



AUSTRALIAN LABOUR MARKET STATISTICS

EMBARGO: 11.30AM (CANBERRA TIME) FRI 7 JAN 2011

CONTENTS

page

LABOUR STATISTICS NEWS

Labour statistics news and upcoming statistical releases 3

LABOUR MARKET SUMMARY

Key measures and time-series graphs 7

ARTICLES AND ANALYSIS

Labour underutilisation - more than unemployment 12

Measures of labour underutilisation 17

Labour force characteristics during recent economic downturns 20

ADDITIONAL INFORMATION

Explanatory Notes 30

Glossary 36

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Labour Market Statistics Section on Canberra (02) 6252 7206, email <labour.statistics@abs.gov.au>.

NOTES

FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
April 2011	1 April 2011
July 2011	1 July 2011
October 2011	6 October 2011

DATA CONTAINED IN THIS ISSUE

The statistics shown are the latest available at 7 January 2011. Data sources for the tables in this publication are described in the Explanatory Notes.

CHANGES IN THIS ISSUE

Earlier editions of this publication contained a number of tables which reproduced information that is freely available from the ABS website <<http://www.abs.gov.au>>. These tables will no longer be produced in this publication. For more details see Labour Statistics News.

ELECTRONIC PRODUCT

The spreadsheets and data cubes referenced in this publication are available free of charge on the ABS website at <<http://www.abs.gov.au>> [Statistics - By Catalogue Number - 6. Labour Statistics and Prices].

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASGC	Australian Standard Geographical Classification
ATO	Australian Taxation Office
AWE	average weekly earnings
EEH	Survey of Employee Earnings and Hours
ERP	estimated resident population
GDP	gross domestic product
ID	industrial disputes
ILO	International Labour Organization
JVS	Job Vacancies Survey
LFS	Labour Force Survey
LPI	labour price index
MPHS	Multipurpose Household Survey
MPS	Monthly Population Survey
qtr	quarter
RSE	relative standard error
SEE	Survey of Employment and Earnings
WPI	wage price index

Brian Pink
Australian Statistician

CHANGES TO AUSTRALIAN
LABOUR MARKET
STATISTICS

As announced in the October issue of *Australian Labour Market Statistics* (cat. no. 6105.0), changes are being made from this issue on. Earlier editions of this publication contained tables which drew together a range of labour statistics from a number of ABS sources and some international comparisons from the International Labour Organisation. These tables reproduced information that is freely available from the original sources. To ensure that users have access to the most up to date sources of data and information, this publication no longer contains reproductions of data that can be found elsewhere.

The webpage 'Data Sources for Tables' contains more information on how to access ABS labour market statistics, and links to original sources for the discontinued tables from *Australian Labour Market Statistics* (cat. no. 6105.0).

Some information provided in earlier editions was unique to this publication and is still available. The following datacubes will continue to be released annually:

- Extended labour force underutilisation rate;
- Volume measures of labour underutilisation; and
- Employment type time series.

In addition, four new datacubes will be published each quarter containing information on:

- All families: family type by labour force status;
- Employed persons: actual hours worked in all jobs;
- Unemployed persons: reason for unemployment by industry and occupation of last job; and
- Underemployed: industry and occupation.

Each of these datacubes is available free of charge from the ABS website <<http://www.abs.gov.au>> under the Downloads tab for this publication.

REVIEW OF THE LABOUR
HOUSEHOLD SURVEY
PROGRAM

It has been many years since a holistic review of the ABS labour household survey program was undertaken. Over recent years there have been many changes to the structure of the labour market and the nature of work. Many of the labour surveys have origins in the late 1970s and 1980s, and as a result they may, to some extent, reflect an outdated view of work and the labour market, and the interest therein. Adhoc and survey-specific reviews have been conducted from time to time to maintain the relevance of the program, but it is timely for a holistic review to be undertaken to ensure ABS labour statistics continue to deliver high quality, coherent, conceptually robust and relevant statistics into the future.

REVIEW OF THE LABOUR
HOUSEHOLD SURVEY
PROGRAM *continued*

This review has recently commenced and is considering a range of issues around relevance, coherence and relative priority of topics and data items. An important element of the review will be seeking feedback from a range of users. This is planned to occur in February and March 2011.

Once the review is complete, information will be provided to users about any changes to the labour household survey program and timing for implementation of these changes.

For more information please contact Michael Gerrity on (02) 6252 5514 or email <labour.statistics@abs.gov.au>.

NEW SERIES: AGGREGATE
MONTHLY HOURS
WORKED BY STATE AND
TERRITORY

An article in the November 2010 issue of *Labour Force, Australia* (cat. no. 6202.0) introduced the expansion of the newly developed measures of aggregate monthly hours worked to complement the existing state and territory information on employment and unemployment.

For information on the methodology used to create these estimates see *Information Paper: Expansion of Hours Worked Estimates from the Labour Force Survey, Australia* (cat. no. 6290.55.001), released on 8 September 2009.

From the January 2011 issue of *Labour Force, Australia* (cat. no. 6202.0) (to be released on 10 February 2011), the ABS will introduce:

- monthly measures of aggregate monthly hours worked, by state, in seasonally adjusted terms; and
- monthly measures of aggregate monthly hours worked, by state and territories, in trend terms.

RELEASE OF
WORK-RELATED INJURIES

In December 2010, the ABS released *Work-Related Injuries, Australia, 2009-10* (cat. no. 6324.0). The Work-Related Injuries topic is included in the Multi-Purpose Household Survey (MPHS) every four years, beginning with 2005–06. The publication provides information on persons who worked at some time in the previous 12 months and who suffered a work-related injury or illness. These people were asked whether they suffered the injury in their current or previous job; the number of illnesses or injuries suffered; the number of days/shifts absent from work due to the injury/illness; sources of financial assistance; whether they applied for workers' compensation; and, if not, the reason they did not apply for workers' compensation; whether received any OH & S training. Estimates can be cross-classified with labour force characteristics and demographics such as State, sex, relationship in household, marital status, birthplace, occupation and industry.

A confidentialised unit record file from this survey is planned for release in late February 2011. For further information contact the Labour Market Statistics Section on (02) 6252 7206 or email <labour.statistics@abs.gov.au>.

REVIEW OF TOPICS @ A
GLANCE - LABOUR

There have been a number of changes to this edition of *Australian Labour Market Statistics* (cat. no. 6105.0) including the discontinuation of a number of tables. These changes stem from a recent review conducted into the way the ABS communicates information about labour statistics to different users. The communication review considered the purpose, structure and content of vehicles such as this publication,

REVIEW OF TOPICS @ A
GLANCE - LABOUR
continued

Australian Labour Market Statistics (cat. no. 6105.0), *Labour Statistics News* (cat. no. 6106.0), and Topics @ a Glance - Labour.

In early 2011, a number of changes are planned for the Topics @ a Glance - Labour pages on the ABS website. These pages provide a guide to the full range of ABS statistics on the labour market, as well as links to the latest data releases. To find Topics @ a Glance, go to <<http://www.abs.gov.au>> [Topics @ a Glance - People - Labour].

If you would like further information about the upcoming changes to Topics @ a Glance - Labour please contact Joanne Baker on (02) 6252 7206 or email <labour.statistics@abs.gov.au>.

ABS EMAIL NOTIFICATION
SERVICE

By subscribing to this free service, you will be kept informed of the latest releases of ABS products. To subscribe, follow the link from the ABS home page <<http://www.abs.gov.au>>, provide your email address, and select your topics of interest.

NEW RELEASES

RECENT AND UPCOMING STATISTICAL RELEASES

<i>Release date/title of publication</i>	<i>Reference period</i>	<i>Catalogue number</i>
December 2010		
Australian Economic Indicators	(a) January 2011	1350.0
Australian Social Trends	(a) December 2010	4102.0
Employment and Earnings, Public Sector, Australia	2009 - 2010	6248.0.55.002
Industrial Disputes, Australia	September 2010	6321.0.55.001
Labour Force, Australia	November 2010	6202.0
Labour Force, Australia, Detailed - Electronic Delivery	November 2010	6291.0.55.001
Labour Force, Australia, Detailed, Quarterly	November 2010	6291.0.55.003
Microdata: Labour Force Survey and Labour Mobility, Basic and Expanded CURF, Australia	November 2010	6202.0.30.004
Technical Manual: Labour Force Survey and Labour Mobility, Basic and Expanded CURF, Australia	November 2010	6202.0.30.005
Work Related Injuries, Australia	2009 - 2010	6324.0
January 2011		
Australian Economic Indicators	(a) February 2011	1350.0
Australian Labour Market Statistics	(a) January 2011	6105.0
Employee Earnings and Hours, Australia	May 2010	6306.0
Job Search Experience, Australia	July 2010	6222.0
Job Vacancies, Australia	November 2010	6354.0
Labour Force, Australia	December 2010	6202.0
Labour Force, Australia, Detailed - Electronic Delivery	December 2010	6291.0.55.001
February 2011		
Australian Economic Indicators	(a) March 2011	1350.0
Average Weekly Earnings	November 2010	6302.0
Business Indicators, Australia	December 2010	5676.0
Labour Force, Australia	January 2011	6202.0
Labour Force, Australia, Detailed - Electronic Delivery	January 2011	6291.0.55.001
Labour Price Index, Australia	December 2010	6345.0
March 2011		
Australian Economic Indicators	(a) April 2011	1350.0
Australian Social Trends	(a) March 2011	4102.0
Industrial Disputes, Australia	December 2010	6321.0.55.001
Job Vacancies, Australia	February 2011	6354.0
Labour Force, Australia	February 2011	6202.0
Labour Force, Australia, Detailed - Electronic Delivery	February 2011	6291.0.55.001
Labour Force, Australia, Detailed, Quarterly	February 2011	6291.0.55.003
Persons Not in the Labour Force, Australia	September 2010	6220.0
Underemployed Workers, Australia	September 2010	6265.0
April 2011		
Australian Economic Indicators	(a) May 2011	1350.0
Australian Labour Market Statistics	(a) April 2011	6105.0
Employee Earnings, Benefits and Trade Union Membership, Australia	August 2010	6310.0
Forms of Employment, Australia	November 2010	6359.0
Labour Force, Australia	March 2011	6202.0
Labour Force, Australia, Detailed - Electronic Delivery	March 2011	6291.0.55.001

(a) Refers to the issue of the publication, not the reference period

CHAPTER 2

LABOUR MARKET SUMMARY

JANUARY 2011

This table summarises Australia's key labour market indicators.

KEY MEASURES

	Period	Current figure	% CHANGE FROM	
			Previous qtr(a)	Previous year(b)
TREND				
Employed				
Persons ('000)	Nov 10	11 390.1	0.9	3.3
Full-time ('000)	Nov 10	8 012.2	1.0	3.9
Part-time ('000)	Nov 10	3 377.9	0.7	2.1
Part-time employment as a proportion of total employment (%)	Nov 10	29.7	(c)-0.1	(c)-0.4
Employment to population ratio				
Persons (%)	Nov 10	62.5	(c)0.3	(c)0.8
Males (%)	Nov 10	69.2	(c)0.4	(c)1.0
Females (%)	Nov 10	55.9	(c)0.3	(c)0.5
Unemployed				
Persons ('000)	Nov 10	632.7	2.0	-3.2
Looking for full-time work ('000)	Nov 10	442.3	1.2	-8.7
Looking for part-time work ('000)	Nov 10	190.4	3.8	12.2
Unemployment rate - persons (%)	Nov 10	5.3	(c)0.1	(c)-0.3
Long-term unemployment				
Persons ('000)	Nov 10	124.0	5.9	15.6
As a proportion of total unemployment (%)	Nov 10	19.6	(c)0.7	(c)3.2
Long-term unemployment rate (%)	Nov 10	1.0	(c)0.1	(c)0.1
Quarterly labour underutilisation rates				
Underemployment rate (%)	Nov 10	7.2	—	(c)-0.6
Labour force underutilisation rate (%)	Nov 10	12.4	—	(c)-1.0
Labour force participation rate				
Persons aged 15-64 years (%)	Nov 10	76.9	(c)0.4	(c)0.7
Total (%)	Nov 10	65.9	(c)0.4	(c)0.6
Aggregate monthly hours worked				
Persons (mill. hours)	Nov 10	1 601.9	0.6	3.5
Wage price index				
Total hourly rates of pay excluding bonuses (index)	Sep 10	105.5	1.0	3.6
Average weekly earnings				
Full-time adult ordinary time earnings (\$)	Aug 10	1 259.4	0.6	4.4
All employees total earnings (\$)	Aug 10	982.9	0.6	4.7

— nil or rounded to zero (including null cells)

(b) Same period previous year.

(a) Same period previous quarter (monthly data is presented for the middle month of each quarter).

(c) Change is in percentage points.

KEY MEASURES *continued*

	Period	Current figure	% CHANGE FROM	
			Previous qtr(a)	Previous year(b)
ORIGINAL				
Actual hours worked				
Average weekly hours - Persons (hours)	Nov 10	33.8	-0.5	-0.4
Average weekly hours - Full-time (hours)	Nov 10	40.9	-0.7	-0.7
Average weekly hours - Part-time (hours)	Nov 10	16.7	-1.7	-0.3
Proportion of part-time workers who preferred to work more hours (%)	Nov 10	25.4	(c)0.6	(c)-1.7
Industrial disputes				
Working days lost ('000)	Sep qtr 10	46.6	94.3	60.4
Working days lost per 1,000 employees (no.)	Sep qtr 10	4.7	95.4	53.1
Job vacancies - Australia ('000)(d)	Sep qtr 10	181.4	10.2	na
Labour force status of families				
Percent of children living without an employed parent %(e)	Jun 09	15.1	na	(c)2.6

na not available

(a) Same period previous quarter (monthly data is presented for the middle month of each quarter).

(b) Same period previous year.

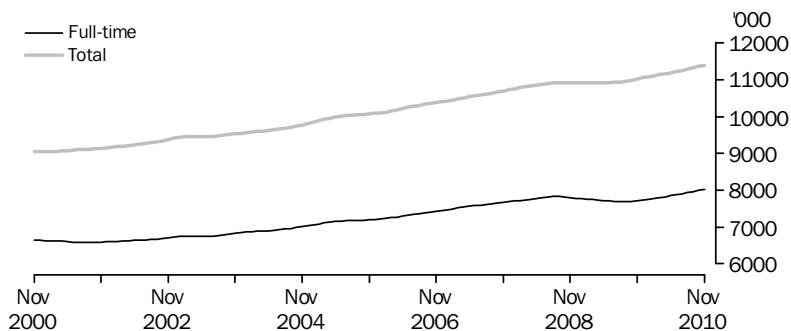
(c) Change is in percentage points.

(d) As a result of the Job Vacancy Survey being suspended, no original estimates were produced for five quarters between August 2008 and August 2009 inclusive. The ABS cannot produce reliable estimates by collecting this missing data retrospectively. As a consequence, both seasonally adjusted and trend estimates cannot be produced for the five quarters.

(e) As a proportion of all children aged under 15 years.

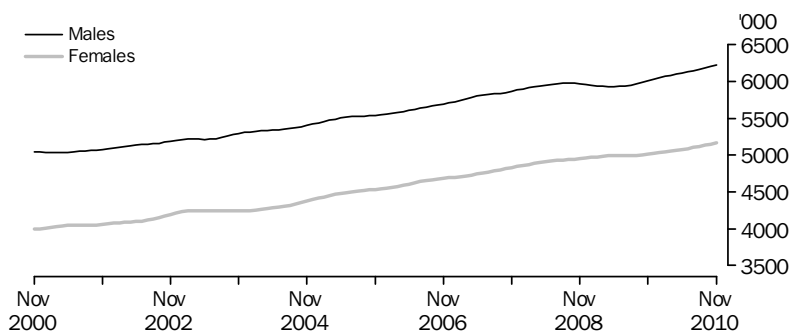
EMPLOYMENT: TREND SERIES

FULL-TIME AND TOTAL EMPLOYMENT



Source: Labour Force Survey.

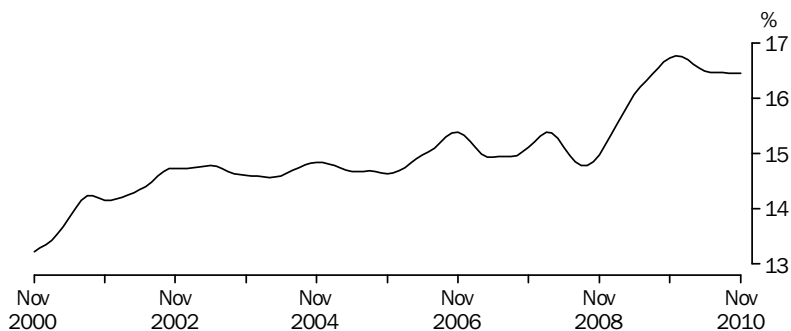
MALES AND FEMALES



Source: Labour Force Survey.

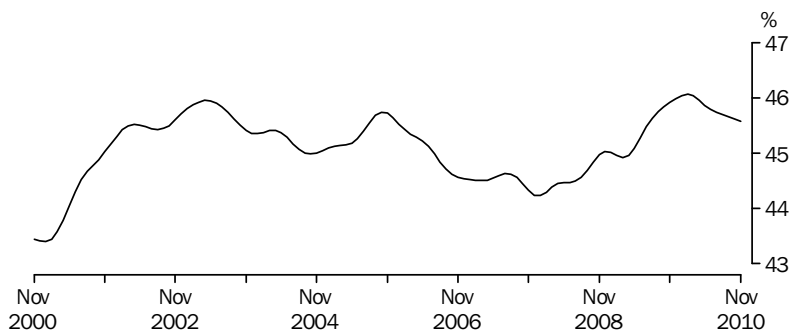
PART-TIME EMPLOYMENT: TREND SERIES

PROPORTION OF TOTAL EMPLOYMENT, Males



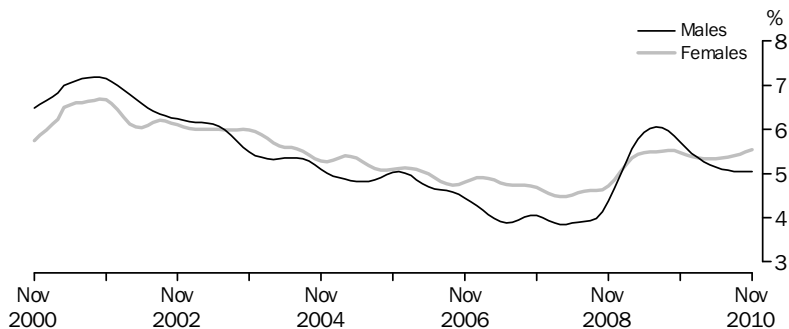
Source: Labour Force Survey.

PROPORTION OF TOTAL EMPLOYMENT, Females



Source: Labour Force Survey.

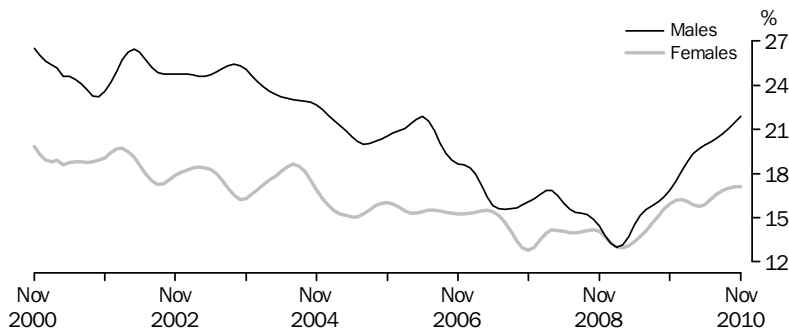
UNEMPLOYMENT RATE: MALES AND FEMALES
TREND SERIES



Source: Labour Force Survey.

LONG-TERM UNEMPLOYMENT: TREND SERIES

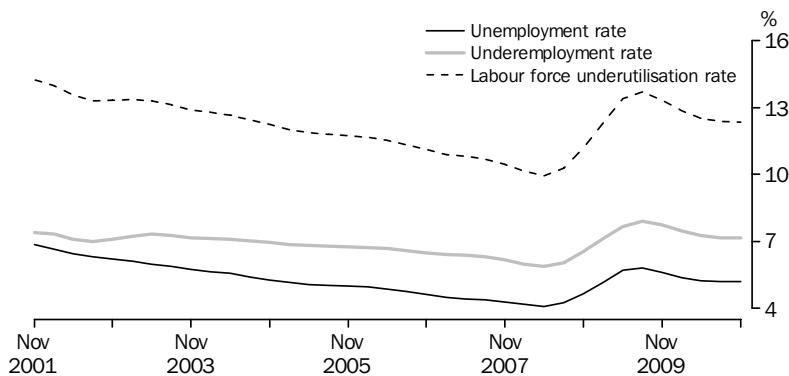
PROPORTION OF TOTAL UNEMPLOYMENT



Source: Labour Force Survey.

UNDERUTILISED LABOUR: TREND SERIES

QUARTERLY LABOUR FORCE UNDERUTILISATION BY AGE FROM MAY 2001 TO CURRENT

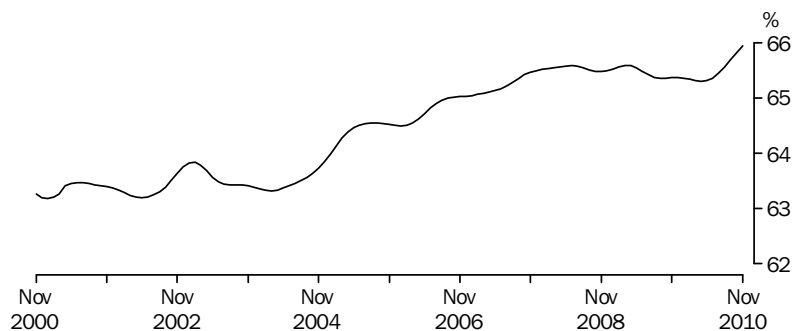


(a) The trend unemployment rate compiled as part of the suite of quarterly labour underutilisation rates may differ from the official monthly unemployment rate as the labour underutilisation rates are subject to a separate seasonal adjustment and trend process.

Note: See the Glossary for further information on the labour underutilisation rates.

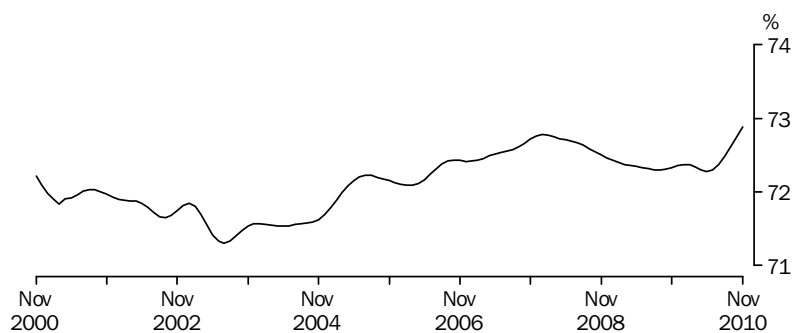
Source: Labour Force Survey.

PARTICIPATION RATE: PERSONS
TREND SERIES



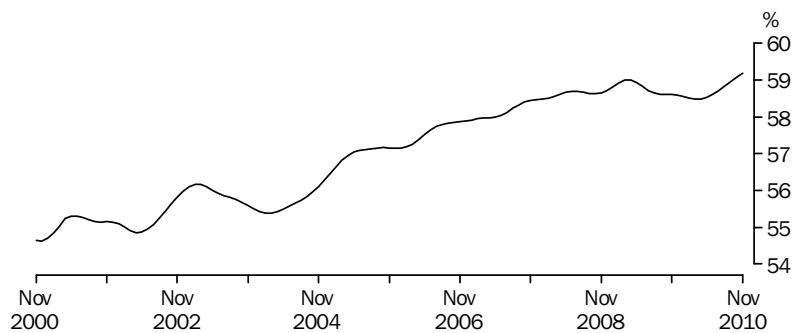
Source: Labour Force Survey.

MALES



Source: Labour Force Survey.

FEMALES



Source: Labour Force Survey.

FACT SHEET LABOUR UNDERUTILISATION - MORE THAN UNEMPLOYMENT

LABOUR
UNDERUTILISATION:
MORE THAN
UNEMPLOYMENT

Labour underutilisation (that is, unemployment and underemployment) can have a large impact on the people who experience it, their families, the community and also the economy. From a social viewpoint, there is concern that people whose aspirations for work are not being realised may suffer in a number of ways - personally, financially and socially. From an economic perspective, there is interest in the capacity for growth in the labour force now, and the future labour supply and its potential to contribute to the production of goods and services. The labour underutilisation rate attempts to provide a more comprehensive view of underutilised labour in the labour force than the unemployment rate or the underemployed rate can do alone.

What is Labour Underutilisation?

Unemployment is the most widely known and used component of labour underutilisation. However, labour underutilisation includes a wider group of people than the unemployed, such as people who are part-time workers who are willing and available to work more hours, and people who are willing and available to work but have become discouraged and stopped looking for work.

Labour underutilisation includes people who are:

- Unemployed;
- Underemployed; or
- Marginally attached to the labour force.

Who are the unemployed?

People are classified as unemployed based on their activity in the survey reference week. Every month the ABS collects information from the occupants of a sample of dwellings. These people are asked a range of questions, such as whether or not they are working, and if they are not working they are asked whether they looked for work and whether they were available for work. Answers to questions like these allow the ABS to accurately estimate the labour market activity of Australia's resident civilian population aged 15 years and over in a way that is consistent with international standards. The ABS does not use information about the receipt of any income assistance to measure unemployment.

Unemployed persons are those aged 15 years and over who were not employed during the reference week, and had:

- actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Long-Term Unemployment People who are unemployed for long periods of time (for a year or more) may experience greater economic hardship and social consequences than those who are unemployed for short periods. In addition, they may have more difficulties in finding employment because of loss of relevant skills and employers' perception of their 'employability'. The ABS considers people who have been unemployed continuously for 12 months or more to be long-term unemployed. A long-term unemployment rate is included in the suite of labour underutilisation measures because the economic and social consequences of being unemployed are affected by the length of time a person is unemployed.

Underemployment Underemployment, like unemployment, reflects additional labour supply which is available but which is underutilised, and is an important component of underutilised labour. Underemployed workers are basically employed persons who want, and are available for, more hours of work than they currently have. Being underemployed can have a significant impact on the financial, personal and social lives of both individuals and their families. While there are some people who are entirely without work (the unemployed), there is also a growing number of people who are in work but who are underemployed. Most of the underemployed are part-time workers who would like to work more hours, but the underemployed also includes full-time workers who could not work their usual full-time hours for economic reasons.

The two distinctive groups defined as underemployed are:

- persons employed part-time who want to work more hours and are available to start work with more hours, either in the reference week or in the four weeks subsequent to the reference week; and
- persons employed full-time who worked part-time hours in the reference week for economic reasons (such as being stood down or insufficient work being available). It is assumed that these people wanted to work full-time in the reference week and would have been available to do so.

Extended Labour Force Underutilisation While the labour force underutilisation rate reflects the proportion of people in the labour force who are not being fully utilised, there are also some people outside the labour force who could be considered as part of the potential labour supply.

Extended labour force underutilisation is the broadest measure of underutilised labour which includes:

- Unemployed;
- Underemployed; and
- Two groups of people considered to be *marginally attached* to the labour force.

What is marginal attachment to the labour force? The concept of marginal labour force attachment is quite broad. It includes people who have a strong likelihood of joining the labour force in the near future as well as some who have taken few, if any, steps to find employment.

A group of special interest within the marginally attached population to the labour force is discouraged jobseekers. These are people who want to work and could start work within four weeks if offered a job, but who have given up looking for work for reasons including:

- being considered too young or too old by employers;

What is marginal attachment to the labour force? continued

- lacking necessary schooling, training, skills or experience;
- having difficulties with language or ethnic background;
- feeling there are no jobs in their locality or line of work; or
- feeling there are no jobs available at all.

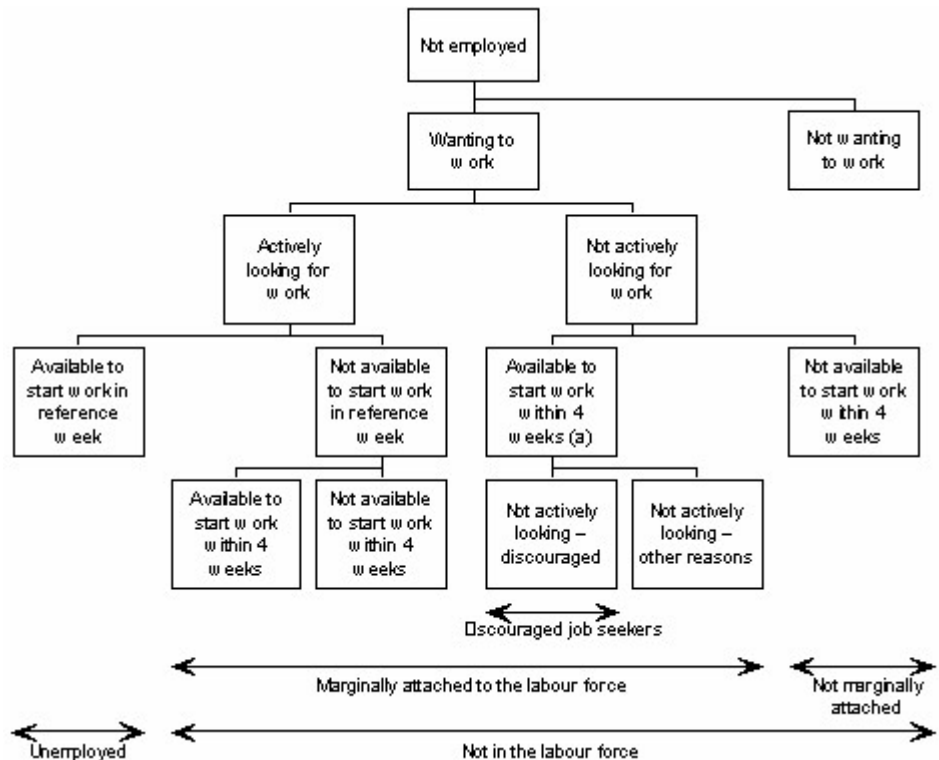
This group shares some characteristics with unemployed people, although they have given up looking for work because they believe they cannot find a job. The annual LFS supplementary survey *Persons Not in the Labour Force* (cat. no. 6220.0) collects data about people who, while considered to be outside the labour force, nevertheless have some attachment to the labour force, and could be considered to be ‘jobless’ (although technically neither employed nor unemployed).

Two groups defined as marginally attached to the labour force are included in the extended labour force underutilisation rate, namely:

- persons actively looking for work, who were not available to start work in the reference week, but were available to start work within four weeks; and
- discouraged job seekers - a group of people wanting to work and who were available to start work within four weeks; however their main reason for not looking for work was that they believed they would not find a job for labour market related reasons.

The following framework outlines those people not working and the various criteria to determine whether they are unemployed or not in the labour force. For those not in the labour force it further identifies those marginally attached.

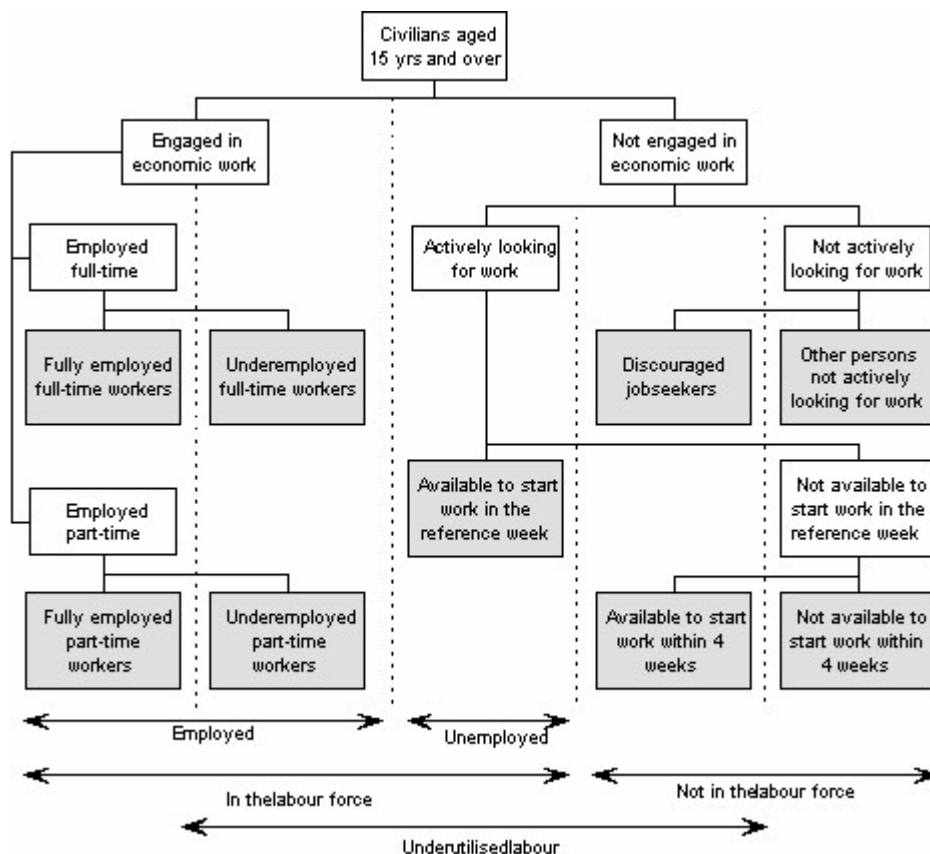
PERSONS NOT EMPLOYED FRAMEWORK



The overall picture of labour underutilisation

The following framework draws together the unemployed, the underemployed and persons not in the labour force to give an overall picture of labour underutilisation.

LABOUR UNDERUTILISATION FRAMEWORK



Labour underutilisation measures in hours

Labour underutilisation can be measured either by population (head count) or hours based (volume) estimates. The headcount measure relates to the number of people whose labour is not being fully used, whereas the volume measure provides a better picture of the total amount of potential labour inputs, or hours of work available, to the economy.

Whether people are unemployed or underemployed, not all people are in search of work (or more work) or require the same number of hours of work. The main use of the measure can be illustrated by the following example. Suppose there were two people who are considered underemployed, where one is working 20 hours but would like to work 30 hours, and the other person is working 25 hours and would like to work 30 hours as well. Both people will be counted as underemployed and would contribute equally to the headcount underutilisation measure. However, the fact that one is willing to work an additional 10 hours per week and the other only an additional 5 hours would be reflected in the volume underutilisation aged measure.

Remember!

There is no single measure that can fully capture the complexity of the labour market or satisfy all the purposes for which such data are needed. The number of unemployed persons and the unemployment rate are widely used as measures of the available resources which are not being utilised in the economy. However, the official unemployment rate clearly only captures part of the picture of the total underutilised labour resources, and this picture can be supplemented with other measures of labour underutilisation.

FACT SHEET MEASURES OF LABOUR UNDERUTILISATION

MEASURES OF LABOUR UNDERUTILISATION

The ABS produces a range of measures of labour underutilisation including the official unemployment rate. The official unemployment rate and the three supplementary measures are strongly correlated through the economic cycle. The supplementary measures cover a number of population groups who are generally considered to be underutilised labour resources including:

- unemployed people;
- underemployed people; and
- people with a marginal attachment to the labour force.

This wider coverage helps overcome some of the limitations inherent in the official unemployment rate for measuring the degree to which available and potential labour resources are not being utilised in the economy.

To understand the structure and the dynamics of the labour market, the ABS provides a range of data on available labour resources in the form of labour underutilisation, which consists of five measures.

FIVE MEASURES OF LABOUR UNDERUTILISATION

UNEMPLOYMENT RATE

The number of unemployed persons as a percentage of the labour force of the same group, where the labour force is the sum of employed and unemployed persons. This measure is available monthly from *Labour Force, Australia* (cat. no. 6202.0).

LONG-TERM UNEMPLOYMENT RATE

The number of persons who have been unemployed continuously for 12 months or more, as a percentage of the labour force. This measure is available monthly from *Labour Force, Australia* (cat. no. 6202.0).

LABOUR FORCE UNDERUTILISATION RATE

The unemployed plus the underemployed, as a percentage of the labour force. This measure is available quarterly from *Labour Force, Australia* (cat. no. 6202.0).

EXTENDED LABOUR FORCE UNDERUTILISATION RATE

The broadest measure of underutilised labour which adds together:

- Unemployed;
- Underemployed; plus
- Two groups of people marginally attached to the labour force:
 - (i) persons actively looking for work, not available to start work in the reference week, but available to start work within four weeks; and
 - (ii) discouraged jobseekers

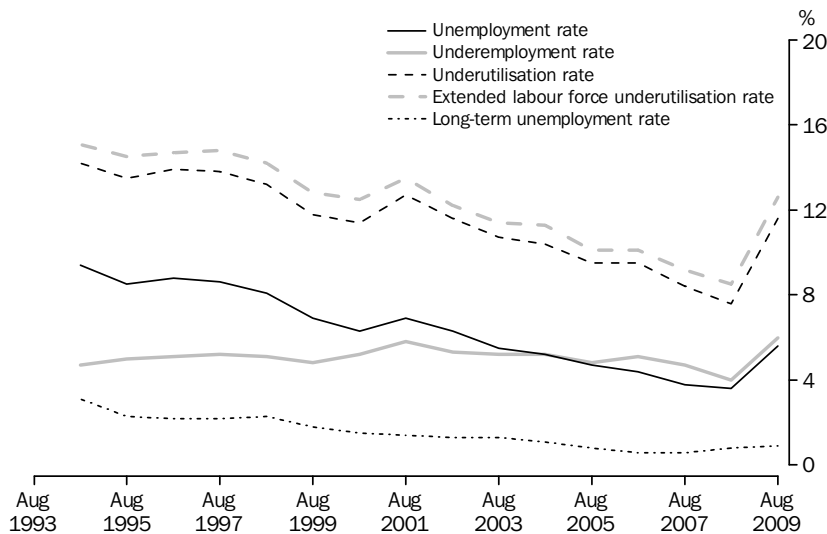
The rate is calculated as a percentage of the labour force augmented by the marginally attached populations described above in (i) and (ii).

This measure is available annually from *Australian Labour Market Statistics* (cat. no. 6105.0).

The following graph shows these five measures and how they have changed over recent years.

LABOUR
UNDERUTILISATION
MEASURES OVER TIME

MEASURES OF LABOUR UNDERUTILISATION: **Original**



Source: Australian Labour Market Statistics (cat. no. 6105.0)
Labour Force, Australia (6202.0)

VOLUME MEASURES OF
LABOUR
UNDERUTILISATION

While the rate measures described above count each individual person whose labour is underutilised, volume measures are calculated by dividing the number of hours of underutilised labour in the labour force into the sum of actual and underutilised hours. Volume measures can be derived for each of the corresponding underutilisation rates.

Volume measures of labour underutilisation are available annually as datacubes from *Australian Labour Market Statistics* (cat. no. 6105.0).

VOLUME MEASURES

VOLUME UNEMPLOYMENT RATE

This refers to the hours of labour sought by unemployed people, as a percentage of the potential hours in the labour force (those hours worked by employed people and those hours sought by unemployed people).

VOLUME UNDEREMPLOYMENT RATE

This refers to the additional hours of labour preferred by underemployed workers, as a percentage of the potential hours in the labour force.

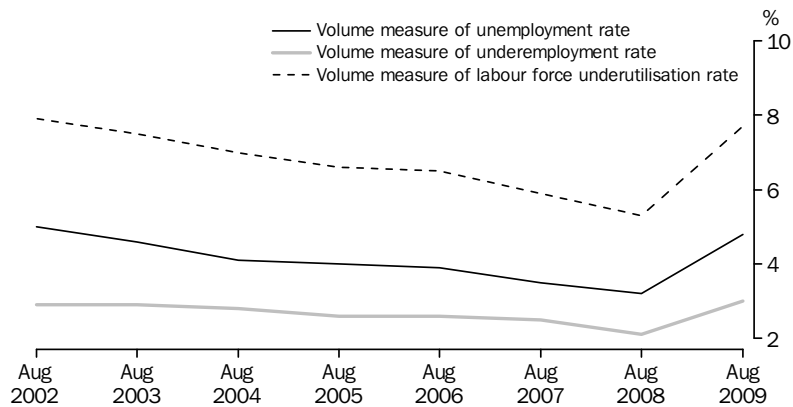
VOLUME LABOUR FORCE UNDERUTILISATION RATE

This refers to the total volume of underutilised labour in the labour force (hours sought by unemployed people, plus additional hours preferred by underemployed people), as a percentage of the potential hours in the labour force.

The following graph shows the three volume measures of underutilisation.

VOLUME MEASURES OVER
TIME

VOLUME MEASURES OF UNDERUTILISED LABOUR, Original



Source: Australian Labour Market Statistics (cat. no. 6105.0)

FEATURE ARTICLE LABOUR FORCE CHARACTERISTICS DURING RECENT ECONOMIC DOWNTURNS

INTRODUCTION

The most recent economic downturn was the fifth main period of slowing or declining economic growth in Australia's recent history. In the last 30 years, two severe and protracted major economic recessions occurred during the early stages of both the 1980s and 1990s, with a short economic downturn between them in the mid 1980s. A fourth downturn occurred during the early part of the 2000s, followed by the most recent in late 2008 to early 2009, triggered by the global financial crisis. These latter two were both mild in length and severity in Australia.

Economic downturns are typically characterised by falling employment, rising unemployment, and a decrease in the participation rate. However, there are a number of other statistical measures that can be useful in observing changes to Australia's labour force characteristics during these marked declines in economic activity, particularly in the most recent downturns where the rise in unemployment was not as severe as in the past.

There are a number of key measures that the Australian Bureau of Statistics produces that are used to assist in understanding such movements in the labour market and are available on a monthly or quarterly basis from the Labour Force Survey. These measures are:

- labour force, the total number of employed and unemployed;
- aggregate monthly hours worked;
- employment to population ratio, those employed as a proportion of the civilian population;
- unemployment rate, those unemployed as a proportion of the labour force;
- participation rate, the labour force as a proportion of the civilian population;
- underemployment rate, those underemployed as a proportion of the labour force; and
- labour force underutilisation rate, those unemployed and underemployed as a proportion of the labour force.

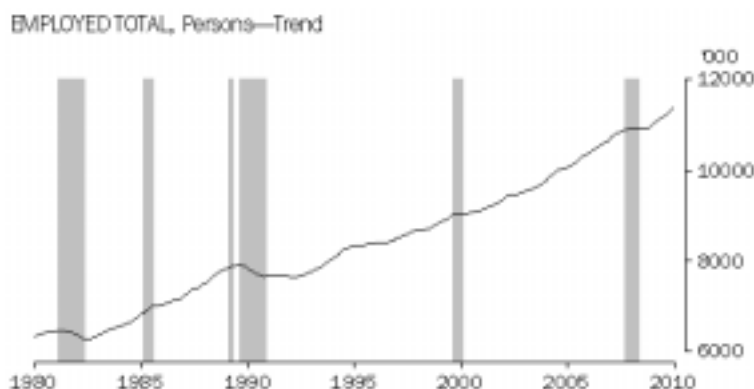
This article presents trend data and describes each of these measures and their use in understanding movements in Australia's labour market.

EMPLOYMENT

The ABS releases the count of the number of people employed each month in the measure, total employed persons. The number of employed persons in Australia has generally risen since the last major economic downturn in the early 1990s. Since 1978, the largest fall in employment occurred at this time, between June 1990 and December 1992, falling from 7,910,800 employed persons to 7,637,300, a decrease in employment of 273,500 persons (3.5%).¹

¹ For graphs in this article, the shaded areas indicate quarters where the percentage change in Gross Domestic Product (GDP - Chain Volume measure, Trend) was less than or equal to +0.2%, indicating the periods of slowing or declining economic growth. Source: *Australian National Accounts: National Income, Expenditure and Product, Sep 2010* (cat no. 5206.0). All graphs end at November 2010, to coincide with the latest available data.

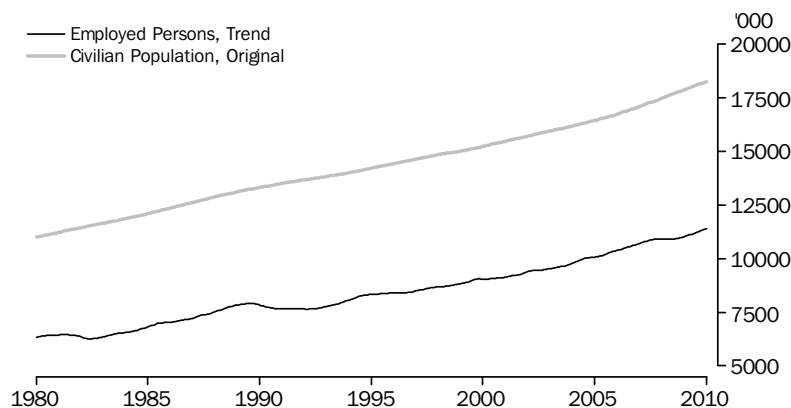
EMPLOYMENT *continued*



Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

Each month, the results of the Labour Force Survey are benchmarked to the latest civilian population estimates. As the population increases, there is a corresponding upward influence on the level estimates of Australia's labour force characteristics, such as the number of people employed. Each new estimate of the number of employed persons in a month will have a component of this population increase, plus or minus the relative changes in Australia's employment characteristics. These relative movements in employment are often disguised by the general upward movement of population growth. The employment estimates are best used as a point in time level measure (that is, the level of employment at a particular moment in time) rather than for tracking month-to-month movements in employment.

COMPARISON OF EMPLOYMENT TO POPULATION, Persons



Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

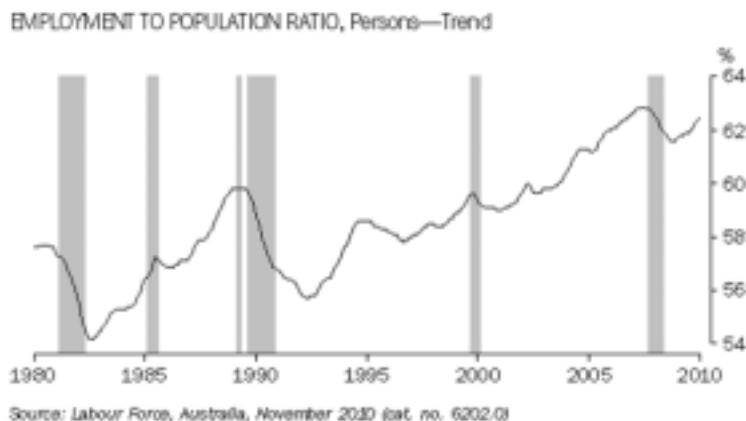
EMPLOYMENT TO POPULATION RATIO

The ratio of the number of employed persons to the civilian population, termed the employment to population ratio, is a measure that removes the influence of population growth from the level estimates, revealing the underlying month-to-month movements in the employed proportion of the civilian population. This measure allows for better comparability of Australia's employment characteristics across time.

The two largest declines in the employment to population ratio occurred during the early 1980s and 1990s. Between July 1981 and June 1983, the employment to population ratio fell 3.5 percentage points, from 57.7% to 54.2%, and between December 1989 and February 1993 it fell 4.0 percentage points, from 59.8% to 55.7%.

EMPLOYMENT TO
POPULATION RATIO
continued

The third largest fall occurred during the most recent downturn where the employment to population ratio decreased 1.3 percentage points, from the highest recorded rate of 62.8% in May 2008, to 61.6% in August 2009. During the same period, this decrease was not reflected in the measure of total employed persons, due to the effects of population growth. Interestingly, the lowest point of this recent downturn still remained higher than any point during all of the prior economic cycles (between February 1978 and April 2006).



AGGREGATE MONTHLY
HOURS WORKED

An alternative measure of the employment characteristics of Australia is the series Aggregate monthly hours worked. Rather than measuring the number of people employed, this measures the total number of hours worked in a given month by all employed Australians. Similar to the employed persons estimates, it is influenced by the growing population of Australia, but it is more responsive to increases in underutilisation, as increases in unemployment and underemployment (discussed later in the article) will have a negative influence on the total number of hours worked in a particular month.

During each of the main economic downturns, there was a corresponding fall in aggregate monthly hours worked. During both the 1980s and 1990s recessions, hours worked dropped by 47 million hours; from 975 million hours in September 1981 to 928 million hours in April 1983 (4.8% decrease) and from 1,175 million hours in June 1990 to 1,128 million hours in October 1992 (4.0% decrease). Both of these are the largest declines in aggregate hours worked in the last 30 years.

During the mid-1980s downturn, hours worked only fell by 0.3 million hours (less than 0.1%) between September and November 1986, but the impact was reflected in a slower than usual growth rate between April 1986 and February 1987. In the early 2000s, hours worked fell by 14 million hours (1.1% decrease); from 1,329 million in Feb 2000 to 1,315 million in November 2001. In the most recent downturn, aggregate monthly hours worked dropped from 1,566 million hours in July 2008 to 1,535 million hours in June 2009, a decrease of 32 million hours (2.0%). Since then, aggregate monthly hours worked has grown to 1,602 million hours in November 2010.

AGGREGATE MONTHLY HOURS WORKED *continued*

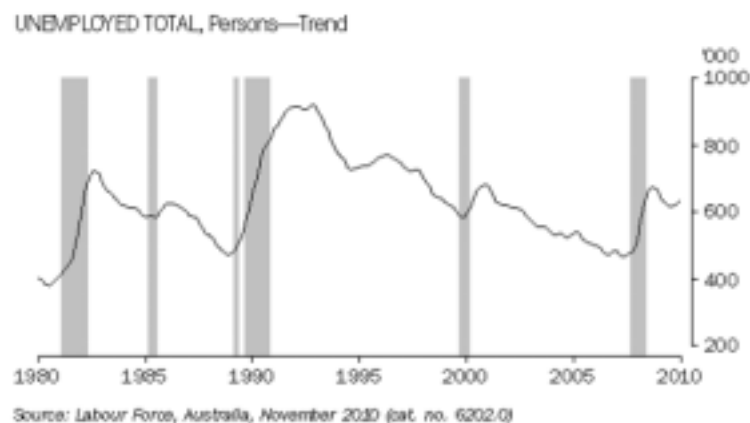
In the recent economic downturn, precipitated by the global financial crisis, there is a marked difference in the trend behaviour of the total employed persons series compared to the aggregate monthly hours worked series. Employed persons remained relatively flat during the crisis, whereas hours worked instead showed a noticeable decline, which indicates that while people generally did not lose their jobs as a result of the downturn, they did suffer a reduction in their hours worked. This highlights the importance of comparing multiple labour force characteristics when considering the effects of economic downturns on the Australian population.



UNEMPLOYMENT

The ABS releases the count of the number of people unemployed each month in the measure, total unemployed persons. Similar to employment, estimates of unemployed persons are also affected by the rise in Australia's population and are best used as point in time level measures.

The number of unemployed persons has risen after each of the five main economic downturns. The largest increase was between November 1989 and December 1992, rising 443,200 persons, almost doubling (93.3% increase) from 474,800 to 918,000, the highest recorded level of unemployment since 1978. The number of unemployed persons during the two most recent downturns peaked at similar levels; 682,100 persons in October 2001 and 673,400 persons in August 2009.



UNEMPLOYMENT RATE

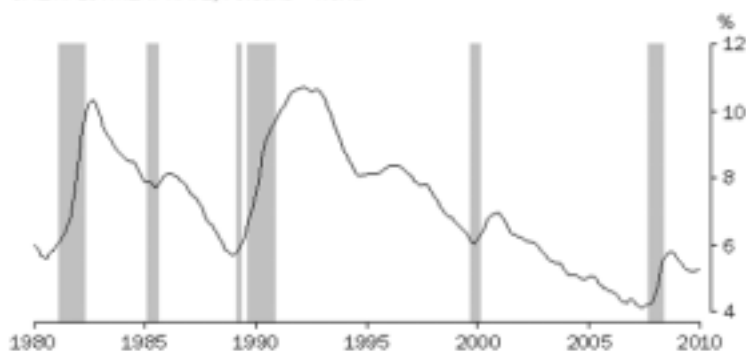
The unemployment rate removes the effect of population growth by expressing the number of unemployed persons as a percentage of the labour force. This is the best measure for tracking Australia's unemployment proportionally from month to month.

From the trend estimates of unemployment rate, the 1980s and 1990s economic downturns both peaked at similar levels; 10.3% in June 1983 and 10.7% in September 1992, although the 1990s economic downturn remained around this level for longer. Between these record highs, the mid-1980's downturn saw a localised peak of 8.1% in November 1986.

During the early 2000s, the unemployment rate rose to 7.0% in October 2001 and in the most recent downturn peaked at 5.8% in August 2009, which is only 0.2 percentage points higher than the lowest unemployment rate recorded during previous economic cycles.

Interestingly, when comparing the last two economic downturns, the latest 2009 peak unemployment rate (5.8%) was less severe than the previous peak in 2001 (7.0%), whereas in the total unemployed persons series, the last two economic downturns peaked at similar levels. This highlights the importance of removing the effects of population growth in order to make more informed comparisons between different time periods.

UNEMPLOYMENT RATE, Persons—Trend



Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

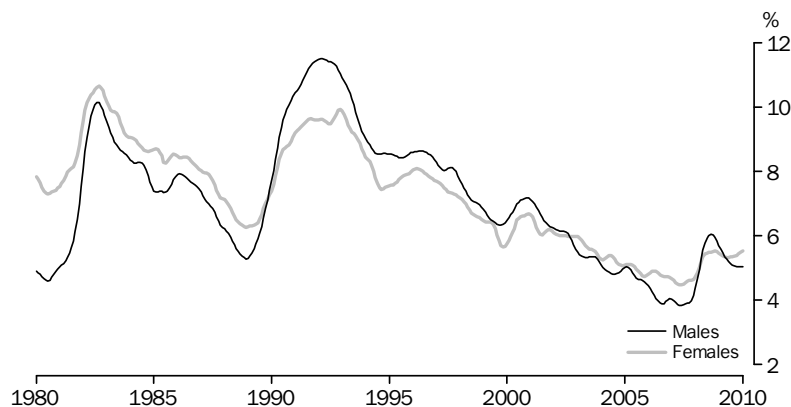
Since the participation rate of males is higher than females (shown later in the article), the effect of economic downturns on the male unemployment rate is more pronounced. The largest rise in the male unemployment rate was 6.2 percentage points during the 1990s recession (5.3% in October 1989 to 11.5% in December 1992) compared with the largest female unemployment rate rise of 3.7 percentage points during the same downturn (6.3% in October 1989 to 9.9% October 1993).

The female unemployment rate was higher than the male rate during the early and mid-1980s downturns. During the 1990s recession, the male unemployment rate overtook the female rate in October 1990 and remained higher through both the recovery and the milder early 2000 downturn. From July 2003 onwards, the female unemployment rate was generally higher than the male rate, excluding a brief period between February 2009 and February 2010 during the most recent downturn, where the male unemployment rate exhibited a sharp increase before subsiding during the remainder of 2010.

UNEMPLOYMENT RATE

continued

UNEMPLOYMENT RATE, Trend



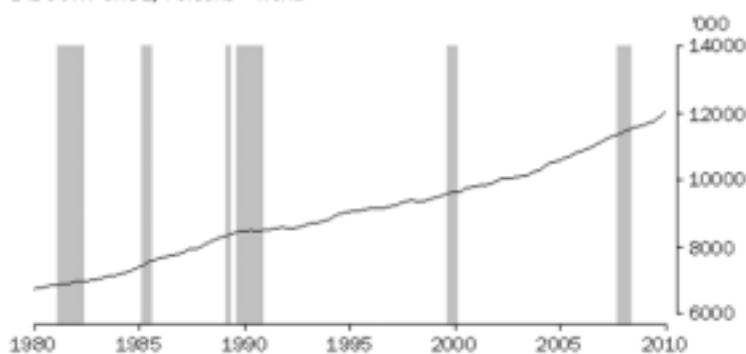
Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

LABOUR FORCE

The labour force is a measure of the total number of people in Australia that are willing and able to work at a given point in time; that is, it includes the total number of persons employed together with the total number of persons unemployed for a given collection month. Similar to the total number of employed and unemployed persons, the labour force measure is affected by the rise in Australia's population, and the estimates are best used as point in time level measures.

Since February 1978, the labour force has risen from 6,425,400 people to 12,022,900 people in November 2010. The trend behaviour of the series seems to be generally unaffected by economic downturns, so it is again important to compare this with other labour force measures, particularly the participation rate, when investigating changes to the labour force with respect to the economy.

LABOUR FORCE, Persons—Trend



Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

PARTICIPATION RATE

The participation rate is a proportional measure of the labour force in regards to the total civilian population in Australia. This allows for comparability of the relative size of the labour force across time, revealing changes to the proportion of Australians who are actively participating in Australia's economy.

The largest falls in the participation rate occurred during the early 1980s and 1990s economic downturns; falling 1.1 percentage points from 61.5% in July 1980 to 60.4% in December 1983 and 1.5 percentage points from 63.9% in July 1990 to 62.4% in April 1993. The lowest point of the 1990s economic downturn (62.4%) did not fall below the

PARTICIPATION RATE

continued

highest point just prior to the 1980s economic downturn (61.5% in July 1980). The mid 1980's downturn saw no significant falls in participation rate, but the impact is reflected in the relatively flat growth rate for the period April 1986 to December 1987.

After recovering to 63.8% in November 1995 following the 1990s economic downturn, the participation rate oscillated around a relatively steady level through the early 2000s downturn, before trending up to reach 65.6% in April 2008. The participation rate remained relatively steady during the latest economic downturn, with a fall of only 0.3 percentage points to 65.3% in April 2010, but has since recovered to a record high 65.9% in November 2010.

Participation in the last 5 years has been at the highest level ever in the last 30 years.



Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

The participation rate by sex reveals significant variance over the past 30 years, but has been gradually converging over time.

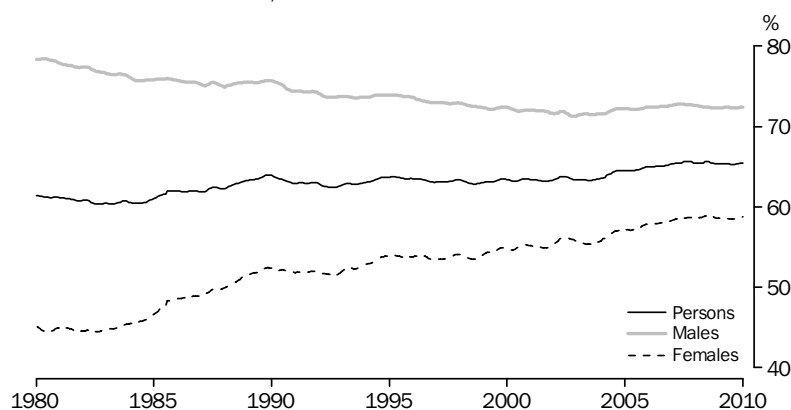
The male participation rates have been consistently higher than female; however, there has been a gradual decline from 79.4% in February 1978 to 72.9% (a decrease of 6.5 percentage points) in November 2010, whereas the female participation rate has generally increased from 43.5% to 59.2% (an increase of 15.7 percentage points) over the same period.

The increase in female participation has offset the decline in male participation, and, in the last 5 years, the overall participation rate of the Australian population has been higher than in any preceding period.

PARTICIPATION RATE

continued

PARTICIPATION RATE, Trend



Source: *Labour Force, Australia, November 2010 (cat. no. 6202.0)*

UNDEREMPLOYMENT RATE

The underemployment rate is similar to the unemployment rate, but instead of measuring Australia's unemployment characteristics, it measures the proportion of the labour force that are currently employed, but are willing and able to work more hours. It highlights people in the labour force who are not unemployed, and so are not captured in the unemployment rate, but are dissatisfied with their current working arrangements and would like to work more hours. This is sometimes referred to as the 'hidden' potential in the labour force.

For example, during an economic downturn, a portion of the labour force lose their job, become unemployed and contribute to a rising unemployment rate. Another portion of the labour force might not lose their jobs, but their working arrangements might change so that they are working fewer hours. If they are dissatisfied with this loss in hours and are available to work more, they are classed as underemployed, and contribute to a rising underemployment rate.

The trend estimate of the underemployment rate increased during each of the five main economic downturns. The early and mid- 1980's downturns peaked at similar levels of underemployment; 4.0% in May 1983 and 4.1% in August 1987 respectively. The largest increase was between May 1988 and August 1992, increasing from 3.6% to 7.0%.

Underemployment then largely remained around this level between August 1992 and November 2004, with a brief increase to 7.4% in November 2001, coinciding with the early 2000s downturn. The trend estimate recorded its longest prolonged period of decline between February 2002 and May 2008, falling to 5.9%, before rising to a record high during the global financial crisis of 7.9% in August 2009. Since then, underemployment has fallen to 7.2% in August 2010 and remained steady until November 2010.

UNDEREMPLOYMENT RATE

continued

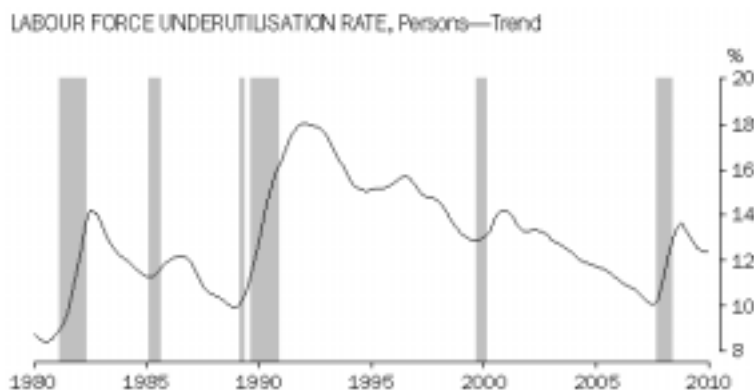


Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

LABOUR FORCE UNDERUTILISATION RATE

The labour force underutilisation rate combines the unemployment rate and the underemployment rate into a single measure of the proportion of the labour force that is willing and able to do more work. It includes people who are not currently working and want to start, and those who are currently working but want to and can work more hours. It is regarded as a more complete measure of the proportion of the labour force that has the potential to be utilised more in Australia's economy. During an economic downturn, the underutilisation rate will capture both rises in unemployment and rises in underemployment.

The lowest level of underutilisation in the last 30 years was 8.4% in May 1981. During the early 1980s economic downturn, underutilisation rose to 14.2% in May 1983 and then recovered to a low of 9.9% in August 1989, interrupted by a relatively small rise to 12.2% in February 1987 during the mid-1980s downturn. The following 1990s downturn resulted in an increase of 8.1 percentage points to reach a peak of 18.1% from August 1989 to November 1992; the highest recorded underutilisation rate in the last 30 years. The underutilisation rate then generally recovered between November 1992 and May 2008, with a brief rise to 14.2% in August 2001 during the early 2000s downturn. From a low of 10.0% in May 2008, the underutilisation rate increased to 13.7% in August 2009 during the global financial crisis, before recovering to 12.4% in November 2010.



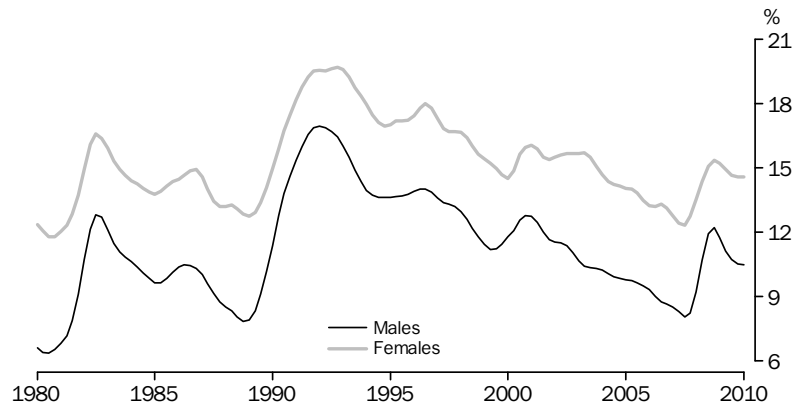
Source: Labour Force, Australia, November 2010 (cat. no. 6202.0)

The female underutilisation rate has been consistently higher than the male rate over the last 30 years, with a high of 19.7% during the 1990s recession in August 1993. This is a different result to the unemployment rate statistics, where, during the same recession,

LABOUR FORCE
UNDERUTILISATION RATE
continued

the male unemployment rate was higher. Higher female underutilisation is due to consistently higher levels in underemployment of females. During the recent downturn, the male underutilisation rate rose to 12.2% and female underutilisation rose to 15.4%, both in August 2009.

LABOUR FORCE UNDERUTILISATION RATE, Trend



Source: *Labour Force, Australia, November 2010* (cat. no. 6202.0)

CONCLUSION

There are a number of key labour force measures available from the Labour Force Survey. Some of these measures are influenced by changes in the underlying civilian population. Therefore, it is important to consider the full range of measures to form a comprehensive picture of the labour market, particularly during times of economic decline.

FURTHER INFORMATION

For any queries regarding these measures or any other queries regarding the Labour Force Survey estimates contact Labour Force Estimates on Canberra 02 6252 6525, or via email at labourforce@abs.gov.au.

EXPLANATORY NOTES

INTRODUCTION

1 *Australian Labour Market Statistics* provides information about the latest developments in the Australian Bureau of Statistics (ABS) labour statistics program, highlighting new and upcoming releases of ABS labour data or changes to these series. It presents a broad level summary of key labour market measures, contains analyses of labour market issues, and resources on how to understand and interpret labour market statistics.

2 The electronic product takes advantage of website capabilities and is a little different from the downloadable (.pdf) version.

3 In addition to data from the Labour Force Survey (LFS), this publication contains key labour market statistics from a range of other ABS labour surveys including Average Weekly Earnings, the Labour Price Index, Job Vacancies, and Industrial Disputes.

4 This publication includes a range of feature articles which are intended to assist users in understanding and interpreting the data and will also promote the range of data available from the ABS labour statistics program.

LABOUR STATISTICS CONCEPTS, SOURCES AND METHODS

5 The concepts and definitions underpinning ABS labour statistics align closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts of Australia's labour market statistics, and the sources and methods used in compiling the estimates, are presented in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001), which is available on the ABS website at <<http://www.abs.gov.au>> [Topics @ a Glance – People – Labour – *Labour Statistics: Concepts, Sources and Methods*].

6 For an explanation of terms used in this publication, refer to the Glossary.

LABOUR TOPICS @ A GLANCE

7 The Labour Topics @ a Glance page is a portal to all labour statistics and related information residing on the ABS website. The page contains hyperlinks to *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001); information about labour related surveys; and a help page for respondents to ABS labour related surveys. The Labour Topics @ a Glance page can be accessed at <<http://www.abs.gov.au>> [Topics @ a Glance – People – Labour].

ORIGINAL AND TREND ESTIMATES

8 Series in this publication include *original* and *trend* series. Special care should be taken in interpreting data for the most recent months and quarters, as some of the original and all of the trend series are subject to revision.

9 It is not uncommon for movements in original time series data and those provided from trend series to differ. Movements in a time series of original data may reflect several factors, including:

- longer-term changes in the item being measured (i.e. trend movements);
- short-term irregular changes;
- regular seasonal influences;
- normal 'trading', 'working' or 'pay' day patterns; and
- systematic holiday effects.

10 Trend estimates help the user to identify the underlying magnitude and direction of a time series. Seasonal adjustment removes the effect of the last three listed influences from the data, leaving only trend and short-term irregular movements. Trend estimates

ORIGINAL AND TREND
ESTIMATES *continued*

are then obtained by removing the effects of the short-term irregularities, which in some series can be a major contributor to movements in the original data.

11 Trend estimates are produced by using a statistical procedure based on Henderson moving averages. At each time point in a series, a trend estimate is calculated using a centred x-term Henderson moving average of the seasonally adjusted series. The moving averages are centred on the point in time at which the trend is being estimated. The number of terms used to calculate the trend varies across surveys. Generally, ABS monthly surveys use a 13-term moving average and quarterly surveys use a 7-term moving average.

12 Estimates for the most recent time points cannot be calculated using the centred average method as there are insufficient data to do so. Instead, alternative approaches that approximate the smoothing properties of the Henderson moving average are used. This can lead to revision in the trend estimates for the most recent time periods until sufficient data are available to calculate the trend using the centred Henderson moving average. Revisions of trend estimates will also occur with revisions to the original data and re-estimation of seasonal adjustment factors.

13 Seasonal factors are reviewed at least annually for ABS labour series, to take account of additional original data. The results of the latest reviews were used to compile the trend estimates given in this publication. For further information about the most recent reviews of seasonal factors for the labour surveys, see the following publications:

- for labour force, see *Labour Force, Australia* (cat. no. 6202.0);
- for labour price index, see *Labour Price Index, Australia* (cat. no. 6345.0); and
- for average weekly earnings, see *Average Weekly Earnings, Australia* (cat. no. 6302.0).

14 The general methods used in the ABS for estimating trends are described in *Information Paper: A Guide to Interpreting Time Series – Monitoring Trends* (cat. no. 1349.0).

RELIABILITY OF ESTIMATES

15 Estimates in this publication are subject to two types of error:

- sampling error – errors that occur because the data were obtained from a sample rather than the entire population; and
- non-sampling error – errors that occur at any stage of a survey and can also occur in a census, e.g. incorrect responses to questions, processing errors, frame deficiencies.

16 For more information on these sources of error, and on measures of these types of errors, including standard errors, refer to the main publications associated with each of the data series presented in this publication (see the relevant sections later in these Explanatory Notes). More information on standard errors applying to LFS estimates is contained in *Information Paper: Labour Force Survey Standard Errors, 2005* (cat. no. 6298.0). To assist users, a spreadsheet incorporating the revised standard error models using composite estimation is available from *Labour Force Survey Standard Errors, Data Cube, Oct 2009* (cat. no. 6298.0.55.001).

ROUNDING

17 Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

LABOUR FORCE SURVEY DATA
Description of the survey

18 The Labour Force Survey (LFS) provides extensive and timely information on the labour market activity of the usually resident civilian population of Australia aged 15 and over. The LFS is a component of the Monthly Population Survey (MPS), which includes the LFS and supplementary surveys.

Monthly Population Survey

19 The Monthly Population Survey (MPS) is a population survey based on a multi-stage area sample of private dwellings and list samples of discrete Indigenous communities and non-private dwellings (hospitals, hotels, motels, etc.), and covers about 0.45% of the population of Australia. The information is obtained from occupants of selected dwellings by interviewers, with the first interview conducted face-to-face and subsequent interviews over the telephone. Once selected, households are included for eight consecutive months before being replaced.

Labour Force Survey

20 The Labour Force Survey (LFS) has been conducted since 1960, first as a quarterly collection and then monthly from February 1978. The content of the survey has remained broadly the same since its introduction, but is regularly updated to ensure that it is the most appropriate for the provision of accurate labour force statistics.

21 The LFS is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory. Further details about concepts and methods are presented in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001),

Supplementary surveys

22 A supplementary topic was included with the Labour Force Survey for the first time in November 1961, and this concept has been gradually extended so that now, a majority of the months in each year include supplementary questions on one or more topics. Results from each supplementary survey topic are released separately.

23 The survey methodology does not differ greatly among the supplementary surveys, and in many aspects is the same as the LFS methodology. A list of topics covered in recent years is available from Find Out More > Related Publications. Further details about concepts and methods are presented in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

Multi Purpose Household Survey

24 The Multi Purpose Household Survey (MPHS) was introduced in 2004–05. This survey vehicle is designed to provide statistics annually for a number of small, self contained topics, including a number of labour related topics. Data for MPHS topics are collected each month over a financial year. A list of topics covered in recent years is available from Find Out More > Related Publications. Further details about concepts and methods are presented in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

Reference period

25 Interviews are generally conducted during the two weeks beginning on the Monday between the 6th and 12th of each month, with questions relating to the week prior to the interview (the reference week).

Notes on data

26 From time to time, changes to survey methodology affect the time series produced. Some examples of changes to this survey are: new questions added to the LFS questionnaire in April 2001; and the introduction of telephone interviewing in 1996–97.

27 In February 2004 the definition of unemployed persons was changed to include all persons who were waiting to start work and were available to start in the reference week, with consequent revisions to data from April 2001 to January 2004. For further details, see *Information Paper: Forthcoming Changes to Labour Force Statistics, 2003* (cat. no. 6292.0).

28 In May 2007, an improved method of estimation, known as composite estimation, was introduced into the Labour Force Survey. In introducing this change the ABS revised unit record data from April 2001 to April 2007 based on the new estimation method. While estimates for periods prior to April 2001 are unrevised and were compiled using a different estimation method, no trend break was identified in the employed persons series. Also, no change was identified in the trend breaks in the unemployed persons and unemployment rate series which arose with the introduction of a redesigned survey

Notes on data continued

form in April 2001. For further details, see *Information Paper: Forthcoming Changes to Labour Force Statistics, 2007* (cat. no. 6292.0).

Population benchmarks

29 Labour Force Survey estimates are calculated in such a way as to add up to independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are projections of the most recently released quarterly Estimated Resident Population (ERP) data. For information on the methodology used to produce the ERP see *Australian Demographic Statistics Quarterly* (cat. no. 3101.0).

30 The ERP series are revised twice-yearly in the March and September quarter issues of *Australian Demographic Statistics Quarterly* (cat. no. 3101.0), released in September each year, to incorporate more up to date information available for the population components. For further details, see article in *Labour Force, Australia* (cat. no. 6202.0) entitled: Labour Force Survey Population Benchmarks in the September 2010 issue.

Estimation method

31 The estimation method used in the Labour Force Survey is Composite Estimation, which was introduced in May 2007. Composite Estimation combines data collected in the previous six months with current month's data to produce the current month's estimates, thereby exploiting the high correlation between overlapping samples across months in the Labour Force Survey. The Composite Estimator combines the previous and current months' data by applying different factors according to length of time in the survey. After these factors are applied, the seven months of data are weighted to align with current month population benchmarks. For details see *Information Paper: Forthcoming Changes to Labour Force Statistics, 2007* (cat. no. 6292.0).

Families series

32 Family relationship is not determined for all households and persons in scope of the LFS. This is due to a number of factors related to the scope and coverage of the LFS, as well as difficulties in determining family structure and characteristics. The survey questions used to determine family relationships are restricted to persons enumerated as usual residents of private dwellings. That is, the following persons are excluded:

- all persons enumerated in non-private dwellings (including hotels, motels, hospitals and other institutions); and
- members of households where any of the usual residents aged 15 years and over are:
 - Non-Australian diplomats, non-Australian diplomatic staff or non-Australian members of their household;
 - Short term overseas visitors, whose usual residence is outside of Australia and who are staying in Australia for less than 12 months; or
 - Members of non-Australian defence forces stationed in Australia or their dependants.

33 From October 2008, the method of producing family estimates from the LFS included: an expanded scope to include households containing permanent members of the Australian defence forces; a wider range of families in the LFS sample contributing to the family estimates; and improving the weighting method by utilising independent population benchmarks (of persons and households), ensuring the estimates more closely reflected the Australian population. See *Improvements to Family Estimates from the Labour Force Survey* (cat. no. 6224.0.55.002).

Further information and data on the LFS

34 LFS estimates are published monthly in *Labour Force, Australia* (cat. no. 6202.0). A series of time series spreadsheets are released at the same time as this publication under cat. no. 6202.0.55.001. More detailed estimates are released, in electronic format, one week later, under cat. no. 6291.0.55.001 for monthly data, or cat. no. 6291.0.55.003 for quarterly data. All electronic data can be accessed via the ABS website at <<http://www.abs.gov.au>>. For details on the data available in the Labour Force standard

products, see Labour Force Survey Standard Products and Data Item Guide (cat. no. 6103.0). Additional data are available on request.

35 For further information about the range of LFS products and services, and the concepts and methodology used in the LFS, refer to *Information Paper: Changes to Labour Force Survey Products* (cat. no. 6297.0), *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001), or contact Labour Market Statistics on Canberra (02) 6252 7206.

WAGE PRICE INDEX DATA

Description of the survey

36 The Labour Price Index (LPI) measures change in the price of labour in the Australian labour market, unaffected by changes in the quality or quantity of work performed, i.e. it is unaffected by changes in the composition of the labour force, hours worked, or changes in characteristics of employees (e.g. work performance). In the LPI, index numbers are compiled for a range of wage and non-wage costs. Information about the wage price indexes has been released for each quarter since September 1997.

Reference period

37 The reference period for the survey is the last pay period ending on or before the third Friday of the mid-month of the quarter.

Further information

38 For further information about the range of products and services relating to the Wage Price Index, and the concepts and methodology used, refer to *Labour Price Index, Australia* (cat. no. 6345.0), *Labour Price Index, Concepts, Sources and Methods* (cat. no. 6351.0.55.001), the associated time series spreadsheets available from the ABS website, or contact the Manager, Labour Price Index on Perth (08) 9360 5151.

AVERAGE WEEKLY EARNINGS DATA

Description of the survey

39 The Survey of Average Weekly Earnings has been conducted quarterly since August 1981. Approximately 5,500 businesses contribute to the survey each quarter. The purpose of the survey is to measure average gross weekly earnings of employee jobs in Australia.

40 Average weekly earnings statistics represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the 'average person'. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings by estimates of number of employees. Changes in the averages may be affected not only by changes in the level of earnings of employees but also by changes in the overall composition of the wage and salary earner segment of the labour force.

Reference period

41 The reference period for the survey is the last pay period ending on or before the third Friday of the middle month of the quarter. For non-weekly payrolls, businesses are asked to provide one week's portion.

Further information

42 For further information about average weekly earnings statistics and the concepts and methodology used refer to *Average Weekly Earnings, Australia* (cat. no. 6302.0), and *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001), or contact the Manager, Survey of Average Weekly Earnings on Perth (08) 9360 5236.

INDUSTRIAL DISPUTES DATA

Description of the survey

43 The ABS has been collecting information about industrial disputes since 1913. The Industrial Disputes collection produces estimates of the number of industrial disputes (where ten or more working days are lost), employees involved, and working days lost.

44 The scope of the Industrial Disputes collection is restricted to employing businesses at which an industrial dispute has occurred. For this collection, industrial disputes are defined as work stoppages of ten working days or more. Ten working days are equivalent to the amount of ordinary time worked by ten people in one day, regardless of the length of the stoppage, e.g. 3,000 workers on strike for two hours would be counted as 750 working days lost (assuming they work an eight-hour day).

<i>Description of the survey continued</i>	45 Effects on other establishments not directly involved in the dispute, such as stand-downs because of lack of materials, disruption of transport services, power cuts, etc. are not included in the scope of this collection.
<i>Reference period</i>	46 The collection reference period is the calendar quarter.
<i>Further information</i>	47 For further information about industrial disputes statistics, and the concepts and methodology used, refer to the electronic publication <i>Industrial Disputes, Australia</i> (cat. no. 6321.0.55.001), and <i>Labour Statistics: Concepts, Sources and Methods</i> (cat. no. 6102.0.55.001), or contact the Manager, Industrial Disputes on Perth (08) 9360 5184.
JOB VACANCIES DATA	
<i>Description of the survey</i>	48 The current Job Vacancies Survey has been conducted since November 1983, with the exception of between August 2008 and August 2009 when the survey was temporarily suspended. It is a quarterly sample survey of approximately 5,000 employers. The survey produces estimates of the number of job vacancies in Australia.
<i>Reference date</i>	49 The reference date for the survey is the third Friday of the middle month of the quarter.
<i>Further information</i>	50 For further information about the range of products and services relating to ABS job vacancies statistics, and the concepts and methodology used, refer to <i>Job Vacancies, Australia</i> (cat. no. 6354.0), <i>Labour Statistics: Concepts, Sources and Methods</i> (cat. no. 6102.0.55.001), the associated time series spreadsheets available from the ABS website, or contact the Manager, Job Vacancies Survey on Perth (08) 9360 5373.

GLOSSARY

Actual hours worked	The hours actually worked during the reference week, not necessarily hours paid for.
Adult employees	<i>Average Weekly Earnings</i> . Adult employees are those employees 21 years of age or over and those employees who, although under 21 years of age, are paid at the full adult rate for their occupation.
Aggregate monthly hours worked	<p>Aggregate monthly hours worked measures the total number of actual hours worked by employed persons in a calendar month. It differs from the actual hours worked estimates (and the usual hours worked estimates) since these refer only to the hours worked in the reference week.</p> <p>Actual and usual hours worked cannot be aggregated across time to produce either quarterly or annual estimates as they relate to only a single week in the month. In contrast, aggregate monthly hours worked estimates are a true monthly measure, and may be aggregated across time to produce both quarterly and annual estimates.</p>
Attending full-time education	Persons aged 15–24 years who were enrolled full-time at secondary school, high school, Technical and Further Education (TAFE) college, university, or other educational institution in the reference week.
Average weekly earnings	Average weekly earnings represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the 'average person'. Estimates of average weekly earnings are derived by dividing estimates of weekly total earnings by estimates of number of employees.
Average weekly hours worked	The average total number of hours a group of employed persons has actually worked during the reference week, not necessarily hours paid for.
Civilian population aged 15 years and over	All usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.
Couple families	A couple family exists if any two people, both of whom must be 15 years of age or over, have formed a couple relationship. This is defined as two people usually residing in the same household who share a social, economic and emotional bond usually associated with marriage and who consider their relationship to be a marriage or marriage-like union. It is identified by the characterisation of the relationship by a respondent using terms such as 'husband', 'wife', 'spouse', 'de facto', 'partner' etc.
Dependants	All family members under 15 years, and all children aged 15–24 years attending full-time education (except those who have a partner or child of their own usually resident in the household).
Discouraged jobseekers	<p>Persons with marginal attachment to the labour force who wanted to work and were available to start work within the next four weeks but whose main reason for not actively looking for work was that they believed they would not find a job for any of the following reasons:</p> <ul style="list-style-type: none">■ considered to be too young by employers;■ considered to be too old by employers;■ lacked necessary schooling, training, skills or experience;■ difficulties because of language or ethnic background;■ no jobs in their locality or line of work;

Discouraged jobseekers <i>continued</i>	<ul style="list-style-type: none"> ■ no jobs available at all; and ■ no jobs in suitable hours.
Duration of unemployment	<p>Duration of unemployment is the period of time from when an unemployed person began looking for work, until the end of the reference week; or the period of time since an unemployed person last worked in any job for two weeks or more, until the end of the reference week; whichever was the shorter period.</p> <p>Prior to April 2001, duration of unemployment was defined in the Labour Force Survey as the period of time from when an unemployed person began looking for work, until the end of the reference week; or the period of time since an unemployed person last worked full-time for two weeks or more, until the end of the reference week; whichever was the shorter period.</p>
Employed	<p>Employed persons include all persons aged 15 years and over who, during the reference week:</p> <ul style="list-style-type: none"> ■ worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or ■ worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or ■ were employees who had a job but were not at work and were: <ul style="list-style-type: none"> ■ away from work for less than four weeks up to the end of the reference week; or ■ away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or ■ away from work as a standard work or shift arrangement; or ■ on strike or locked out; or ■ on workers' compensation and expected to return to their job; or ■ were employers or own account workers, who had a job, business or farm, but were not at work.
Employed full-time	See <i>full-time employed</i> .
Employed part-time	See <i>part-time employed</i> .
Employee	<p><i>Labour Force Survey and other household surveys.</i> A person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or a person who operates their own incorporated enterprise with or without hiring employees.</p> <p><i>Employer surveys.</i> Employees are wage and salary earners who received pay for any part of the reference period.</p>
Employee job	<p><i>Wage Price Index(WPI).</i> A job for which the occupant receives remuneration in wages, salary, payment in kind, or piece rates. All employee jobs in all employing organisations are in scope of the WPI, except the following:</p> <ul style="list-style-type: none"> ■ those excluded from all ABS labour employer surveys ■ 'non-maintainable' jobs (i.e. jobs that are expected to be occupied for less than six months of a year) ■ jobs for which wages and salaries are not determined by the Australian labour market (e.g. most employees of Community Development Employment Programs, jobs where the remuneration is set in a foreign country).
Employer	<p><i>Labour Force Survey and other household surveys.</i> A person who operates their own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.</p> <p><i>Employer surveys.</i> A business with one or more employees.</p>

Employment to population ratio	For any group, the number of employed persons expressed as a percentage of the civilian population in the same group.
Extended labour force underutilisation rate	<p>The unemployed, plus the underemployed, plus two groups of marginally attached to the labour force:</p> <p>(i) persons actively looking for work, not available to start work in the reference week, but available to start work within four weeks; and</p> <p>(ii) discouraged jobseekers</p> <p>as a percentage of the labour force augmented by (i) and (ii).</p> <p>For more information, see datacube 'Table 5. Extended Labour Force Underutilisation Rate' and the Technical Report 'Extended Labour Force Underutilisation Rate' in the July 2009 issue of this publication.</p>
Family	Two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.
Former workers	Unemployed persons who have previously worked for two weeks or more but not in the last two years.
Full-time educational attendance	Persons aged 15–19 who, during the reference week, were enrolled full-time at secondary or high schools, and those aged 15–24 who, during the reference week, were enrolled full-time at a Technical and Further Education (TAFE) college, university, or other tertiary educational institution.
Full-time employed	<i>Household surveys.</i> Persons employed full-time are those employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.
Full-time employees	<i>Employer surveys.</i> Full-time employees are permanent, fixed term and casual employees who normally work the agreed or award hours for a full-time employee in their occupation and received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more per week.
Household	A group of one or more persons in a private dwelling who consider themselves to be separate from other persons (if any) in the dwelling, and who make regular provision to take meals separately from other persons, i.e. at different times or in different rooms. Lodgers who receive accommodation but no meals are treated as separate households. Boarders who receive both accommodation and meals are not treated as separate households. A household may consist of any number of families and non-family members.
Industrial dispute	An industrial dispute is defined as a state of disagreement over an issue or group of issues between an employer and its employees, which results in employees ceasing work. Industrial disputes comprise strikes, which are a withdrawal from work by a group of employees; and lockouts, which are a refusal by an employer or group of employers to permit some or all of their employees to work.
Industry	An industry is a group of businesses or organisations that perform similar sets of activities in terms of the production of goods and services. Industry is classified according to the <i>Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006</i> (cat. no. 1292.0). The industry assigned to an employed person is the industry of the organisation in which the person's main job is located. Unemployed persons who had worked for two weeks or more in the last two years are classified according to the industry of their most recent job.

Job vacancy	<p>A job vacancy is an employee job available for immediate filling on the survey reference date and for which recruitment action has been taken. Recruitment action includes efforts to fill vacancies by advertising, by factory notices, by notifying public or private employment agencies or trade unions and by contacting, interviewing or selecting applicants already registered with the enterprise or organisation. Excluded are vacancies:</p> <ul style="list-style-type: none"> ■ for jobs which became vacant on the survey date and were filled that same day; ■ for jobs of less than one day's duration; ■ to be filled by persons already hired, or by promotion or transfer of existing employees; ■ to be filled by employees returning from paid or unpaid leave or after industrial dispute(s); ■ not available for immediate filling on the survey reference date; ■ for work to be carried out by contractors; ■ for which no recruitment action has been taken; ■ where a person has been appointed but has not yet commenced duty; ■ to be filled by staff from contract labour agencies; and ■ for jobs available only to persons already employed by the enterprise or organisation.
Labour force	<p>The labour force is the labour supply available for the production of economic goods and services in a given period, and is the most widely used measure of the economically active population. Persons in the labour force are classified as either employed or unemployed according to their activities during the reference period by using a specific set of priority rules.</p>
Labour force status	<p>A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.</p>
Labour force underutilisation rate	<p>The unemployed plus the underemployed, as a percentage of the labour force.</p>
Long-term unemployed	<p>Persons unemployed for 12 months or more. See <i>duration of unemployment</i> for details of the calculation of duration of unemployment.</p>
Long-term unemployment rate	<p>The number of long-term unemployed persons expressed as a percentage of the labour force.</p>
Marginal attachment to the labour force	<p>Persons who were not in the labour force in the reference week, wanted to work, and:</p> <ul style="list-style-type: none"> ■ were actively looking for work but did not meet the availability criteria to be classified as unemployed; or ■ were not actively looking for work but were available to start work within four weeks or could start work within four weeks if child care were available. <p>The criteria for determining those in the labour force are based on activity (i.e. working or looking for work) and availability to start work during the reference week. The criteria associated with marginal attachment to the labour force, in particular the concepts of wanting to work and reasons for not actively looking for work, are more subjective. Hence, the measurement against these criteria is affected by the respondent's own interpretation of the concepts used. An individual respondent's interpretation may be affected by their work aspirations, as well as family, economic and other commitments.</p>
Not determined	<p>Families estimates from the Labour Force Survey include families where one or more adult members have an unknown labour force status. This 'not determined' category comprises families where one or both spouses (or lone parent or family reference persons) did not fully complete the questionnaire, were away from their usual residence for six weeks or more, or were permanent members of the Australian defence forces (out of scope for the Labour Force Survey).</p>
Not in the labour force	<p>Persons who were not classified as employed or unemployed.</p>

Occupation	An occupation is a collection of jobs that are sufficiently similar in their main tasks to be grouped together for the purposes of classification. Occupation is classified according to the ANZSCO <i>Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1</i> (cat. no. 1220.0). The occupation assigned to an employed person relates to the person's main job. Unemployed persons who had worked for two weeks or more in the last two years are classified according to the occupation of their most recent job.
One-parent family	A family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household.
Original series	Estimates produced directly from the survey data, before seasonal adjustment or trend estimation take place.
Other family	Related individuals residing in the same household who do not form a couple or parent-child relationship with any other person in the household and are not attached to a couple or one parent family in the household. If two brothers, for example, are living together and neither is a spouse, a lone parent or a child, then they are classified as 'other family'.
Own-account worker	People who operate their own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees.
Owner managers of incorporated enterprises	People who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (also known as a limited liability company). These people are classified as employees under 'status in employment'. Technically they are employees, however, they are similar in characteristics to owner managers of unincorporated enterprises.
Owner managers of unincorporated enterprises	People who work in their own unincorporated enterprise, that is, a business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred. Includes those engaged independently in a profession or trade. These people are classified as employers under 'status in employment' if their business has employees, or own account workers if they do not.
Participation rate	The labour force participation rate for any group within the population is the labour force component of that group, expressed as a percentage of the population in that group.
Part-time employed	<i>Household surveys.</i> Persons employed part-time are those employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.
Status in employment	Employed persons classified by whether they were employees, employers, own account workers or contributing family workers.
Total earnings	See <i>weekly total earnings</i> .
Total hourly rates of pay index excluding bonuses	<i>Wage Price Index.</i> This index measures quarterly change in a weighted combination of ordinary time and overtime hourly rates of pay. See <i>Labour Price Index, Australia</i> (cat. no. 6345.0) for more information.
Trend series	A smoothed seasonally adjusted series of estimates. See Explanatory Notes for more detail.
Underemployed workers	Underemployed workers are employed persons who want, and are available for, more hours of work than they currently have. They comprise: <ul style="list-style-type: none"> ■ persons employed part-time who want to work more hours and are available to start work with more hours, either in the reference week or in the four weeks subsequent to the survey; and

Underemployed workers <i>continued</i>	<ul style="list-style-type: none"> ■ persons employed full-time who worked part-time hours in the reference week for economic reasons (such as being stood down or insufficient work being available). It is assumed that these people wanted to work full-time in the reference week and would have been available to do so.
Underemployment rate	The number of underemployed workers expressed as a percentage of the labour force.
Unemployed	<p>Persons aged 15 years and over who were not employed during the reference week, and</p> <ul style="list-style-type: none"> ■ had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or ■ were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.
Unemployed looking for first full-time job	Unemployed persons looking for full-time work who had never worked full-time for two weeks or more.
Unemployed looking for first job	Unemployed persons who had never worked for two weeks or more.
Unemployed looking for full-time work	<p>Unemployed persons who:</p> <ul style="list-style-type: none"> ■ actively looked for full-time work, or ■ were waiting to start a new full-time job.
Unemployed looking for part-time work	<p>Unemployed persons who:</p> <ul style="list-style-type: none"> ■ actively looked for part-time work only, or ■ were waiting to start a new part-time job.
Unemployment rate	The number of unemployed persons expressed as a percentage of the labour force.
Unemployment to population ratio	For any group, the number of unemployed persons expressed as a percentage of the civilian population aged 15 and over in the same group.
Usual hours worked	The hours usually worked per week by an employed person.
Wage and salary earners	See <i>employee</i> .
Weekly total earnings	Weekly total earnings of employees is equal to weekly ordinary time earnings plus weekly overtime earnings.

FOR MORE INFORMATION . . .

INTERNET **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

PHONE 1300 135 070

EMAIL client.services@abs.gov.au

FAX 1300 135 211

POST Client Services, ABS, GPO Box 796, Sydney NSW 2001

FREE ACCESS TO STATISTICS

All statistics on the ABS website can be downloaded free of charge.

WEB ADDRESS www.abs.gov.au