Household Labour Force Survey: December 2012 quarter

Key facts

In the December 2012 quarter compared with the September 2012 quarter:

- The unemployment rate fell 0.4 percentage points, to 6.9 percent.
- The number of people unemployed decreased by 10,000 people (down 6.0 percent).
- The employment rate fell 0.8 percentage points, to 62.6 percent.
- The number of people employed decreased by 23,000 (down 1.0 percent).
- The labour force participation rate fell 1.2 percentage points, to 67.2 percent.
- The number of people in the labour force decreased by 33,000.

All figures are seasonally adjusted.

	December 2012 quarter	Quarterly change	Annual change
	(000)	(Percent)	
Unemployed	163	-6.0	+6.8
Employed	2,194	-1.0	-1.4
Not in the labour force	1,149	+3.8	+4.4
Working-age population	3,506	+0.3	+0.8
	(Percent)	(Percentage points)	
Unemployment rate	6.9	-0.4	+0.5
Employment rate	62.6	-0.8	-1.4
Labour force participation rate	67.2	-1.2	-1.2

Unemployment rate — Quarterly
Source: Statistics New Zealand
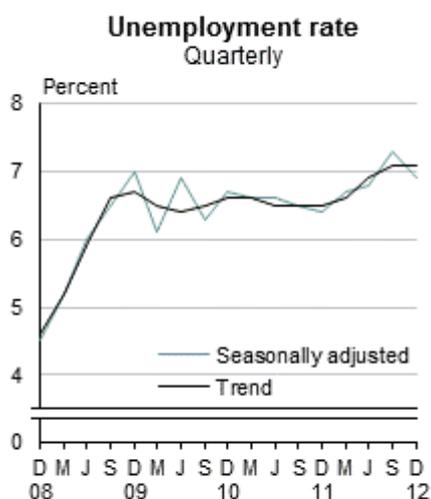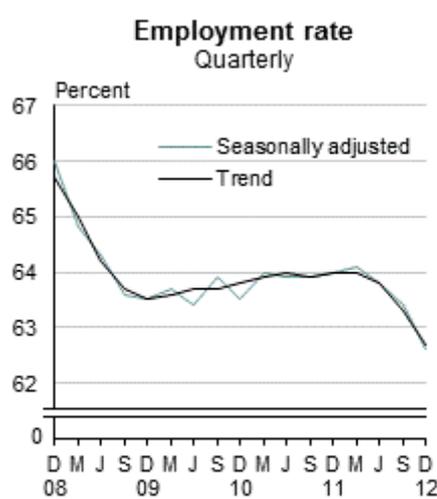
Employment rate — Quarterly
Source: Statistics New Zealand

Geoff Bascand
Government Statistician

Commentary

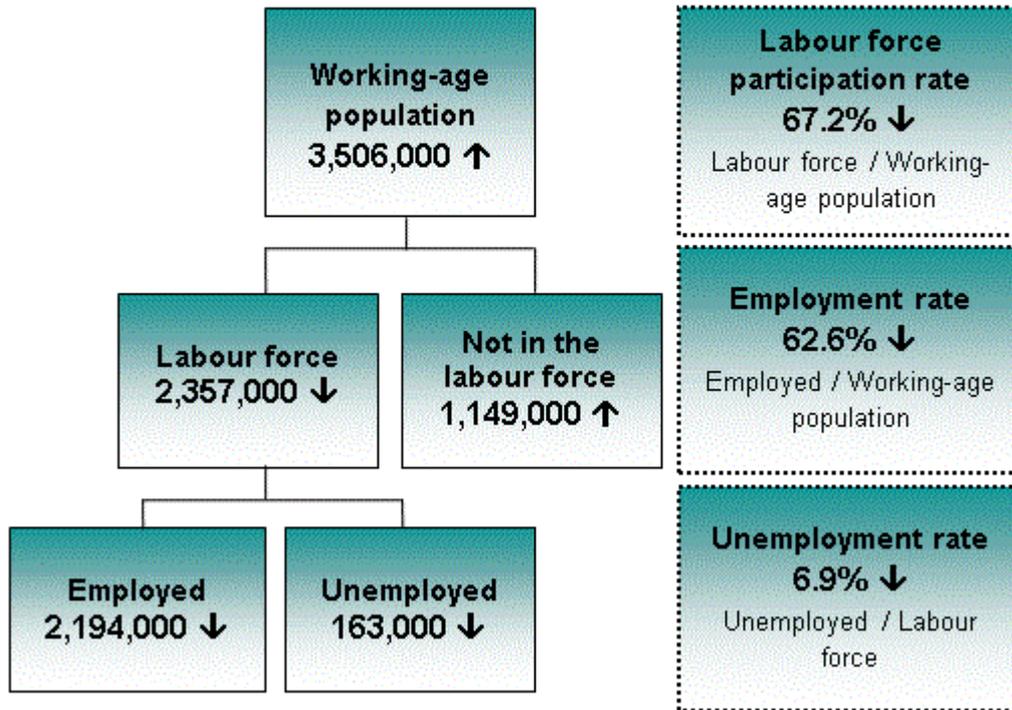## Labour force weak this quarter – overview

In the December 2012 quarter the **employment rate** decreased 0.8 percentage points in seasonally adjusted terms. This is the third consecutive quarter the employment rate has fallen. The number of **people employed** fell 23,000, with fewer women in employment, as well as fewer people employed in part-time work.

The **unemployment rate** also decreased over the quarter, down 0.4 percentage points to 6.9 percent. This decrease reflected 10,000 fewer people being unemployed. The fall in unemployment was from a decrease in male unemployment.

The **labour force participation rate** fell 1.2 percentage points over the quarter, due to both employment and unemployment decreasing.

The number of **people not in the labour force** had a large increase over the quarter, with increases for both males and females. Over the year to the December 2012 quarter, more people in the older age groups were not in the labour force. This was partly due to an ageing population.

The labour market
December 2012 quarter
Seasonally adjusted figures

|	
Working-age population 3,506,000 ↑	**Labour force participation rate** 67.2% ↓ Labour force / Working-age population
Labour force 2,357,000 ↓ / **Not in the labour force** 1,149,000 ↑	**Employment rate** 62.6% ↓ Employed / Working-age population
Employed 2,194,000 ↓ / **Unemployed** 163,000 ↓	**Unemployment rate** 6.9% ↓ Unemployed / Labour force

## Employment continues to decline

During the December 2012 quarter the employment rate decreased 0.8 percentage points, to 62.6 percent, in seasonally adjusted terms. This is the third consecutive fall in the employment rate, after employment had been relatively unchanged for about two years. The employment rate is now at the lowest level in over 10 years.

The female employment rate fell for its second quarter, down 1.3 percentage points to 57.0 percent. The male employment rate fell 0.4 percentage points to 68.4 percent, falling for the third quarter in a row and is now at the lowest rate since the September 1999 quarter.

Over the latest quarter the number of people employed decreased 23,000 (down 1.0 percent), to 2,194,000. There was a 20,000 fall in the number of women employed (down 1.9 percent), and a 3,000 fall in the number of men employed (down 0.2 percent).

Employed
Quarterly

Employment rate
Quarterly
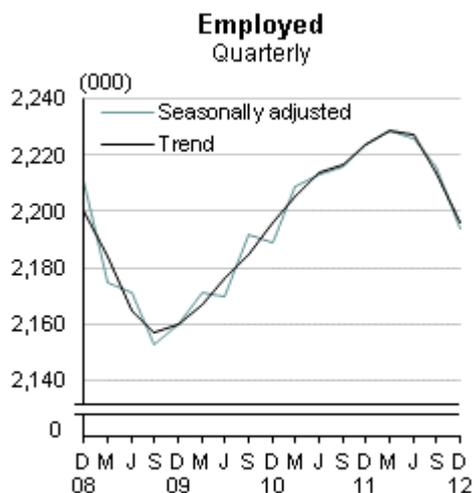
Source: Statistics New Zealand
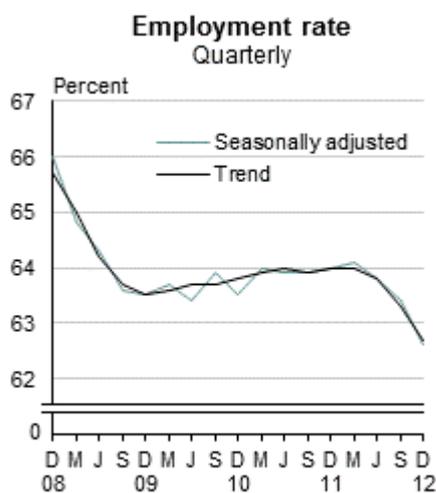
Source: Statistics New Zealand

Fall in part-time work while full-time work edges up

Part-time employment fell over the latest quarter, while full-time employment showed a small rise. Part-time employment fell 6.0 percent to reach 486,000. This fall comes soon after a peak in the March 2012 quarter.

Part-time employment by industry

The annual industry figures below are not seasonally adjusted, and are based on changes that were statistically significant.

Within part-time employment, there were annual decreases in the education and training, and the agriculture, forestry, and fishing industries – down 8,900 and 6,400, respectively.

For total employment the manufacturing industry had an annual fall – down 17,200.

Actual hours worked flat

In the December 2012 quarter, the number of hours people actually worked per week remained flat – at 73.1 million hours (down 0.1 percent). However, usual hours worked increased 0.3 percent – up to 79.8 million hours. Although there was an overall fall in employment, the total number of hours worked remained steady, reflecting the changes in full- and part-time employment over the quarter.

Self-employment decreases over the year

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

Over the December 2012 year the total number of people employed decreased 31,900 (down 1.4 percent). The main fall was in self-employment, down 50,200 (19.3 percent), reflecting 32,000 fewer men in self-employment (down 18.8 percent) and 18,200 fewer women (down 20.2 percent). Self-employment has been decreasing since its peak in the December 2011 quarter.

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The number of employers increased over the December 2012 year – up 40,300 (45.6 percent). Most of this increase was from males – up 31,400 (51.7 percent), while females increased 8,900 (32.2 percent). 'Employer' was the only underline employment type to increase.

Fewer Pacific people in employment during 2012

The total number of employed people who identified with the Pacific peoples ethnic group fell over the year – down 15,600 (13.8 percent). The number of employed Pacific men decreased 9,600.

The total employment rate for Pacific peoples fell 5.0 percentage points to 50.1 percent for the year to December 2012. This is the lowest employment rate since the June 2010 quarter.

Unemployment falls for the quarter but up for the year

In the December 2012 quarter the unemployment rate fell to 6.9 percent, in seasonally adjusted terms. This is a 0.4 percentage-point fall from the previous quarter. However, over the year unemployment was up 0.5 percentage points.

The number of unemployed people fell 10,000 (down 6.0 percent) for the quarter, to 163,000. The number of unemployed men fell 11,000 (down 12.2 percent), to 79,000. The number of unemployed women remained steady, at 84,000.

The male unemployment rate fell for the latest quarter while the female unemployment rate rose. The unemployment rate for men decreased 0.8 percentage points, to 6.3 percent, back to the levels seen in the period from the December 2010 to the June 2012 quarters. The female unemployment rate continued to rise, up 0.2 percentage points to 7.6 percent. This is the fourth consecutive increase in the female unemployment rate.

Source: Statistics New Zealand
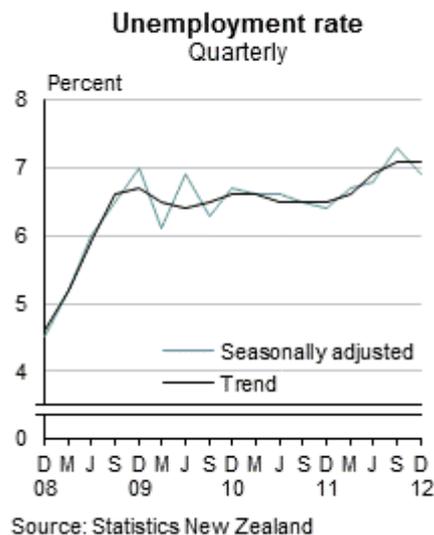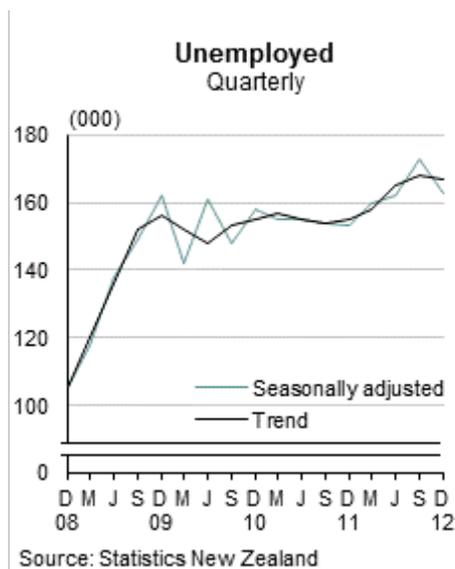
Rise in number of younger people in study over the year

During the December 2012 quarter, the NEET (not in employment, education or training) rate for youth (aged 15–24) increased 0.8 percentage points, to 14.2 percent. The youth NEET rate has been increasing since the June 2012 quarter. The female youth NEET rate rose for the fifth consecutive quarter – up 1.6 percentage points to 17.5 percent. The male NEET rate continued to be relatively flat, with a 0.1 percentage point rise to 11.0 percent.

The 15–19-year NEET rate increased 0.3 percentage points to 9.6 percent over the quarter. However, over the same period, 18,000 more 15–19-year-olds were in education and training but not in employment.

In unadjusted terms, over the year there was a large fall in the number aged 15–19 years in the labour force. The number who were unemployed rose (up 5,300) but there was a larger fall in employment (down 20,300). As a result, the15–19-year unemployment rate rose significantly – up 6.7 percentage points to 30.9 percent.

In the year to December 2012, the 20–24-year age group had no significant movements. Their employment and unemployment rates both rose slightly. For the quarter, the 20–24-year NEET rate increased 1.3 percentage points, up to 18.5 percent.

NEET rate
Seasonally adjusted
Quarterly

Source: Statistics New Zealand
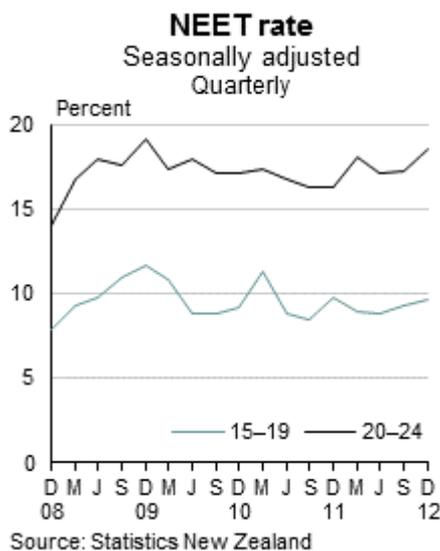
Number outside labour force increases

Corresponding with the fall in the labour force, the number of people not in the labour force rose 42,000 (up 3.8 percent) over the quarter. This increase reflects new highs for both men and women not in the labour force.

In seasonally adjusted terms, the labour force contracted over the December 2012 quarter – down 33,000 people. The labour force is made up of employed and unemployed people. Over the quarter, there were falls in both female and male employment, as well as a fall in the number of unemployed men.

As a result of both employment and unemployment decreasing, the labour force participation rate fell 1.2 percentage points over the quarter, to 67.2 percent. The female labour force participation rate decreased 1.3 percentage points, to 61.7 percent, following their highest participation rate ever last quarter.

Ageing population reflected in lower participation during 2012

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

Over the December 2012 year the number of older people not in the labour force increased in both the 65+ and 55–59-year age groups (up 19,000 and 6,100, respectively). The 65+ age group also had a large increase in its working-age population. The number of people not in the labour force who said they were retired had a large increase – up 20,400 (4.1 percent).

For those aged 35–39 years, their working-age population continued to decrease – down 9,600 over the December 2012 year. Their labour force fell 8,200.

The labour force fell for the 45–49-year age group. This reflected an 11,800 fall in the number in employment as well as a drop in their employment rate. Their working-age population fell 5,800.

Number of jobless rises over the year

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

In the year to December 2012, the number of people in the jobless category increased 23,200 (up 8.9 percent) to 284,500. Jobless people are those who are either unemployed, available but not actively seeking work, or actively seeking but not available for work.

While the number of unemployed people fell in seasonally adjusted terms over the quarter, in unadjusted terms there were 9,800 more unemployed people for the year (up 6.5 percent). The rise in unemployment was a main contributor to the rise in the number of jobless. However, this rise was not significant. Those actively seeking but not available for work also contributed to the increase – up 9,700 (up 36.4 percent).

The number of unemployed people who said they had been looking for work for over a year rose 7,100, which included a 4,700 increase in male long-term unemployment.

Canterbury employment rises over the year

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

In the year to December 2012, Canterbury employment rose 16,100 (5.2 percent), while unemployment remained flat and those not in the labour force fell. The increase in employment in Canterbury came entirely from males – up 17,100 (10.2 percent); female employment remained relatively flat.

The total increase in employment included a 6,800 rise in the construction industry. This increase came entirely from an increase in males employed in the industry.

Full-time employment increased 14,500 over the December 2012 year. This increase came from men – up 16,300. More people were also employed part-time.

The total number of actual and usual hours worked per week increased – up 5.7 percent and 4.3 percent, respectively.

The working-age population increased in Canterbury over the year. The growth in employment was larger than the growth in the working-age population and this meant the employment rate increased to 66.8 percent over the year, up from 64.6 percent in 2011.

Excluding Canterbury from the national estimates shows a stronger decrease in employment over the year.

Supplementary tables with detailed data for the Canterbury region are included in this release. These are similar to tables 3, 4, 7, 8, 9, 11, and 14 from the main tables. Data in the tables for the Canterbury region are all unadjusted.

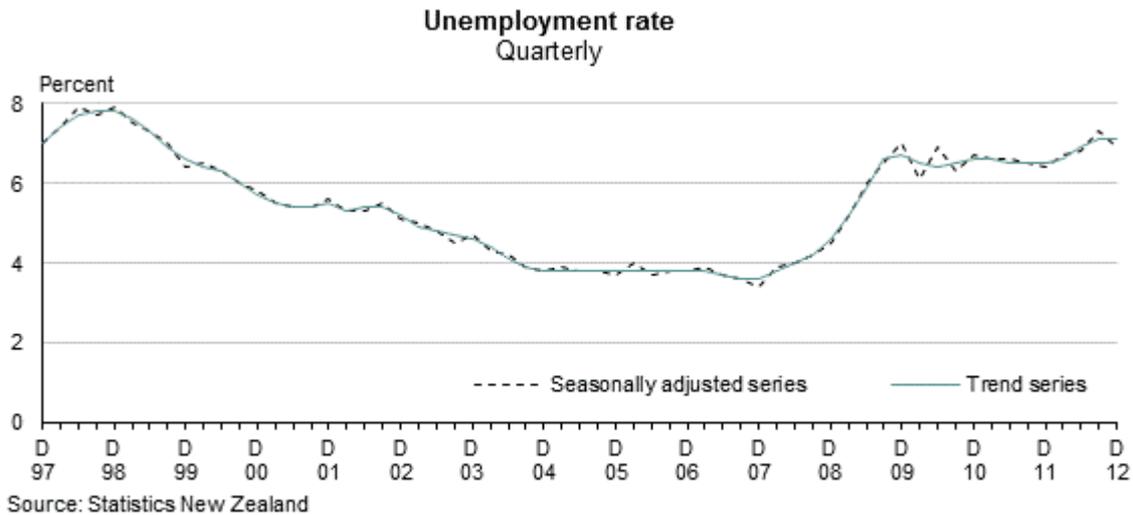To view these tables, see the Excel tables in the 'Downloads' box.

Labour markets of other regions

Over the December 2012 year, the number of people not in the labour force in the Wellington and Otago regions increased – by 13,200 (11.8 percent) and 9,000 (17.6 percent), respectively. Otago also had an 11,900 fall in employment and a 13,100 fall in the labour force.

The Auckland region had no significant annual movements – employment fell slightly, unemployment rose, and there was a larger rise in the number of people not in the labour force.

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.

Unemployment rate
Quarterly

Source: Statistics New Zealand

Employment rate
Quarterly

Source: Statistics New Zealand

Labour force participation rate
Quarterly
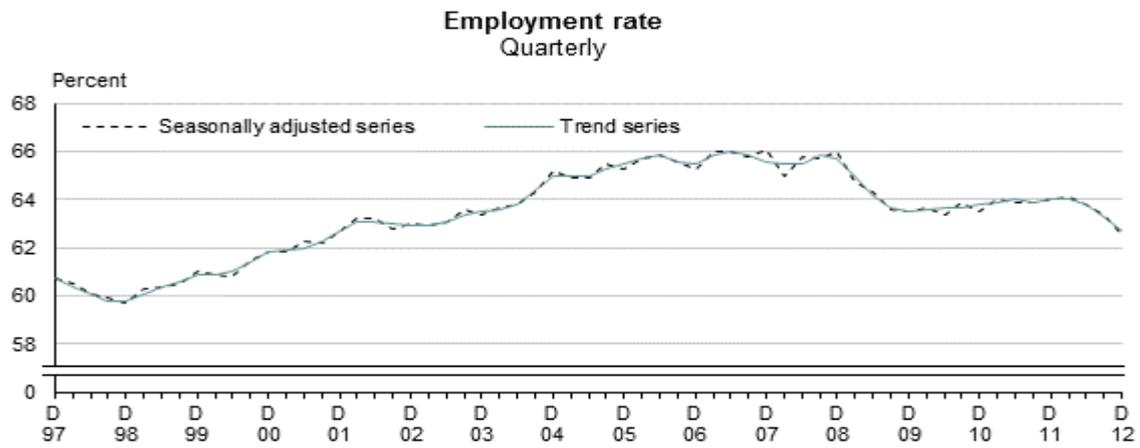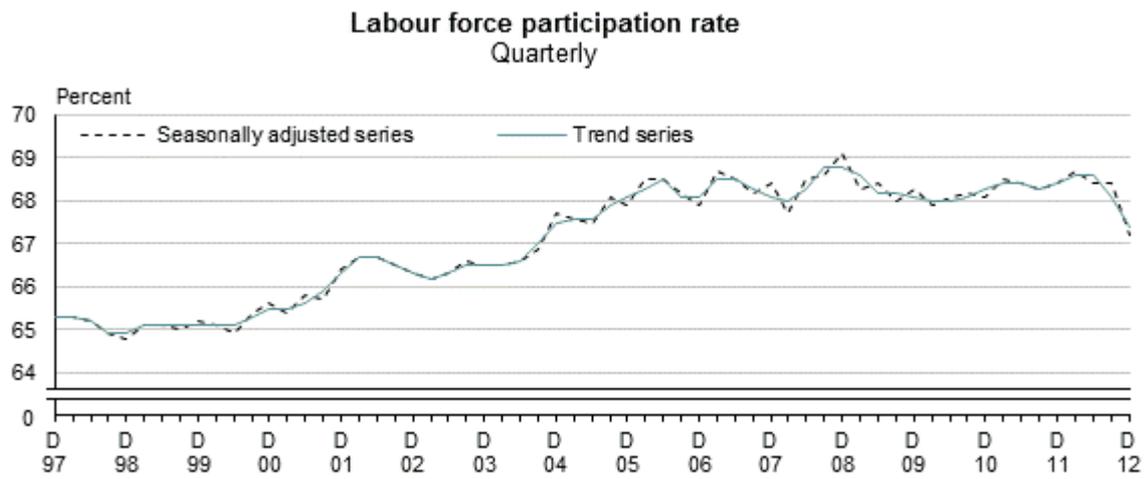
Source: Statistics New Zealand

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

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 New Zealand 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 Data quality 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 Data quality 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 would prefer to work more hours.

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.

For more information on these definitions please refer to <u>Labour force categories used in the Household Labour Force Survey</u>.

Related links

Upcoming releases

The *Household Labour Force Survey: March 2013 quarter* will be released on 9 May 2013.

To subscribe to information releases, including this one, please complete the online subscription form.

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

Past releases

See Household Labour Force Survey for links to past releases.

Related information

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.

- Response rate
- Ethnic statistics

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

Response rate

The target response rate for the Household Labour Force Survey (HLFS) is 90 percent. The response rate for the December 2012 quarter was 86.7 percent.

Ethnic statistics

Single/combination

The HLFS currently uses the total response output method for classifying ethnicity. An alternate method uses the single/combination output method. Using this output, we count people just once according to the ethnic group or combination of ethnic groups they report. This means the total number of responses equals the total number of people who stated an ethnicity.

The table below shows single/combination data for the working-age population for the December 2012 and December 2011 quarters of the HLFS. Ethnicity data using the single/combination output method is available on Infoshare.

Single/combination HLFS ethnicity data for working-age population		
Ethnic group	December 2012 quarter	December 2011 quarter
European only	2,389,400	2,366,700
Māori only	239,900	249,400
Pacific peoples only	144,200	163,700
Asian only	375,200	356,500
MELAA only[1]	24,600	28,900
Other ethnicity only	64,800	67,300
European/Māori	177,300	169,600
Two or more groups not elsewhere included	80,100	65,000
Residual categories	7,500	9,100
Total all ethnic groups	3,503,000	3,476,000
1. MELAA = Middle Eastern/Latin American/African.		

See the New Zealand statistical standard for ethnicity (2005) for more information.

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 December 2012 quarter is 2,205,100 before seasonal adjustment. This estimate is subject to a sampling error of plus or minus 22,100, or 1.0 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 2,183,000 and 2,227,200.

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 December 2012 quarter is 160,500 before seasonal adjustment. This estimate is subject to a sampling error of plus or minus 10,700 or 6.7 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 149,800 and 171,200.

Estimates of change are also subject to sampling error. For example, the survey estimate of change in total employment from the December 2011 quarter to the December 2012 quarter is a decrease of 31,900. This estimate is subject to a sampling error of plus or minus 24,400 (at the 95 percent confidence level). Therefore, the true value of the change in surveyed employment from the December 2011 quarter to the December 2012 quarter has a 95 percent chance of lying between -7,500 and -56,300.

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 represents 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 (eg non-response).

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.

Response rates

The target response rate for the HLFS is 90 percent. 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 response rates for the last five quarters.

HLFS response rates	
Quarter	National response rate (percent)
December 2011	88.8
March 2012	87.3
June 2012	87.7
September 2012	85.0
December 2012	86.7

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.

See Seasonal adjustment for 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.

Information on the change in estimates between the current and previous publication for the seasonally adjusted and trend data is in the Revisions section.

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							
	Reference value	Male employed	Female employed	Male unemployed	Female unemployed	Male not in labour force	Female not in labour force
Test for seasonality	<0.10	0.00	0.00	0.00	0.00	0.00	0.00
Test for moving seasonality	>0.10	0.15	0.43	0.03	0.36	0.79	0.08
Period until trend dominates	<3	1	1	1	2	2	2
Trend contribution to change	<20	32.57	43.17	42.34	15.19	13.56	22.45
Seasonal contribution to change	>50	58.35	41.17	29.87	67.34	74.29	48.21
Irregular contribution to change	<20	9.08	15.65	27.79	17.47	12.15	29.34
Quality statistic	<1	0.42	0.53	0.82	0.72	0.62	1.01

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. No outliers are present over the last four quarters of data.

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.

See Implementing ANZSIC 2006 in the Household Labour Force Survey for 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.

See Implementing ANZSCO in the Household Labour Force Survey for 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

See Comparing our labour market statistics for 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.

See A Guide to Unemployment Statistics for 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. The HLFS measures the number of employed people from New Zealand households; the QES measures the number of jobs from New Zealand businesses. The HLFS comparable series (in the table below) removes major differences between HLFS and QES. This provides an HLFS employment 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.

	Annual percentage change (%)
HLFS comparable series	+1.0
QES filled jobs	+1.4

The change in the HLFS comparable series is similar to that for QES filled jobs. The HLFS saw falls in self-employment and the agricultural industry over the year that were not captured by the QES.

The comparable series does not make adjustments for all differences between the HLFS and QES.

See Comparing our labour market statistics for 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 December 2012 quarter gives a surveyed figure of 77.2 percent (labour force participation rate) and 71.8 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

For more technical information, see <u>Information about the Household Labour Force Survey</u>.

Liability

While all care and diligence has been used in processing, analysing, and extracting data and information in this publication, Statistics NZ gives no warranty it is error-free and will not be liable for any loss or damage suffered by the use directly, or indirectly, of the information in this publication.

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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 September 2012 quarter was 440,000. In the December 2012 quarter release, that estimate is revised to 442,000. These numbers are rounded to the nearest 1,000, but the relative change derived from the unrounded estimates is a upward revision of 0.28 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
Dec 2011	0.08	0.15	1.41	0.47	-0.32	-0.26
Mar 2012	-0.03	-0.01	0.86	-0.17	0.09	0.03
Jun 2012	-0.04	0.00	-0.61	0.00	-0.03	0.00
Sep 2012	-0.01	-0.15	-1.82	-0.25	0.28	0.25

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
Dec 2011	0.04	0.04	0.66	0.12	-0.08	-0.07
Mar 2012	0.00	0.06	0.99	0.07	-0.09	-0.09
Jun 2012	-0.02	0.10	0.38	0.27	-0.16	-0.22
Sep 2012	0.07	-0.59	-5.36	-0.46	0.64	0.96

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 male employment for the December 2011 quarter was 1,181,000 when first published. In the December 2012 quarter, one year later, the trend estimate of male employment for the December 2011 quarter is 1,183,000, an increase of 2,000 (or up 0.19 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 March 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	0.07	0.12	0.26	0.27
Male unemployed	0.46	0.70	1.67	1.68
Female unemployed	0.52	0.99	1.90	1.91
Male not in labour force	0.10	0.19	0.37	0.39
Female not in labour force	0.09	0.16	0.36	0.39

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Tables

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. Household composition, by household labour force status
11. Underemployment, 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 and are available in Excel format from the 'Downloads' box.

1. People employed, unemployed, and not in 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 and Table Builder

Use Infoshare to access time-series data specific to your needs. For this release, select the following categories from the Infoshare homepage:

Subject category: **Work Income and Spending**
Group: **Household Labour Force Survey – [HLF]**

Use Table Builder to extract the information you want. To access this release's data on Table Builder, select the following tables from the homepage:

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Table title: **Key Labour force measures by qualification, age and sex**