDP	Trough to peak in unemployment		
		% change in unemployment	% point change in unemployment rate	# of quarters unemployment increasing
Dec 1966 - Dec 1967	-2.5%	131%	0.7	5
Jun 1976 - Mar 1978	-4.1%	125%	0.9	4
Jun 1982 - Mar 1983	-3.2%	98%	2.4	6
Dec 1987 - Jun 1991	-2.0%	170%	7.0	16
Jun 1997 - Mar 1998	-1.6%	28%	1.7	8
Dec 2007 - Sep 2009	-	106%	3.7	10

Source: Hall and McDermott, NZIER, Statistics NZ and RBNZ June MPS Projections.

The 1987 stock market crash, extensive economic restructuring, and a shift in focus by policymakers to concentrate primarily on reducing inflation, constrained economic growth and led to rising unemployment over the late-1980s and early-1990s. As noted by Chapple (1994) "Disinflation, resulting high real interest and exchange rates, and contractionary fiscal policies meant that aggregate demand did not expand rapidly



enough to restore jobs eliminated by structural change"<sup>8</sup>. The unemployment rate rose from 4.2% in the September 1987 quarter to 7.5% in the June 1989 quarter. Over the same period, employment contracted sharply, falling by 109,000 and leaving it nearly 7% lower than it was in 1987.

Economic activity fell sharply again in 1991 with real GDP falling by more than 3% over the first half of the year. A rise in oil prices, contractionary fiscal and monetary policy, and a global downturn were contributory factors. The unemployment rate, which had only just begun to level out, increased from 7.2% in 1990 to a peak of 11.2% in 1991. Over the entire 1987-1991 period, unemployment increased from around 70,000 to nearly 190,000, a rise of 170%.

The economy and the labour market recovered strongly from the downturn in the late-1980s/early-1990s. The economy grew by an average of 5% per annum in the three years to December 1995 and the unemployment rate fell to 6.2%. However, growth was interrupted by consecutive droughts and the fallout from the Asian Financial Crisis with real GDP falling by 1.6% between the June 1997 and March 1998 quarters. The unemployment rate rose from 6.2% in late-1996 to reach 7.9% in both the June and December 1998 quarters.

### **Who is most affected during a downturn?**

During a downturn, the impacts of the recession are not generally distributed evenly among the many demographic groups in the labour force. Typically, it is those with no or low qualifications, youth, Maori, Pacific peoples and those in low income, low skilled occupations that are impacted most.

### **How quickly does the labour market recover?**

A key issue when looking at past recessions is the speed with which the labour market recovers. However, the unemployment rate has generally not returned to its pre-downturn level following the past five recessions. Between the late-1970s and early-1990s the unemployment rate in New Zealand generally trended upwards. John Savage noted in 1990 that "there has been a tendency for New Zealand's unemployment rate to level out during each recovery since 1977 at progressively higher levels"<sup>1</sup>. This appears to be due to a structural rise in unemployment as opposed to a failed recovery.

Following the recession in the late-1980s/early-1990s where the unemployment rate rose from 4.2% to 11.2%, it took over 12 years before it fell back to 4.2%. This was not only because the downturn was so severe, but also because it was interrupted by the 1997/98 recession. During that recession, the unemployment rate rose 1.7 percentage points and took nine quarters to recover to its pre-downturn rate of 6.2%.

Employment on the other hand, has usually recovered to its pre-downturn level within a few quarters. The exception to this was after the 1987-91 recession where it took three years for employment to return to its pre-recession level.

<sup>1</sup> Savage, J. (1990). "Recession, Recovery and the Labour Market - The OECD Experience", Department of Labour Occasional Paper 1990/2.

<sup>8</sup> Chapple, S. (1996). "Full employment: whence it came and where it went", Research monograph 66, NZIER.



In the past two recessions, for example, the unemployment rate for those aged 15-24 years has risen by around double that of the overall increase while their employment rate (employment/working-age population) has fallen by around double the average. The large decline in youth employment during downturns suggests the influence of a discouraged worker effect (discussed later on in the paper). This can be confirmed by larger than average falls in the youth labour force participation rate and also data which shows that the number of people not in the labour force due to studying has increased strongly over the past two downturns.

Like youth, Maori and Pacific peoples are generally more affected during a recession. This can largely be attributed to them holding lower levels of qualifications and being over-represented in lower skilled occupations. During the past two recessions, employment in highly skilled occupations has continued to rise while there were declines in the number of many lower skilled jobs. There was also continued growth in employment for people who held post-school qualifications compared to declines for those with no or school qualifications only. Analysis by the Department of Labour (2009) suggests a continuation of these trends during the current downturn, with growth in 'knowledge intensive'<sup>9</sup> sectors persisting despite falling economic activity<sup>10</sup>.

It is also interesting to note that there is usually strength in part-time employment during a downturn. In every recession since the 1960s, the number of people employed part-time has continued to increase while full-time employment has fallen. However, this is most likely due to full-time workers having their hours reduced and being forced to move into part-time employment, evidenced by an increase in the number of 'involuntary' part-time workers during a downturn. During the past two recessions, there has been a noticeable increase in the percentage of part-timers wanting to work more hours. There has also been a small decline in the average number of hours worked per worker.

Many similar trends of previous recessions can already be seen in the current downturn. In the year to March 2009, there has been a large increase in the unemployment rate for youth, Maori and Pacific peoples. As the labour market continues to ease over the next year, these groups will continue to be significantly affected. Another at-risk group is older workers. Research released by the Department of Labour (2009) shows that while older workers currently enjoy a strong position in the labour market, they are more likely to become long-term unemployed or leave the job market altogether if they are made redundant<sup>11</sup>.

## Migration

Permanent and long-term (PLT) net migration inflows usually decline during a downturn. As unemployment rises and there are fewer job opportunities, many New Zealanders will head overseas to find work. Arrivals also tend to fall for much the same reason. In the 1966/67 recession, annual net migration fell from an inflow of 18,000 to an outflow of 6,000 while weak economic growth over the second half of the 1970s saw net migration fall from an inflow of 20,000 to a record high outflow of more than 43,000 (see *Figure 3*).

---

<sup>9</sup> A knowledge intensive sector is an industry that has at least 25 per cent of the workforce qualified to degree level or higher, and at least 30 per cent of the workforce employed in professional, managerial and scientific and technical occupations. For further information please see the report on the Department's website: <http://www.dol.govt.nz/publications/lmr/knowledge-economy/index.asp>.

<sup>10</sup> Department of Labour (2009). "The New Zealand Knowledge Economy: A Refined Methodology and Further Findings on the Structure and Growth of the Knowledge Economy (2009)".

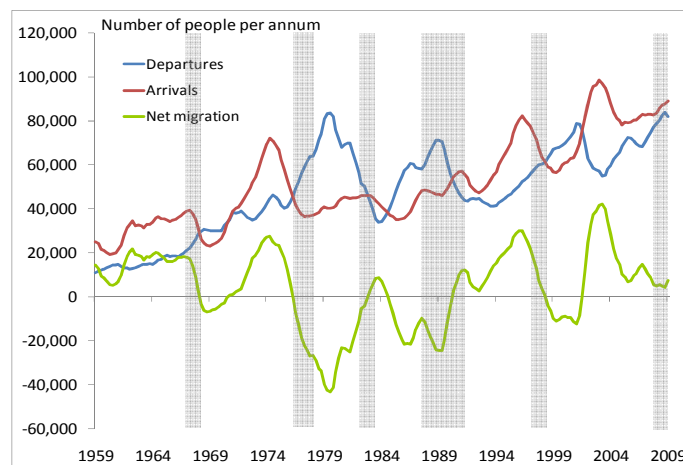
<sup>11</sup> Department of Labour (2009). "Understanding the Job Mobility and Employability of Older Workers".



However, when a domestic downturn coincides with deteriorating global conditions, the opposite may occur, and net migration can rise. During the early-1990s for example, many other countries were in recession, including Australia and the UK, which are the main destinations for New Zealand migrants. The poor economic conditions abroad led to a strong increase in the number of New Zealanders returning home, particularly from Australia, and may have contributed to the large rise in the unemployment rate in New Zealand during this period. A similar trend is also noticeable during the downturn in the early-1980s.

The current downturn originally saw net migration inflows fall for much of 2008 as New Zealand entered recession before most other countries. Subsequently, the domestic recession has coincided with a severe global downturn that has seen the unemployment rate rise strongly in many countries. Due to a number of factors, New Zealand is expected to perform better than many other countries during this global economic downturn, which points to migration perhaps holding up better than might be expected.

**Fig 3: Annual PLT net migration, arrivals and departures**



Source: Statistics NZ.

Indeed, annual net migration has risen strongly in recent months, increasing from a net inflow of 3,800 in the year to December 2008 to 11,200 in the year to May 2009. Over the next 12 months it is expected to continue rising which will boost demand and have a positive influence on housing and construction activity. The rise, however, may mean there is an upside risk to the projected unemployment rate, as not all migrants coming into the country are likely to be absorbed into the labour market.

### Labour force participation rate

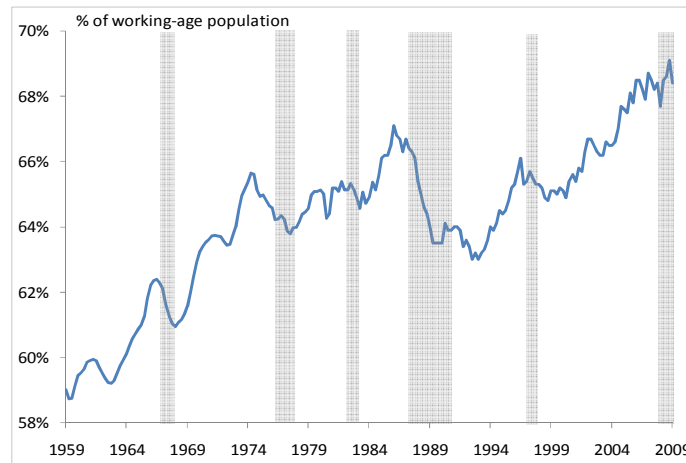
A key dynamic during any labour market downturn is how the labour force participation rate (the percentage of the working-age population that are either employed or seeking work) interacts with the unemployment rate. During a recession, we usually expect the overall participation rate to decline. This is due to the 'discouraged worker effect' where people find jobs hard to come by, and instead take up other activities such as study or childcare, thereby dropping out of the labour force.



Over the past 50 years, the labour force participation rate has tended to fall during recessions (see *Figure 4*). The largest fall in the participation rate was during the 1987-91 recession when it fell by nearly 3 percentage points, although on average it has fallen by around 1 percentage point. There are instances, however, where the labour force participation rate has held up during downturns. During the downturns in the late-1970s and early-1980s in particular, the participation rate remained relatively steady despite the unemployment rate increasing strongly.

The participation rate has held up during the current downturn, in spite of rising unemployment and currently sits at 68.4%, the same rate as recorded when the recession began. Looking forward, the overall participation rate is expected to decline from its high level as falling job opportunities discourage workers from participating in the labour force. A falling participation rate tends to limit the extent to which the unemployment rate rises.

**Fig 4: Labour force participation rate**



Source: NZIER, Statistics NZ.

One important factor to note however, is that compared to many previous downturns the composition of the current labour market is different. The overall participation rate has risen strongly in the past two decades, with the increase being driven by higher participation of women as well as older workers who are staying in the labour force for longer. Additionally, today's labour force is a lot more flexible, with more part-time work available and more flexible working arrangements than seen in the past. This has helped boost the overall participation rate to historically high levels in recent years, but it may suggest that the participation rate falls more sharply than in previous recessions.

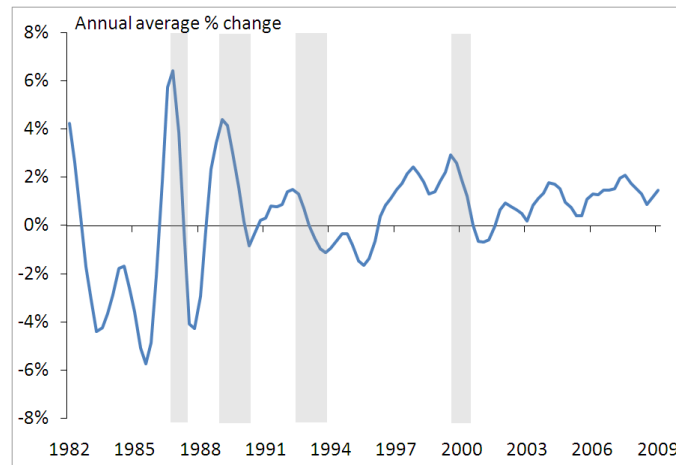
## Wages

Real wage growth (ie wages adjusted for the cost of living) tends to be pro-cyclical, rising when the economy and labour market are performing well and slowing during a downturn as the demand for labour eases. However, wage growth typically lags labour market conditions, largely due to the infrequent nature of most wage negotiations. It takes around 1-2 years for a lower unemployment rate to push annual average real wage growth up. *Figure 5* shows annual average real wage growth with recessions



(represented by the shaded bars) advanced two years<sup>12</sup>. Note that in the graph we have treated the 1987-91 downturn as two separate recessions.

**Fig 5: Annual average real wage growth**



Source: Statistics NZ, DoL calculations.

The lag of around 1-2 years means that wage growth is one of the last indicators to turn during a recession. For example, the rise in the annual average unemployment rate to 7.7% in 1998 led to annual average real wages falling in 2000, down from nearly 3% growth in 1999. Similarly, the rise in the annual average unemployment rate over 1990 and 1991 saw real wage growth ease from around 1.5% in 1992 to -1.1% in 1993. Real wage growth over the past year is therefore responding to the unemployment rate in 2007, which was under 4%, rather than current labour market conditions. Nonetheless, nominal wage growth has already begun to ease in recent quarters and with unemployment rising and weakening demand for labour, real (and nominal) wage growth is expected to weaken over the next few years. Labour productivity growth, which tends to be pro-cyclical, is also expected to ease over the short-term.

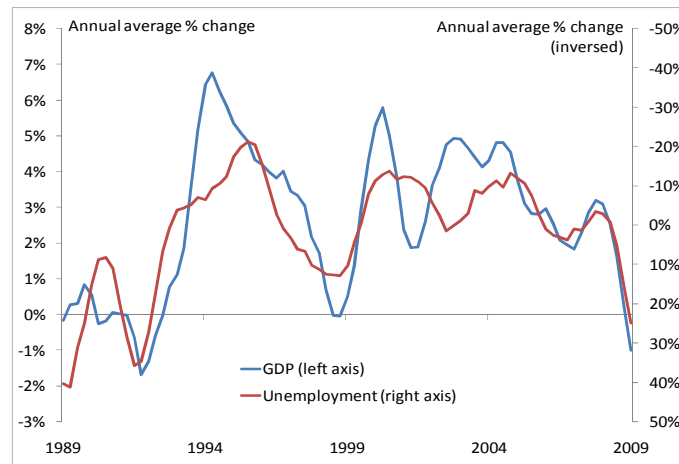
## The current recession and the labour market going forward

The current recession has so far seen the unemployment rate rise from a 22-year low of 3.5% in the December 2007 quarter to 5.0% in the March 2009 quarter. With real GDP expected to continue falling over the next two quarters, and given the labour market typically lags economic activity, the unemployment rate is widely predicted to continue rising throughout 2009 and into 2010. However, while unemployment generally tends to lag economic growth, they have tracked each other increasingly closely in recent years as shown in *Figure 6*. It is possible that the peak in unemployment may follow the upturn in economic activity sooner than is generally expected.

<sup>12</sup> Due to data availability, we only report on trends in wage growth from 1982 to present using the Quarterly Employment Survey. To obtain real wage growth figures we have deflated earnings by the Consumers Price Index (CPI).



**Fig 6: GDP and unemployment growth**



Source: Statistics NZ.

Using forecasts from the Reserve Bank's June 2009 Monetary Policy Statement, we can project the extent of this downturn - unemployment is expected to more than double and the unemployment rate reach 7.2% by June 2010. The risk of this approach is the current downturn could be worse than forecast. However, there is also a possibility of the downturn being less negative as turning points are difficult to pick<sup>13</sup>. With the global economy going through the most significant and synchronised downturn since World War II, there is significant uncertainty around the direction of the economy, and therefore the labour market.

There is a possibility that this downturn could be less severe than the average downturn based on the experience to date: more than a year into an economic recession, annual employment growth remains positive and the labour force participation rate has remained steady at a near record high. However, the global economic and financial crisis, which began in late-2008, may not yet have had time to have a material impact on the labour market and could have quite a different impact than previous downturns. The experience of many nations overseas shows how much more serious the downturn could be. For example, the unemployment rate has increased from 4.7% to 11.1% in Ireland, from 10.0% to 18.1% in Spain and from 4.8% to 9.4% in the United States.

Limiting the extent of this downturn will be that the rise in the unemployment rate is from a position of labour market strength. When the downturn began, unemployment was largely frictional, skill and labour shortages were widespread, and the participation rate was very high. Furthermore, an unemployment rate of 3.5%, briefly reached at the end of 2007, is generally not considered to be sustainable and non-inflationary given a normal level of churn and job seeking in the labour market (e.g. new job seekers, people between jobs).

Another key difference compared with most downturns of the last half century is that the labour market is now more flexible, with a higher proportion of part-time work and more people in temporary employment. Exactly what effect this will have on the labour market is unclear. International evidence suggests that temporary employment falls

<sup>13</sup> In late-1998, the Reserve Bank expected the unemployment rate to rise to 8.4% in March 1999 and be 7.9% a year later. As it turned out, the unemployment rate had peaked at 7.9% in the December 1998 quarter and fell to 7.5% in the March 1999 quarter and 6.5% in the March 2000 quarter.



more steeply than permanent employment during a recession<sup>14</sup>. However, it also suggests temporary employment rises more quickly during the recovery. This is most likely due to hesitancy by some employers to expand their permanent staffing levels until they feel more certain of increased activity in the economy. This may mean that unemployment rises sharply during the current recession but it could also fall sharply during the recovery. On the other hand, the greater labour market flexibility may be helping wages and hours worked to adjust more quickly as firms seek to decrease their labour costs. This would reduce the need for firms to lay off workers and result in less upward pressure on the unemployment rate.

## Summary

While every recession is different, and there is at present great uncertainty around the short-term outlook for the labour market, the current downturn does not appear to be unusually severe. Even assuming more pessimistic forecasts for the labour market<sup>15</sup>, the rise in unemployment is expected to be similar to that recorded in the 1966-67 and 1976-78 recessions, and lower than that recorded in the 1987-91 recession. While this is not to underplay the seriousness of the current recession it does provide useful context for any future rise in unemployment.

---

<sup>14</sup> Holmlund, B. and Storrie, D. (2002). "Temporary Work in Turbulent Times: the Swedish Experience", CESifo Working Paper No. 671 (4).

<sup>15</sup> For example the Treasury assume the unemployment rate will reach 8.0% (or 179,000 people unemployed) in 2010 (*Budget 2009*).