

THE LABOUR FORCE SURVEY

FACT SHEET 3

The Labour Force Survey (LFS) provides Australia's official measure of employment, unemployment and labour force participation. The data captured in this survey are some of Australia's key economic statistics, providing insight into the Australian economy and Australian people.

Table 1: Quickstats – The Labour Force Survey

Frequency	Monthly
Responding sample size	Approx. 26,000 households (52,000 people)
Scope	Usual resident civilians 15 years and over
Response rate	Approx. 93%
Publication	Labour Force, Australia (cat. no. 6202.0)
Data availability	Quarterly from 1966-1977 and monthly from 1978 onwards

Each month, The LFS collects data on the labour force activity of persons around 52,000 people in 26,000 households. The information is collected through a household sample survey conducted by trained interviewers either face-to-face or over the phone, or via online self-completion form. The survey is detailed, including around 70 questions.

The scope of the LFS is limited to the usually resident civilian population of Australia, aged 15 years and over. As such, the survey includes residents who are temporarily overseas (less than 6 weeks), but excludes members of the permanent defence forces. The ABS then weights the people in the survey sample to the most recent population figures, to provide a representative picture of the whole population.

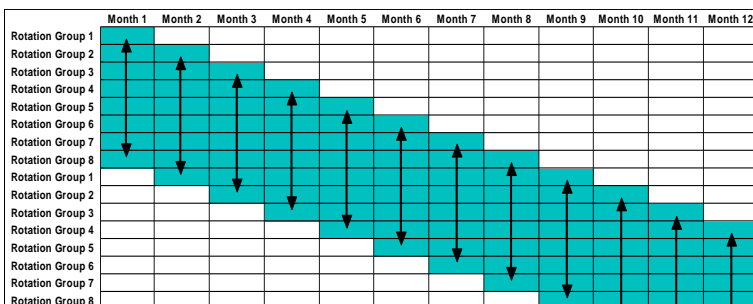
In addition to data on employment and unemployment, the LFS also collects information on underutilisation, hours worked, job searching and retrenchments, as well as socio-demographic characteristics.

Sample Rotation

The LFS sample can be thought of as comprising eight sub-samples (or rotation groups), with each subsample remaining in the survey for eight months. A new rotation group is introduced each month to replace an outgoing rotation group, generally from the same geographic area.

Sample rotation enables reliable measures of monthly change in labour force statistics to be compiled, while ensuring the sample reflects changes in the household population.

Figure 1: Sample Rotation



Using Labour Force Data

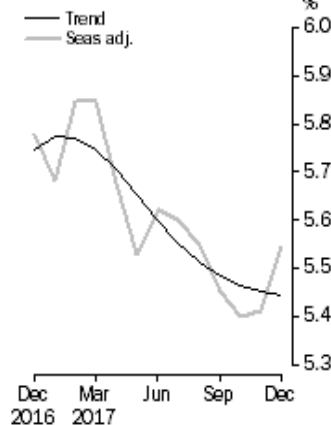
Time-series data

Data collected regularly over time may display seasonal and irregular patterns. This raw data, known as the *original series*, can be very volatile, making it difficult to identify underlying trends. The ABS therefore publishes two additional data series to aid time-series analysis: seasonally adjusted and trend data in addition to the original (unadjusted) survey estimates.

Trend data helps to determine the underlying path of the series, by smoothing out any irregularities. It is calculated as a 13 month moving average, using data from 6 months prior to and following the reference period.

Seasonally adjusted data has been modified to remove any patterns caused by regularly repeating cycles in the real world, such as the Christmas period, harvesting season, and school holidays. This series aids in short-term forecasting and allows series to be compared between periods; however, can still be volatile.

Graph 1: Trend and seasonally adjusted unemployment rate, Dec 2016 to Dec 2017



“Trend estimates are the numbers Australia should be focusing on when looking at how the labour market is faring over time. The trend estimates give us the best picture of what’s happening now, what happened over the last year, decade, and over the last 40 years”

- David W. Kalisch, Australian Statistician

Reliability

As the LFS is a sample survey, the data are subject to sampling and non-sampling error. The ABS takes data quality seriously and makes every effort to minimise error where possible, achieving a response rate of 93%. While the sample is designed to ensure sampling error is as low as possible at the national and state/territory level, it can be higher for labour force regions or for detailed population breakdowns.

Determining the reliability of an estimate

The ABS publishes all information required to calculate standard errors, relative standard errors (RSE), and confidence intervals. For quick reference, the ABS also annotates published estimates where the reliability is low. Specifically, estimates are annotated if they:

- Have a standard error that is greater than one-quarter of the size of the estimate (i.e. RSE greater than 25%). These estimates are subject to sampling error too high for most purposes, and should be used with caution.
- Have a standard error that is greater than one-half of the size of the estimate (i.e. RSE greater than 50%). These estimates considered too unreliable for general use.

Key Labour Force Concepts

Employed

Employed persons are defined as all persons aged 15 years and over whom during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm; or
- worked for one hour or more without pay in a family business or on a farm; or
- were employees or owner managers, who had a job but were not at work.

People are considered to be employed full-time if they worked, or usually work, 35 or more hours per week, including people who worked a total of 35 hours or more in two or more part-time jobs.

Unemployed

Unemployed persons are defined as persons aged 15 years and over who were not employed during the reference week, and were either actively looking for work, or were waiting to start a new job. Importantly, unemployed persons must be available to work during the reference week if a job had been available to them.

Persons Not In the Labour Force (NILF)

Persons not in the labour force are defined as persons aged 15 years and over who were neither employed nor unemployed. Included in this group are people who are retired, studying, performing home duties or caring for children, or unable to participate in the labour force due to an illness, injury or disability.

Figure 2: The Labour Force Framework

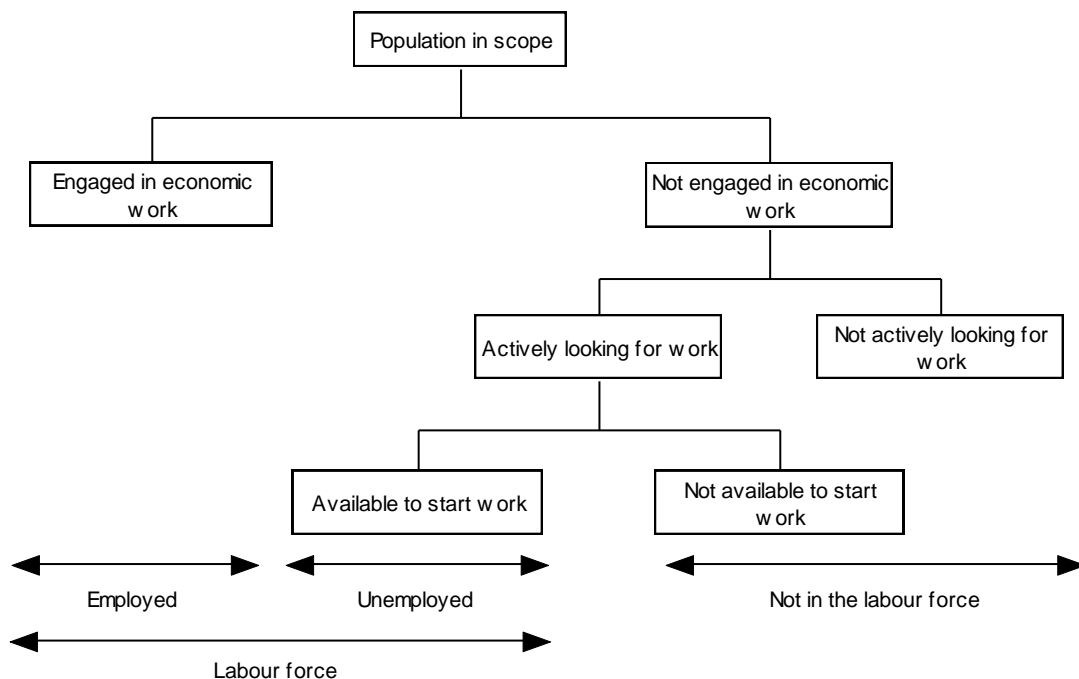


Table 2: Key Labour Force Measures

$\text{Labour force} = \frac{\text{Employed persons} + \text{Unemployed persons}}{\text{Civilian population (Labour force + NILF)}}$	$\text{Unemployment rate} = \frac{\text{Unemployed persons}}{\text{Labour force}}$
$\text{Participation rate} = \frac{\text{Labour force}}{\text{Civilian population (Labour force + NILF)}}$	$\text{Employment to population ratio} = \frac{\text{Employed persons}}{\text{Civilian population (Labour force + NILF)}}$

Supplementary Measures

The ABS also publishes a range of measures to supplement the key labour force concepts. These include:

- *underemployment*: defined as those employed persons who would prefer, and are available for, more hours of work than they currently have.
- *underutilisation*: encapsulates both the unemployed and underemployed. Provides more comprehensive information on the state of labour market and measures the extent to which all available labour force resources are not being fully used in the economy;
- *long-term unemployment*: the number of persons who have been unemployed for 12 months or more; and
- the *hours of labour sought* by the unemployed and underemployed.