

# THE EFFECT OF RESTRUCTURING ON EMPLOYMENT: 1985-89

*In this article Andrew Bascand and Robin Clements assess the effect of restructuring on employment over the period 1985-89<sup>1</sup>.*

## Executive Summary

The number of persons registered as unemployed has increased by around 93,000 over the past four years, and similarly the official HLFS unemployment rate has risen from under 4 per cent to 7.4 per cent. Aside from migration and changing labour force participation influences, the major factors contributing to this recent rise in unemployment have been: the effect of *restructuring* (both in the public and private sectors); a rise in *real wages*; and a relatively sluggish period of *activity* growth that failed to provide enough jobs to offset natural increases in the labour force.

In the analysis presented below, an attempt is made to gauge in broad terms the relative importance of these influences on employment and unemployment. With respect to the decline in employment, the results of the work conducted tend to support the view that the fall in employment levels experienced over the past four years has been predominantly due to restructuring, although higher real wages also made a major contribution. In addition, over the past year it is thought that restructuring has been responsible for virtually all of the fall in employment.

Despite this conclusion, it is also estimated that had restructuring not been undertaken registered unemployment could still have reached almost 110,000. Therefore, while concluding that restructuring has had a major impact on employment levels over the last four years or so, it is not possible to claim that there would not have been a significant increase in unemployment in the absence of this influence.

The decline in employment over the past four years, which in aggregate is estimated to amount to a 6.5 per cent reduction in the number of jobs, has occurred against a background of rapid structural change, relatively strong real wage growth and, on average, only a modest expansion in aggregate activity. Indeed, as seen from an employer's perspective, real wages<sup>2</sup> rose by 6.4 per cent between December 1984 and December 1988, while over the same period real GDP on an output basis only expanded by 2.5 per cent.

## Methodology

Within a stable economic structure, economic theory suggests that real wages and the level of activity are the two major determinants of employment levels. If changes in employment explained by these two factors are abstracted from the remaining (unexplained) change in employment can be regarded as an

estimate of the impact of restructuring; there are almost certainly no other unexplained influences on employment which have been so important in recent years. Restructuring in this context refers mainly to microeconomic policy reforms which have been made *excluding* those changes where the channel of influence can be identified as being via real wages or activity levels. The major restructuring policies which are relevant are the lowering of industry assistance, first to exporters and more recently to producers of import substitutes, and the drive for greater efficiency in the public sector (including the State Owned Enterprises). However, as the focus of this analysis is on private sector employment rather than total employment, 'restructuring' here refers just to the reductions in industry assistance which have occurred.

Of course, this definition of the restructuring effect on employment is rather artificial in the sense that several policy reforms introduced since 1984 have themselves produced falls in the output of specific industries as industry-wide rationalisation has taken place. Predominantly as a result of this aspect, the follow-

ing analysis is likely to *underestimate* the total impact of restructuring as some of its effect will be inappropriately captured under the label of activity changes.

To estimate the employment impact of restructuring, the RBNZ Model 11<sup>3</sup> equation for private, full-time employment was used. This equation provides a quarterly track for private employment based only on the primary determinants of employment; i.e. real wages and private sector output<sup>4</sup>. The equation is used to explain changes in full-time private sector employment as opposed to total employment (which includes part-time workers).

<sup>3</sup> See Clements et al (1986) 'The RBNZ Econometric Model of the New Zealand Economy: Model XI', RBNZ Research Paper No. 40 (pp. 47).

<sup>4</sup> The equation was used in isolation from the rest of the model but was run in dynamic mode in the sense that the level of employment in the previous quarter - which influences current quarter employment through the gap between desired employment and last period's level - is determined by the equation rather than utilising the actual value. In a practical sense this option means that the equation can deviate from history depending on its own momentum rather than being constrained by the use of actual figures.

<sup>1</sup> Ashley Lienert assisted in the preparation of the empirical analysis.

<sup>2</sup> Prevailing weekly wage rates deflated by the Producers Price Index for outputs.

## Employment Results

Using Reserve Bank estimates of real wage and activity out-turns, the employment equation suggests that private full-time employment should have grown by some 9,000 over the past four years. In fact, full-time employment in the private sector declined by 68,000 (a 10 per cent fall) over this period (see Table 1); there have also been 18,000 jobs lost in the public sector, giving a total decline in full-time employment of 86,000. Moreover, the results show that employment growth should have been stronger in the 1985/86 March year and that employment should have increased rather than declined in the 1986/87 March year. In 1987/88 the employment estimate points to a fall slightly less than actually occurred, while in 1988/89, a small estimated decline contrasts with the sizeable decline that is estimated to have actually occurred (see Figure 1). These movements imply that restructuring had a negative impact in each year and that the impact was especially pronounced in 1986/87 and 1988/89. In aggregate, the analysis suggests that restructuring has resulted in job losses amounting to 77,000 jobs over the four years to March 1989.

The profile of the restructuring influence suggests that there have been two stages to the impact on private sector full-time employment. The first stage occurred relatively early on in the process (1985-87) as firms more heavily exposed to international competition had to seek productivity improvements to remain viable in the face of axed export subsidies and price support mechanisms. The second stage has come about as the more domestically orientated firms have had to adjust to the phasing out of import licensing and the reduction in tariff rates.

With respect to the contributions made to employment by activity and real wage rates, activity trends contributed positively to employment growth through 1985/86-1986/87, but were a negative influence in

1987/88. The slight rise in activity estimated for 1988/89, as a whole, is expected to have imparted a positive influence on employment levels. Overall activity growth is estimated to have produced some 56,000 jobs between March 1985 and March 1989. Meanwhile, real wage growth over the four-year period provided a negative influence producing job losses estimated at around 47,000. The lagged impact of real wage growth on employment was particularly evident in 1986/87 and again in 1988/89.

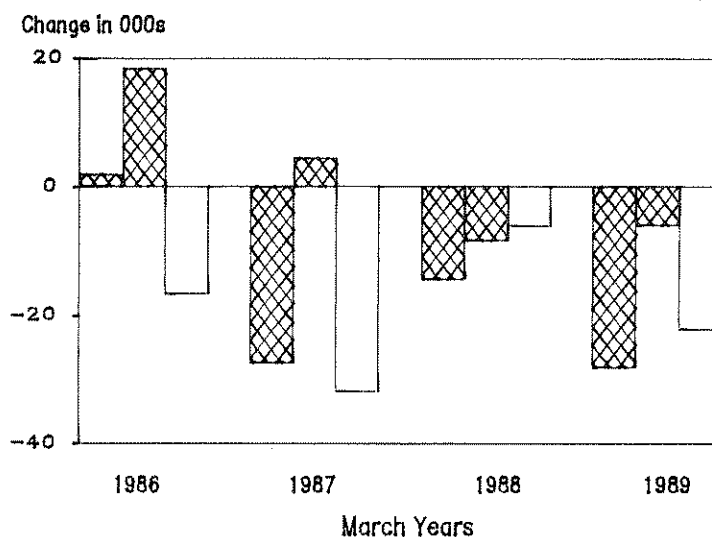
## Unemployment Consequences

In March 1985, 54,000 persons were registered as unemployed (excluding vacation workers). By March 1989 there were some 147,000 people on the register – an increase of 93,000 over four years

(see Table 1). Of this increase, 68,000 came from losses of private full-time jobs while the remaining 25,000 came from falling government employee numbers, changes in part-time numbers (generally rising relative to full-time) and growth in the labour force. Had private full-time employment grown by 9,000 over this four-year period – as suggested by the estimates of private employment in the absence of restructuring which were presented in the preceding section of this article – instead of falling, it would appear on the face of it that unemployment would have risen by only 16,000, i.e. the actual change in the labour force of 17,000 less 1,000 jobs created overall.

However, the total growth in the labour force has been muted over the last four years as poor labour market conditions in New Zealand have resulted in both departures to other countries and withdrawals from the labour force. Had con-

Figure 1  
Impact of Restructuring on Employment<sup>(1)</sup>



ACTUAL
  ESTIMATE  
 IMPACT

(1) Private Sector Full-Time Employment.

**Table 1**  
**Influences on Unemployment<sup>1</sup>**  
(March 1985 – March 1989)

	Cumulative Influences (000s – persons)		
	Actual	Without Restructuring	
Natural Population Increase	150	150	
Migration	– 50	– 25	
Change in Non-Participants	<u>– 83</u>	<u>– 72</u>	
<b>CHANGE IN LABOUR FORCE</b>		17	53
– Real Wage Effect	– 47	– 47	
– Activity Effect	56	56	
– Restructuring Effect	<u>– 77</u>	<u>          </u>	
Change in Private Full-Time Employment	– 68	9	
Change in Government Employment	– 18	– 18	
Change in Part-Time Employment	<u>10</u>	<u>10</u>	
<b>CHANGE IN EMPLOYMENT</b>		<u>– 76</u>	<u>1</u>
<b>CHANGE IN UNEMPLOYMENT</b>		<u>93</u>	<u>52</u>

<sup>1</sup> Table based on QES employment data and registration measures of unemployment together with revised RBNZ estimates.

ditions been somewhat more favourable, as suggested by the estimated non-restructuring employment track, then a proportion of the departures from the labour force would not have occurred. If it is assumed that the flow of net outward migration had been only half the actual out-turn over 1985/86-1988/89 and that the participation rate had fallen by 1 per cent rather than by nearly 2 per cent, the labour force would have expanded by a further 36,000 persons over the four year period. Thus, given these assumptions, unemployment would still have grown by 52,000 in the absence of any restructuring effects (see Table 1).

### Conclusions

The results presented in this paper tend to support the view that the fall in employment levels experienced over the last four years have been

predominantly due to restructuring rather than movements in the overall level of economic activity. In addition it is estimated that in 1988/89, restructuring was responsible for virtually all of the fall in employment while real wages and output accounted for only a minor portion of this fall.

Over the full four-year period, real wage increases are estimated to have contributed substantially to the worsening unemployment situation. Indeed the analysis conducted suggests that if real wages had been stable full-time private sector employment would be some 47,000 higher. However, it cannot be concluded from these results that unemployment would have been substantially lower in the absence of either the restructuring or real wage effects. Improved labour market conditions would have reduced emigration and increased labour market participation. Furthermore,

the analysis has suggested that even in the absence of the restructuring effect, unemployment could still have risen from 54,000 in March 1985 to nearly 110,000 in March 1989.