Household Labour Force Survey: June 2013 quarter

Key facts

In the June 2013 quarter compared with the March 2013 quarter:

- The employment rate fell to 63.6 percent – down 0.1 percentage points.
- The number of people employed increased by 8,000.
- The unemployment rate rose 0.2 percentage points, to 6.4 percent.
- The number of people unemployed increased by 5,000.
- The labour force participation rate increased 0.1 percentage points, to 68.0 percent.
- The number of people not in the labour force remained unchanged.

All figures are seasonally adjusted.

	June 2013 quarter	Quarterly change	Annual change
	(000)	(Percent)	
Employed	2,242	+0.4	+0.7
Unemployed	153	+3.7	-5.1
Not in the labour force	1,127	0.0	+2.2
Working-age population	3,523	+0.4	+0.9
	(Percent)	(Percentage points)	
Employment rate	63.6	-0.1	-0.2
Unemployment rate	6.4	+0.2	-0.4
Labour force participation rate	68.0	+0.1	-0.4

Employment rate
Quarterly
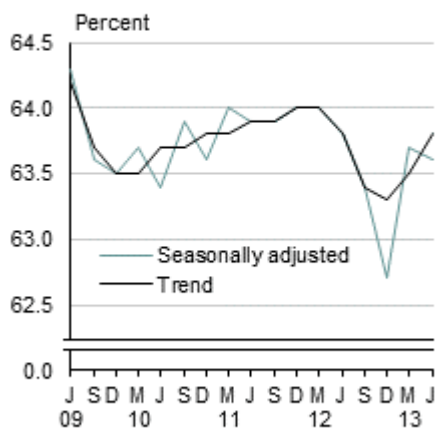
Source: Statistics New Zealand

Unemployment rate
Quarterly
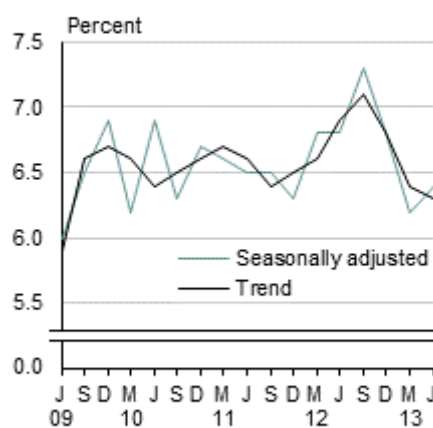
Source: Statistics New Zealand

Dallas Welch
Acting Government Statistician

7 August 2013
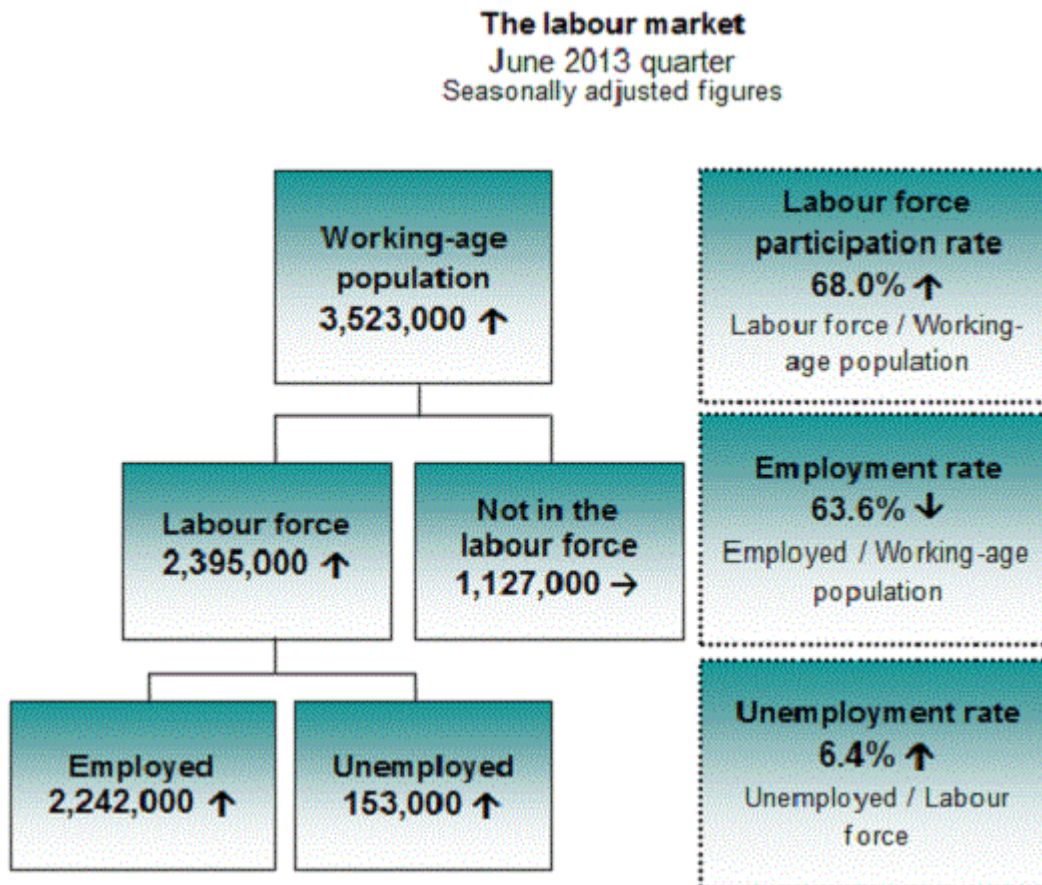ISSN 1178-0487

Commentary

- <u>Employment continues to increase, after falling throughout 2012</u>
- <u>Growth in hours outpaces growth in employment</u>
- <u>Canterbury leads employment growth</u>
- <u>Unemployment up over the quarter, down over the year</u>
- <u>Self-employment down over the year</u>
- <u>Participation still down over the year</u>
- <u>More youth outside the labour force but in education over the year</u>
- <u>Longer time series</u>

Overview

In the June 2013 quarter, the number of **people employed** increased by 8,000 (0.4 percent) in seasonally adjusted terms. This is the second quarterly increase in a row, after a fall in 2012.

The **unemployment rate** increased 0.2 percentage points to 6.4 percent over the quarter. This reflected 5,000 more people unemployed. Over the year, the unemployment rate fell from 6.8 percent in the June 2012 quarter.

Over the quarter, the **labour force participation rate** rose from 67.9 percent to 68.0 percent, while the number of **people not in the labour force** remained unchanged. Over the year, the number of people outside the labour force continued to rise, reflecting an increase in both the number of youth in study and the number of people in retirement.

The labour market
June 2013 quarter
Seasonally adjusted figures

Working-age population 3,523,000 ↑

Labour force 2,395,000 ↑

Not in the labour force 1,127,000 →

Employed 2,242,000 ↑

Unemployed 153,000 ↑

Labour force participation rate 68.0% ↑
Labour force / Working-age population

Employment rate 63.6% ↓
Employed / Working-age population

Unemployment rate 6.4% ↑
Unemployed / Labour force

Employment continues to increase, after falling throughout 2012

In the June 2013 quarter, the seasonally adjusted number of people employed increased 0.4 percent (8,000) to 2,242,000. This followed a 1.7 percent rise in the March 2013 quarter. The rise in employment over the quarter came entirely from a rise in male employment. The number of men employed increased by 10,000 (0.9 percent), while the number of women employed decreased by 2,000 (0.2 percent).

In the June 2013 quarter, the employment rate changed very little, falling 0.1 percentage points to 63.6 percent. This followed a large rise in the March 2013 quarter. The male employment rate increased, for the second quarter in a row, reaching 69.5 percent, while the female employment rate fell to 58.1 percent.

Over the year to June 2013, the number of people employed grew by 17,000 (0.7 percent).
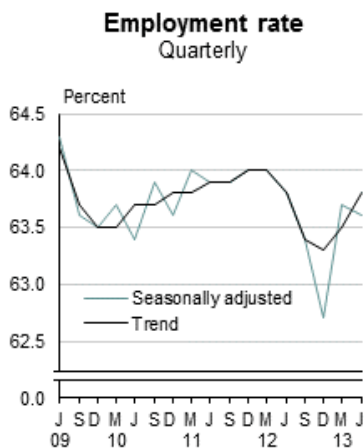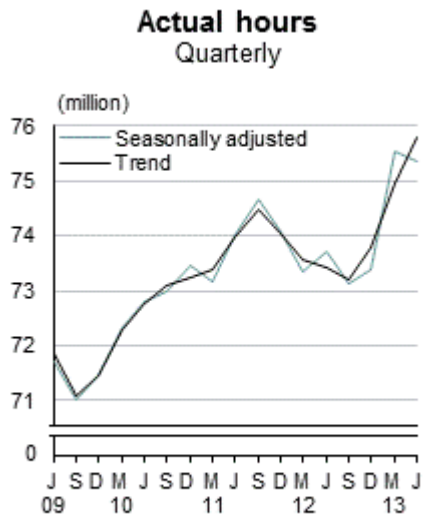

Source: Statistics New Zealand

Growth in hours outpaces growth in employment

In the year to June 2013, the total number of actual hours rose 2.2 percent. This annual growth in actual hours was larger than employment growth. This reflects an increase in average weekly hours of 1.5 percent to 33.6 hours. The total number of hours people usually work also increased over the year (0.5 percent).

Over the year, the number of full-time workers rose 1.5 percent, while part-time employment fell 1.8 percent.

In the June 2013 quarter, full-time employment increased slightly, after a large rise in March 2013. Part-time employment rose for the second quarter in a row, following a large fall in the December 2012 quarter.

Over the quarter, the seasonally adjusted number of actual hours worked per week decreased 0.2 percent to 75.4 million hours. This fall followed a large increase in the March 2013 quarter. The number of usual hours decreased by a larger amount than actual hours – down 1.7 percent to 80.2 million hours in the June 2013 quarter.

Actual hours
Quarterly

Source: Statistics New Zealand

Canterbury leads employment growth

The following figures are not seasonally adjusted, and are based on annual changes.

The Canterbury labour market continued to strengthen, with more people in the labour force and fewer people outside the labour force. The number of people employed grew by 16,800 (5.5 percent) over the year and the employment rate rose to 67.6 percent from 63.7 percent a year ago. The number of people unemployed fell by 6,500 to 15,000, with the unemployment rate falling to 4.4 percent from 6.5 percent in the June 2012 quarter.

The main contributors to total increase in employment were the construction industry and the retail trade, accommodation, and food services industry group. These were not statistically significant movements.

In Canterbury, the growth in hours was similar to employment growth, with the total number of actual and usual hours worked per week increasing by 6.4 percent and 4.4 percent, respectively.

While most of the annual employment growth in the national estimates came from Canterbury, the rest of the country also saw a rise in actual hours worked. Excluding Canterbury from the national estimates, the number of people employed remained unchanged over the year, while actual hours worked increased 1.6 percent.

Employment in Auckland also showed positive signs. Over the year to June 2013, the number of people employed in Auckland rose by 20,100 (2.8 percent). However, as annual population growth was larger than employment growth, the employment rate fell by 1.0 percentage point to 62.3 percent. The population growth was particularly large for the Asian ethnic group.

Canterbury employment rate
Unadjusted
Quarterly
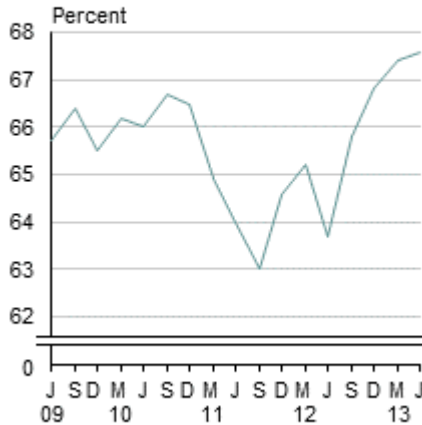
Percent

Source: Statistics New Zealand

Unemployment up over the quarter, down over the year

In the June 2013 quarter, the seasonally adjusted unemployment rate edged up 0.2 percentage points to 6.4 percent. Following a large fall in the March 2013 quarter, the unemployment rate is still below 2012's average rate of 6.9 percent. Unlike the seasonally adjusted series, the trend series continued to fall for the third quarter in a row, down 0.1 percentage points to 6.3 percent in the June 2013 quarter – its lowest level since the June 2009 quarter.

The number of unemployed people increased by 5,000 (3.7 percent) to 153,000 in the June 2013 quarter. Most of this increase came from the number of unemployed men, which rose by 4,000 (5.6 percent). The number of unemployed women also increased, up 2,000 (1.9 percent).
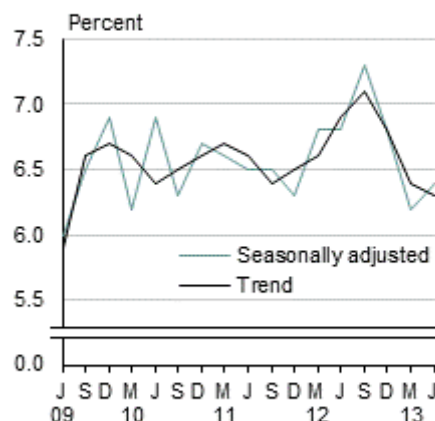
Unemployed
Quarterly
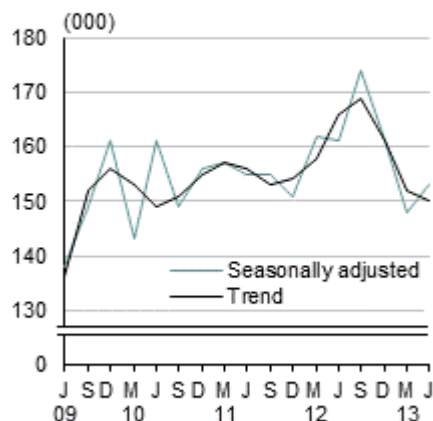
(000)

— Seasonally adjusted
— Trend

Source: Statistics New Zealand

Unemployment rate
Quarterly

Percent

— Seasonally adjusted
— Trend

Source: Statistics New Zealand

In unadjusted terms, the number of people in long-term unemployment (unemployed for more than 26 weeks) decreased for the third quarter in a row. Over the year to June 2013, long-term unemployment fell by 7,200 to 37,800. This is the largest annual decline since December 2004.

Alongside decreasing long-term unemployment, the likelihood that an unemployed person would enter into employment, from one quarter to the next, increased during the June 2013 year, after declining since June 2007.

Likelihood an unemployed person becomes employed
June quarters, 2005–13

Source: Statistics New Zealand
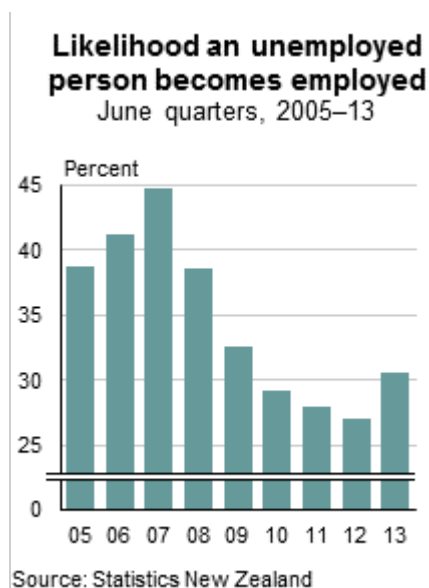
Self-employment down over the year

The following figures are not seasonally adjusted, and are based on annual changes.

Over the year to June 2013, there was an increase of 45,500 (2.5 percent) in the number of employees. However, the number of people who were self-employed fell by 22,200 (9.3 percent).

In this release, we have introduced a new table on people employed by employment status and sex. See table 10 in the 'Downloads box'.

HLFS compared with the Quarterly Employment Survey (QES)

The fall in self-employment over the year contributed to smaller employment growth in the HLFS than in the QES. The HLFS comparable series removes self-employment and agricultural employment to be comparable with the scope of the QES. It is useful to compare the HLFS with the QES as they are complementary measures of the labour market. The QES surveys established businesses, while the HLFS is a household survey.

The QES showed a 1.9 percent increase in filled jobs over the June 2013 year, and the HLFS comparable series showed a 1.8 percent increase in the number of people employed. Hours have improved in both the QES and the HLFS comparable series, with a 1.8 percent increase in total paid hours and a 1.4 percent increase in total usual hours worked.

Participation still down over the year

In seasonally adjusted terms, the labour force participation rate remained relatively unchanged in the June 2013 quarter – up 0.1 percentage points to 68.0 percent. Over the year, participation fell 0.4 percentage points from 68.4 percent.

The number of people not in the labour force remained unchanged over the quarter at 1,127,000. However, over the year to June 2013 the number of people not in the labour force increased by

24,000. Underneath this rise were increases in both the number of retired people and youth solely in study. The increase in the number of retired people reflects a greater number of people hitting retirement age. In addition, the rate at which older people are retiring has stopped declining over the past year.

More youth outside the labour force but in education over the year

The following figures are not seasonally adjusted, and are based on annual changes unless otherwise stated.

In unadjusted terms, the youth labour force contracted over the year to June 2013, with 14,000 fewer youth in the labour force and a fall in participation. The labour force participation rate fell to 57.6 percent – its lowest level since the series began in 1986. This fall in participation coincided with a rise in youth outside the labour force and a strong rise in the number of youth studying (up 12,200 or 6.4 percent). As a result, the number of youth not in employment, education, or training (NEET) fell by 7,200 over the year.

In the June 2013 quarter, the seasonally adjusted NEET rate decreased 0.5 percentage points to 12.1 percent. This is the lowest NEET rate since the December 2008 quarter. The fall in the NEET rate came mainly from a fall of 0.9 percentage points in the 15–19-year-old rate.
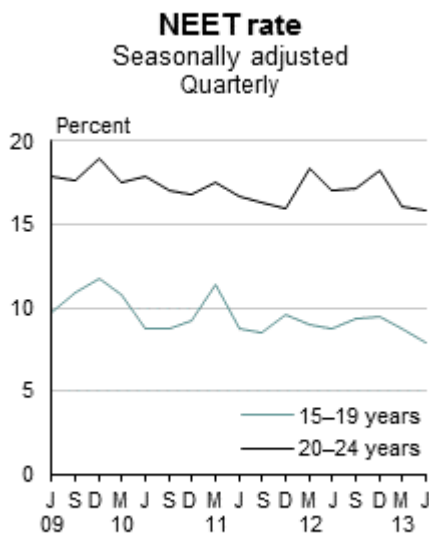
Source: Statistics New Zealand

Longer time series

The following graphs show the HLFS series for the employment rate, the labour force participation rate, and the unemployment rate over a 15-year period. A complete time series from March 1986 onwards is available on Infoshare.

Employment rate
Quarterly
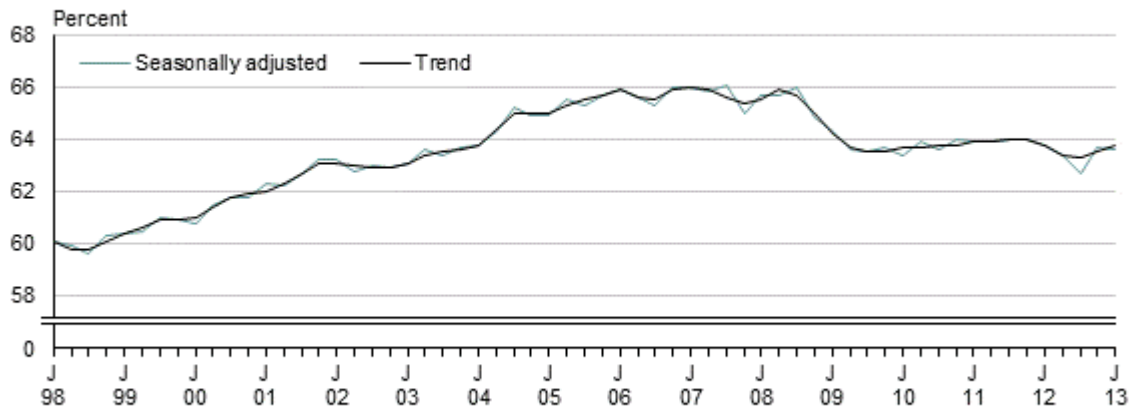
Source: Statistics New Zealand

Unemployment rate
Quarterly
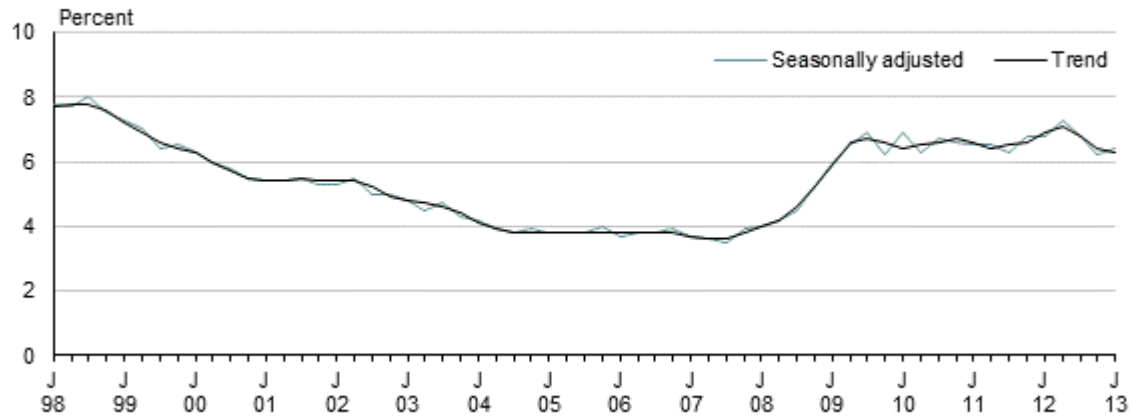
Source: Statistics New Zealand

Labour force participation rate
Quarterly

Source: Statistics New Zealand

For more detailed data see the Excel tables in the 'Downloads' box.

8

Definitions

About the Household Labour Force Survey

The Household Labour Force Survey (HLFS) provides a regular, timely, and comprehensive portrayal of New Zealand's labour force. Each quarter, Statistics NZ produces a range of statistics relating to employment, unemployment, and people not in the labour force.

The survey started in October 1985 and the first results published were for the March 1986 quarter.

More definitions

The labour force category to which a person is assigned depends on their actual activity during a survey reference week.

This section includes definitions used in the HLFS release. These conform closely to the international standard definitions specified by the International Labour Organization.

Employed: people in the working-age population who, during the reference week, did one of the following:

- worked for one hour or more for pay or profit in the context of an employee/employer relationship or self-employment
- worked without pay for one hour or more in work which contributed directly to the operation of a farm, business, or professional practice owned or operated by a relative
- had a job but were not at work due to: own illness or injury, personal or family responsibilities, bad weather or mechanical breakdown, direct involvement in an industrial dispute, or leave or holiday.

Employment type: Four different employment types are measured by the HLFS: employee, employer, self-employment, and unpaid family worker. The HLFS defines a person as self-employed if they work for themselves and do not have any employees.

Employment rate: the number of employed people expressed as a percentage of the working-age population. The employment rate is closely linked to how the working-age population is defined. See the 'Data quality' section for more details about how the employment rate used in this release is calculated.

Formal study statistics: to be participating in formal study, a person must be working towards a qualification that takes three or more months of full-time study to complete. Full-time study is defined as 20 or more hours per week.

Full-time/part-time status: full-time workers are those who usually work 30 hours or more per week, even if they did not do so in the survey reference week because of sickness, holidays, or other reasons. Part-time workers are those who usually work fewer than 30 hours per week.

Hours worked: actual hours are the number of hours a person worked in the reference week (including overtime). Usual hours refers to the number of hours a person normally works in a week (including overtime).

Jobless: people who are either officially unemployed, available but not seeking work, or actively seeking but not available for work. The 'available but not seeking work' category is made up of the 'seeking through newspaper only', 'discouraged', and 'other' categories.

Labour force: members of the working-age population, who during the survey reference week, were classified as 'employed' or 'unemployed'.

Labour force participation rate: the total labour force expressed as a percentage of the working-age population. Labour force participation is closely linked to how the working-age population is defined. See the 'Data quality' section for more details about how the labour force participation rate used in this release is calculated.

NEET rate: The rate is calculated as the total number of youth (aged 15–24 years) who are not in education, employment, or training (NEET), as a proportion of the total youth working-age population.

Not in the labour force: any person in the working-age population who is neither employed nor unemployed. For example, this residual category includes people who:

- are retired
- have personal or family responsibilities such as unpaid housework and childcare
- attend educational institutions
- are permanently unable to work due to physical or mental disabilities
- were temporarily unavailable for work in the survey reference week
- are not actively seeking work.

Seasonally adjusted series: adjusts the series to remove the seasonal component present when dealing with quarterly data. Seasonal patterns obscure the underlying behaviour of the series.

Statistically significant: is a statistical assessment of whether a change in the series is systematic or simply due to chance. Systematic movements occur when the change in the series is greater than its respective sampling error.

Trend Series: removes both the seasonal and irregular component of the series and reveals the underlying direction of movement in a series.

Underemployment: employed people who work part time (ie usually work less than 30 hours in all jobs) and are willing and available to work more hours than they usually do.

Underemployment rate: the number of underemployed people as a percentage of employed people.

Unemployed: all people in the working-age population who during the reference week were without a paid job, available for work, and had either actively sought work in the past four weeks ending with the reference week, or had a new job to start within the next four weeks.

Unemployment rate: the number of unemployed people expressed as a percentage of the labour force.

Young people not in employment, education, or training (NEET): young people aged 15–24 years who are unemployed (part of the labour force) and not engaged in education or training, and those not in the labour force and not engaged in education or training for many reasons.

Working-age population: the usually resident, non-institutionalised, civilian population of New Zealand aged 15 years and over.

Labour force categories used in the Household Labour Force Survey has more information on these definitions.

Related links

Upcoming releases

The *Household Labour Force Survey: September 2013 quarter* will be released on 6 November 2013. The Quarterly Employment Survey (QES) and the Labour Cost Index (LCI) for the September 2013 quarter will be released on the same day.

Subscribe to information releases, including this one, by completing the online subscription form.

The release calendar lists all upcoming information releases by date of release.

Past releases

Household Labour Force Survey has links to past releases.

Related information

Youth labour market dynamics in New Zealand (published 2013) discusses youth movements within the labour market.

New quality measures for the Household Labour Force Survey (published 2013) explains quality measures added to the Household Labour Force Survey information releases from the June 2013 quarter.

Skill levels of New Zealand jobs (published 2013) presents information on the skill levels of jobs done by New Zealanders.

Dynamics of the New Zealand labour market (published 2013) discusses measures of labour market dynamics.

Introducing new measures of underemployment (published 2013) introduces a new underemployment measure, to be added to the suite of labour market statistics available from the *Household Labour Force Survey: March 2013 quarter* onwards.

Introducing the employment rate provides information on the employment rate added to the Household Labour Force Survey (HLFS).

Introducing the youth not in employment, education, or training indicator provides information on youth not in employment, education, or training (NEET).

Ongoing impact of Canterbury earthquakes on the Household Labour Force Survey provides information on the impact of the Canterbury earthquakes on the Household Labour Force Survey.

Quarterly Employment Survey includes statistics on total gross earnings, total paid hours, filled jobs, average hourly and weekly earnings, and average weekly paid hours, based on the Quarterly Employment Survey.

Linked Employer-Employee Data (LEED) provides statistics on filled jobs, job flows, worker flows, mean and median earnings for continuing jobs and new hires, and total earnings. LEED information is based on tax data.

Data quality

Period-specific information
This section is for information that changes between periods.

- Achieved sample and response rate

General information
This section has information about data that does not change between releases.

- Data source
- Accuracy of the data
- How labour force statistics are classified
- Comparability with other datasets
- Interpreting the data
- Timing of published data
- Confidentiality
- More information

Period-specific information

Achieved sample and response rate

In the June 2013 quarter 28,088 people in 14,740 households responded to the Household Labour Force Survey (HLFS).

The target response rate for the HLFS is 90 percent. The response rate for the June 2013 quarter was 80.8 percent and the achieved sample rate was 70.9 percent.

General information

Data source

The target population for the HLFS is the civilian, usually resident, non-institutionalised population aged 15 years and over.

The statistics in this release **do not** cover:

- long-term residents of homes for older people, hospitals, and psychiatric institutions
- inmates of penal institutions
- members of the permanent armed forces
- members of the non-New Zealand armed forces
- overseas diplomats
- overseas visitors who expect to be a resident in New Zealand for less than 12 months
- those aged under 15 years.

Accuracy of the data

Sample design

The HLFS sample contains about 15,000 private households and about 30,000 individuals each quarter. We sample households on a statistically representative basis from areas throughout New Zealand, and obtain information for each member of the household. The sample is stratified by geographic region, urban and rural areas, ethnic density, and socio-economic characteristics.

Households stay in the survey for two years. Each quarter, one-eighth of the households in the sample are rotated out and replaced by a new set of households. Therefore, up to seven-eighths of the same people are surveyed in adjacent quarters. This overlap improves the reliability of quarterly change estimates.

The period of surveying/interviewing is 13 weeks. The information obtained relates to the week before the interview (referred to as the 'survey reference week'). We first interview respondents face-to-face at their home. Subsequent interviews are by telephone wherever possible. Respondents also have the option to file self-completed questionnaires.

Where practicable, we obtain information directly from each household member. Otherwise a proxy interview is conducted, in which details are obtained from another adult in the household.

Sampling errors

Sampling errors can be measured. They quantify the variability that occurs by chance because a sample rather than an entire population is surveyed.

We calculate sampling errors using the jackknife method. It is based on the variation between estimates, based on different subsamples taken from the whole sample. This is an attempt to see how estimates would vary if we were to repeat the survey with new samples of individuals.

We calculate sampling errors for each cell in the published tables and for estimates of change between adjacent quarters. For example, the estimated total number of people employed in the June 2013 quarter is 2,236,500 before seasonal adjustment. This estimate is subject to a sampling error of plus or minus 26,500, or 1.2 percent (measured at the 95 percent confidence level). This means that there is a 95 percent chance that the true number of employed people lies between 2,210,000 and 2,263,000.

Smaller estimates, such as the number of people who are unemployed, are subject to larger relative sampling errors than larger estimates. For example, the estimated total number of people unemployed in the June 2013 quarter is 148,200 before seasonal adjustment. This estimate is subject to a sampling error of plus or minus 11,000 or 7.4 percent (measured at the 95 percent confidence level). This means that there is a 95 percent chance that the true number of unemployed people lies between 137,200 and 159,200

Estimates of change are also subject to sampling error. For example, the survey estimate of change in total employment from the June 2012 quarter to the June 2013 quarter is an increase of 16,200. This estimate is subject to a sampling error of plus or minus 31,200 (at the 95 percent confidence level). Therefore, the true value of the change in surveyed employment from the June 2012 quarter to the June 2013 quarter has a 95 percent chance of lying between -15,000 and 47,400.

A change in an estimate, either from one adjacent quarter to the next, or between quarters a year apart, is said to be statistically significant if it is larger than the associated sampling error. Therefore, the example quoted above does not represent a significant movement.

In general, the sampling errors associated with subnational estimates (eg breakdowns by regional council area or ethnic group) are larger than those associated with national estimates.

A non-sampling error is very difficult to measure, and if present can lead to biased estimates. Statistics NZ endeavours to minimise the impact of these errors by applying best survey practices and monitoring known indicators.

Response rate and achieved sample characteristics

The achieved sample size measure is the number of eligible households and individuals that responded to the HLFS in the quarter. The achieved sample size typically increases over time as the population grows and more dwellings are added to the survey sample.

The response rate is calculated by determining the number of eligible households that responded to the survey, as a proportion of the estimated number of total eligible households in the sample.

The following table shows the HLFS achieved sample and response rates for the last five quarters.

HLFS achieved sample and response rates			
Quarter	National response rate (percent)	Achieved sample rate (percent)	Achieved sample Individuals	Achieved sample Households
Jun 2012	86.3	73.4	28,823	15,135
Sep 2012	82.6	70.2	26,850	14,442
Dec 2012	84.4	71.6	28,139	14,776
Mar 2013	85.8	74.9	30,212	15,434
Jun 2013	80.8	70.9	28,088	14,740

Obtaining a sample that represents the population is essential when it comes to producing reliable labour force estimates. The HLFS goes through three stages of weighting to achieve this. For more information, please see New quality measures for the Household Labour Force Survey.

The following figure shows that while the distribution of the pre- and post-calibration weights differs within a quarter, the difference between the weights typically does not change from quarter to quarter.

Age distribution in the HLFS
By age group
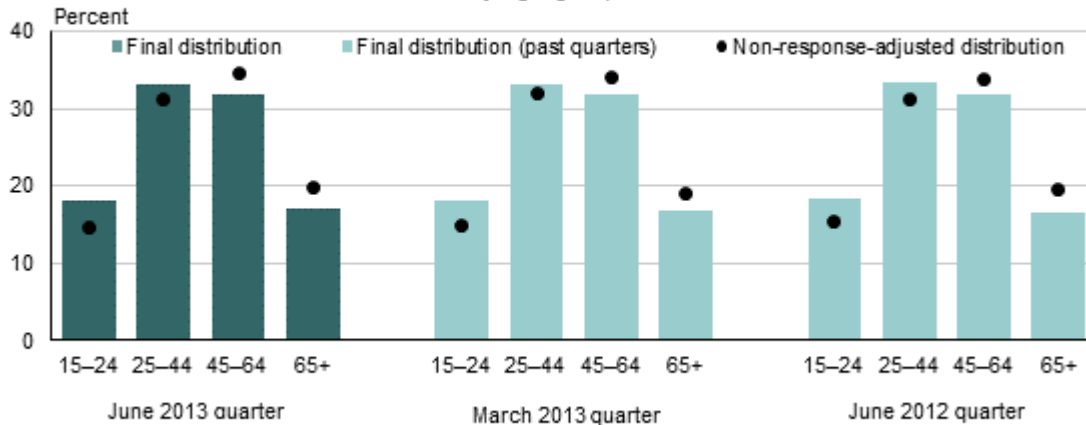
Source: Statistics New Zealand

The undercoverage rate gives an indication of how representative the pre-calibrated sample is. The higher the undercoverage rate, the less representative the pre-calibrated sample.

Usually the undercoverage rate in the HLFS is around 20 percent. The overall undercoverage rate for the HLFS in the June 2013 quarter was 18.5 percent. This compares with 16.9 percent in the March 2013 quarter and 22.5 percent in the June 2012 quarter.

Where practical, the HLFS gets information directly from each household member. Otherwise, a proxy interview is conducted, in which details are given by another adult in the household.

The quality of data from proxy responses is affected by two factors: what type of information is being asked for, and the relationship between the proxy (the person that the survey questions are being answered for) and the proxy respondent (the person replying to the questionnaire on behalf of the proxy). More than 90 percent of related people answer correctly for key variables. When the proxy and proxy respondent are unrelated there is still a high quality of response.

The proxy rate is calculated as the percentage of respondents who had someone else respond on their behalf divided by the total number of respondents. A typical proxy rate in the HLFS is around 30–35 percent. This excludes quarters when a supplement was attached to the HLFS. When a supplement is attached to the HLFS the proxy rate typically falls. This is because supplements often have different proxy rules, which have a small effect on how HLFS responses are collected.

The proxy rate for the HLFS in the June 2013 quarter was 22.3 percent. This compares with 32.5 percent in the March 2013 quarter and 28.4 percent in the June 2012 quarter. Supplements are attached to the HLFS in June quarters.

For full information on the introduction of the quality measures introduced this quarter, please see New quality measures for the Household Labour Force Survey.

Seasonal adjustment and trend series

In the labour market, cyclical events that affect labour supply and demand occur around the same time each year. For example, in summertime a large pool of student labour is both available for, and actively seeking, work. Demand for labour in the retail sector and in many primary production industries also increases.

For any series, the estimates can be broken down into three components: trend, seasonal, and irregular. Seasonally adjusted series have had the seasonal component removed. Trend series have had both the seasonal and irregular components removed, and reveal the underlying direction of movement in a series.

The series for each labour market statistic is adjusted separately. For this reason, the sum of the seasonally adjusted estimates for employment, unemployment, and people not in the labour force will usually not add up to the working-age population estimates.

Seasonal adjustment has more information about how we seasonally adjust our statistics. Seasonal adjustment makes data for adjacent quarters more comparable by smoothing out the effect on the times series of any regular seasonal events. This ensures that the underlying movements in the time series are more visible.

See the 'Revisions' section for information on the change in estimates between the current and previous publication for the seasonally adjusted and trend data.

All seasonally adjusted and trend series are produced using the X-12-ARIMA Version 0.2.10 package developed by the U.S. Census Bureau.

Quality of seasonal adjustment

We monitor our data to make sure that our seasonal adjustment is robust.

The X-12-ARIMA programme is highly customisable and can produce a wide variety of possible adjustments for any particular input series. Consequently, X-12-ARIMA produces a number of diagnostics which are useful in assessing the quality of the chosen adjustment.

The following table provides a selection of diagnostics. The reference value indicates the desired value for each. Most are acceptable, though there is evidence of a changing seasonal pattern for the number of males who are unemployed and females who are not in the labour force. More detail about seasonal adjustment in the HLFS is available on request.

Seasonal adjustment diagnostics							
Diagnostics	**Series**						
	Reference value	**Male employed**	**Female empolyed**	**Male unemployed**	**Female unemployed**	**Male not in labour force**	**Female not in labour force**
Test for sesonality	<0.10	0.00	0.00	0.00	0.00	0.00	0.00
Test for moving seasonality	>0.10	0.12	0.68	0.03	0.34	0.67	0.06
Period until trend dominates	<3	1	1	1	2	2	2
Trend contribution to change	<20	33.64	42.15	45.90	15.01	13.72	20.84
Seasonal contribution to change	>50	57.96	42.09	34.04	67.26	74.20	50.30
Irregular contribution to change	<20	8.40	15.76	20.06	17.73	12.08	28.86
Quality statistic	<1	0.42	0.55	0.88	0.71	0.60	1.03

Outliers

During the seasonal adjustment process, X-12-ARIMA can give less weight to the irregular component. Specifically, if the estimated irregular component at a point in time is sufficiently large compared with the standard deviation of the irregular component as a whole, then the irregular component at that point can be downweighted or removed completely and re-estimated. Such observations are referred to as partial and zero-outliers, respectively. In practice, the downweighting of outliers will do little to seasonally adjusted data, but the impact of the outliers on the trend series will generally be reduced. However, if an outlier ceases to be an outlier as more data becomes available, then significant revisions to the trend series become possible. The table below shows partial (P) and zero (Z) outliers for the last year of each time series.

Outliers						
Quarter	**Male employed**	**Female employed**	**Male unemployed**	**Female unemployed**	**Male not in the labour force**	**Female not in the labour force**
Sep 2012						
Dec 2012		Z				Z
Mar 2012						
Jun 2013						

Suppression of data

Cells with estimates of less than 1,000 are suppressed and appear as 'S' in the tables. These estimates are subject to sampling errors too great for most practical purposes.

Rounding procedures

Figures presented in this release are rounded. Figures are rounded to the nearest hundred or to the nearest thousand for seasonally adjusted and trend estimates. This may result in a total disagreeing slightly with the sum of the individual items as shown in the table. Where figures are rounded the unit is shown as (000) for thousands.

Any quarterly and annual changes for figures are calculated on unrounded numbers. However quarterly and annual percentage point changes for rates are done on rounded rates.

How labour force statistics are classified

The HLFS release includes specific statistics about industry, occupation, study, ethnicity, and region. This section defines what we measure for each of these statistics.

Industry statistics

Since the September 2009 quarter, the industry statistics have been based on the Australian and New Zealand Standard Industrial Classification 2006 (ANZSIC06), the latest edition of the classification. When ANZSIC06 was introduced, Statistics NZ developed the New Zealand Standard Industrial Output Categories (NZSIOC). Classifying industries using NZSIOC helps to standardise outputs. Industry outputs defined using ANZSIC06 are not comparable with those based on ANZSIC96, the version used before the September 2009 quarter.

Implementing ANZSIC 2006 in the Household Labour Force Survey has more information.

Occupation statistics

Since the September 2009 quarter, we have used the Australian and New Zealand Standard Classification of Occupations (ANZSCO) to classify occupation data in the HLFS. ANZSCO is a harmonised classification developed by Statistics NZ, the Australian Bureau of Statistics, and the Australian Department of Employment and Workplace Relations, for use in both Australia and New Zealand. Occupation data was previously based on the New Zealand Standard Classification of Occupations 1999 (NZSCO99). The occupation data is available on Infoshare.

Implementing ANZSCO in the Household Labour Force Survey has more information.

Māori benchmarks

Before April 2009, we did not benchmark the Māori working-age population to population estimates. This, along with other sample design restrictions, caused a high degree of volatility in Māori statistics in the HLFS. Movements in the working-age population estimates of certain ethnic groups, such as Māori, may reflect this volatility rather than a real change in the estimated ethnic demographic. Including Māori benchmarks in the working-age population mitigates the known undercount of Māori in the HLFS and also results in smoother time series for Māori statistics in the HLFS. However, introducing the Māori population benchmarks does not necessarily translate to improved estimates for non-Māori ethnic groups.

Household statistics

A household's labour force status is derived by looking at the labour force status of household members aged 18–64 years. For example, if a couple is living by themselves and one is aged 64 years and the other is aged 65 years, this couple will be assigned to the 'All employed' or 'None employed' category, depending on the labour force status of the 64-year-old.

Households that have no members aged 18–64 years are excluded from this analysis. The household categories incorporate the concept of dependent children rather than just children. A child is a person of any age who usually resides with at least one parent (natural, step, adopted, or foster) and who does not usually reside with a partner or child(ren) of his or her own. Statistics NZ defines a dependent child as a child under the age of 18 years and not in full-time employment.

Updated regional classification

In November 2010, the new Auckland territorial authority replaced the existing Rodney district, North Shore city, Auckland city, Waitakere city, Manukau city, Papakura district, and part of Franklin district councils. This resulted in a minor change in the boundary between the Auckland and Waikato regions.

From the June 2011 quarter, the statistics in the HLFS release were produced using the new boundaries and backcast for the March 2011 quarter. The new boundaries do not significantly affect measures from the HLFS.

Total response ethnicity

From the December 2011 quarter, the HLFS publishes ethnicity data using the total response ethnicity output in the information release. Using this method, people who reported that they belonged to more than one ethnic group are counted once in each group reported. This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities.

Comparability with other datasets

Comparing our labour market statistics has more information on how the HLFS compares with the other labour market statistics that we produce. This web page explains which measures of employment are included in each of our employment releases, and the timings and coverage of each release.

A Guide to Unemployment Statistics has more information on comparing the HLFS with other datasets on unemployment. This web page explains which measures of unemployment are included in the HLFS, the unemployment benefit, and the job-seekers register. It also includes information on the timings, coverage, and different purposes of each of these measures.

HLFS comparable series

The HLFS and the Quarterly Employment Survey (QES) are two different measures of employment and hours worked. The HLFS measures the number of employed people and the number of hours they usually work from New Zealand households; the QES measures the number of jobs and paid hours from New Zealand businesses. The table below compares the unadjusted annual percentage change of each surveys' employment and hours worked measure

for recent quarters. The HLFS comparable series removes major differences between HLFS and QES, yet does not make adjustments for all differences. This provides an HLFS series that is more comparable with QES.

It removes the following categories from the HLFS, which are not collected by the QES:

- self-employment
- agricultural industry
- individuals who work without pay in a family business.

Year to	Annual change in employment		Annual change in hours	
	HLFS comparable series people employed	QES filled jobs	HLFS comparable series usual hours	QES hours paid
Jun 2012	1.2	1.9	0.6	2.4
Sep 2012	0.3	1.4	-0.1	1.9
Dec 2012	0.8	1.4	2.3	1.8
Mar 2013	2.8	1.8	4.7	2.2
Jun 2013	1.8	1.9	1.4	1.8

In the year to June 2013 the HLFS comparable series reported similar growth in both employment and hours with the QES. However, the HLFS comparable series had stronger annual employment and hours growth than the QES in the year to March 2013. Prior to these quarters, the comparable HLFS series has shown lower annual employment and hours growth relative to the QES.

Comparing our labour market statistics has more information on the differences between HLFS and QES.

International comparability of the labour force participation rate and the employment rate

Several alternative definitions of labour force participation rate and employment rate are used by other organisations and countries; they differ in the age of the working-age population and the inclusion of military personnel. A common definition is to restrict the labour force and working-age population to the 15–64-year age group, particularly in countries with a compulsory retirement age. Generally, this definition leads to a higher labour force participation rate and employment rate.

Using this definition for the New Zealand HLFS in the June 2013 quarter gives a surveyed figure of 77.5 percent (labour force participation rate) and 72.5 percent (employment rate).

Interpreting the data

Information releases contain seasonally adjusted, trend, and survey statistics for the latest quarter. These statistics are averages for the three-month period and do not apply to any specific point in time. Data sourced from the seasonally adjusted series and trend series are identified as such in the table or section headings. All other data, in the commentary or in tables, are sourced from the original survey series and are unadjusted.

Timing of published data

The HLFS is published within six weeks after the end of the quarter's reference period.

Confidentiality

Only people authorised by the Statistics Act 1975 are allowed to see your individual information, and they must use it only for statistical purposes. Your information is combined with similar information from other people or households to prepare summary statistics.

More information

See more information about the Household Labour Force Survey

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Revisions

Each quarter, the seasonal adjustment process is applied to the latest quarter and all previous quarters. This means that seasonally adjusted estimates for any of the previously published quarters may change slightly. The following table lists the changes in estimates between the current and previous publication for the seasonally adjusted data. For example, the seasonally adjusted number of males not in the labour force for the March 2013 quarter was 458,000. In the June 2013 quarter release, that estimate is revised to 457,000. These numbers are rounded to the nearest 1,000, but the relative change derived from the unrounded estimates is a downward revision of 0.21 percent.

Percent revision from last published, seasonally adjusted						
Quarter	Male employed	Female employed	Male unemployed	Female unemployed	Male not in labour force	Female not in labour force
Jun 2012	-0.05	-0.02	-1.39	-0.11	0.16	0.04
Sep 2012	0.00	0.00	-0.22	-0.06	0.04	-0.03
Dec 2012	0.02	0.03	-0.14	-0.09	-0.03	-0.01
Mar 2013	0.03	0.00	1.64	0.23	-0.21	-0.03

The following table presents revisions for the trend estimates. Trend revisions are generally larger than those of the seasonally adjusted data.

Percent revision from last published, trend						
Quarter	Male employed	Female employed	Male unemployed	Female unemployed	Male not in labour force	Female not in labour force
Jun 2012	-0.02	-0.02	-0.22	-0.01	0.05	0.04
Sep 2012	-0.01	0.02	-0.49	-0.12	0.09	-0.09
Dec 2012	-0.07	0.03	-0.14	-0.02	0.20	-0.20
Mar 2013	0.15	0.00	6.02	1.12	-1.00	-0.09

Every estimate is subject to revision each quarter as new data is added, though in practice estimates more than two years from the end-point will change little. For example, the trend estimate of males employed for the June 2012 quarter was 1,183,000 when first published. In the June 2013 quarter, one year later, the trend estimate of males employed for the June 2012 quarter is 1,179,000, a decrease of 4,000 (or down 0.36 percent using the unrounded estimates). This is an example of a '4-step ahead' revision.

The table below shows the average of all such absolute revisions, expressed relatively, and gives some indication of how much the current estimates might be revised when the September 2013 data becomes available.

Mean absolute percent revisions				
	Seasonally adjusted		Trend	
	1-step	4-step	1-step	4-step
Male employed	0.05	0.09	0.16	0.17
Female employed	0.24	0.31	0.39	0.45
Male unemployed	0.49	0.70	1.74	1.69
Female unemployed	0.52	0.97	1.89	1.88
Male not in labour force	0.10	0.19	0.37	0.39
Female not in labour force	0.09	0.15	0.38	0.39

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Tables

Note: From the June 2013 quarter onwards, table 10, 'Household composition, by household labour force status', is replaced by 'People employed, by employment status, by sex'.

The old household composition table will be made available on Infoshare and NZ.Stat from the September 2013 quarter onwards. If you require the household composition table for the current June 2013 quarter, please email hlfs@stats.govt.nz to discuss the availability of this data.

The following tables are available in Excel format from the 'Downloads' box. If you have problems viewing the files, see opening files and PDFs.

1. People employed, unemployed, and not in labour force, by sex, seasonally adjusted series
2. People employed, unemployed, and not in labour force, by sex, trend series
3. People employed, unemployed, and not in labour force, by sex
4. People employed, unemployed, and not in labour force, by age group
5. People employed, unemployed, and not in labour force, by ethnic group
6. People employed, unemployed, and not in labour force, by regional council area
7. People employed, by industry and sex
8. The jobless: those without a job and wanting a job, by sex
9. Total actual hours worked
10. People employed, by employment status, by sex
11. People underemployed, by sex
12. People employed, unemployed, not in the labour force, and total actual hours worked, seasonally adjusted series
13. Harmonised unemployment rates in OECD countries, latest available
14. People employed, unemployed, and not in labour force, by sex and formal study status
15. Labour force and education status of those aged 15–24, by age group, seasonally adjusted.

Supplementary tables

The following tables provide unadjusted statistics for the Canterbury region. They are similar to tables 3, 4, 7, 8, 9, 11, and 14 above.

1. People employed, unemployed, and not in the labour force in Canterbury, by sex
2. People employed, unemployed, and not in the labour force in Canterbury, by age group
3. People employed in Canterbury, by industry and sex
4. The jobless: those without a job and wanting a job in Canterbury, by sex
5. Total actual and usual hours worked in Canterbury
6. Underemployment in Canterbury, by sex
7. People employed, unemployed, and not in labour force in Canterbury, by sex and formal study status

A longer time series of the supplementary tables is available on request.

Access more data on Infoshare

Infoshare allows you to organise data in a way that best meets your needs. You can view the resulting tables onscreen or download them.

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