



6296.0

Information Paper

MEASURES OF LABOUR UNDERUTILISATION

2002

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LABOUR
UNDERUTILISATION**

2002

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AUSTRALIAN BUREAU OF STATISTICS

EMBARGO: 11.30 AM (CANBERRA TIME) WED 27 FEB 2002

ABS Catalogue no. 6296.0
ISBN 0 642 47832 5

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- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Harry Kroon on Canberra, 02 6252 6753.

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LIST OF ABBREVIATIONS

ABS	Australian Bureau of Statistics
ICLS	International Conference of Labour Statisticians
ILO	International Labour Organisation
LFS	Labour Force Survey
MAP	Measuring Australia's Progress
OECD	Organisation for Economic Co-operation and Development
SNA	United Nations System of National Accounts

OVERVIEW

The number of unemployed persons and the unemployment rate are widely used as measures of the available labour resources which are not being utilised in the economy. However, despite the high profile of the unemployment rate, no single measure can fully capture the complexity of the labour market nor satisfy all the purposes for which such data are needed.

To assist in understanding the structure and dynamics of the labour market, the ABS already provides a wide range of data on available labour resources and the extent of labour utilisation (in addition to unemployment data). These include data on persons with a marginal attachment to the labour force (in particular, discouraged jobseekers) and persons who are underemployed. The ABS has recently developed a series of supplementary measures based on these data which, together with unemployment statistics, provide a broad view of existing and potential labour resources and the extent to which they are being utilised.

Four measures of labour underutilisation — the official unemployment rate and three supplementary measures — are outlined below. There is a strong correlation between the measures through the economic cycle.

MEASURES OF LABOUR UNDERUTILISATION—SEPTEMBER 1994 TO SEPTEMBER 2000

	1994	1995	1996	1997	1998	1999	2000
	%	%	%	%	%	%	%
Long-term unemployment rate(a)	3.0	2.3	2.3	2.6	2.4	2.0	1.5
Unemployment rate(b)	9.0	8.1	8.3	8.2	7.7	7.1	6.1
Labour force underutilisation rate(c)	14.1	13.8	13.8	13.6	13.0	11.8	10.5
Extended labour force underutilisation rate(d)	15.5	15.1	15.2	15.0	14.3	13.2	11.9

(a) Persons unemployed for 12 months or more as a percentage of the labour force.

(b) The unemployed as a percentage of the labour force.

(c) The unemployed plus the underemployed, as a percentage of the labour force.

(d) The unemployed, plus the underemployed, plus two groups of persons 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 4 weeks; and
 (ii) discouraged jobseekers; as a percentage of the labour force augmented by (i) and (ii).

The unemployment rate will continue to be the 'headline' measure. It and the long-term unemployment rate are available monthly. Currently, the other two supplementary measures (the labour force underutilisation rate and the extended labour force underutilisation rate) are available only on an annual basis. The four measures will be disseminated quarterly, using the latest available data, initially in *Labour Force, Australia* (Cat. no. 6203.0) in mid-2002.

The ABS is also investigating a number of possible future developments regarding measures of labour underutilisation. These include the development of hours-based or 'volume' measures, the investigation of additional population groups whose labour is underutilised, and changes to data collections to improve the frequency of the measures.

USERS' VIEWS

The supplementary measures of labour underutilisation are an important addition to ABS statistics on labour utilisation. Views from the user community are sought on issues relating to the supplementary measures, including comments on their usefulness and priorities for future development work. For comments, suggestions or further information, please contact:

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INTRODUCTION

This Information Paper presents a new set of ABS measures which, together with existing unemployment statistics, provide a wide range of indicators of labour underutilisation. The paper describes the new measures in detail, outlines ABS plans for disseminating the new measures, and discusses plans for future development. ABS is seeking comments from the labour statistics user community on the usefulness of the new measures presented here, and priorities for future development work. Comments and suggestions should be provided to the contact officer listed in this paper.

The paper also outlines the wide range of ABS data already available on labour resources and the extent of labour utilisation. These data, and the new supplementary measures, will enable the ABS to provide a broad view of existing and potential labour resources and the extent to which they are being utilised. It also describes the categories of people who are commonly regarded as being part of the underutilised labour supply, and presents these within the ABS conceptual framework for labour force statistics.

Finally, this paper presents, in its appendices, international standards and guidelines associated with the measurement of labour statistics, and describes the approaches to compiling and presenting supplementary measures of underutilised labour in a number of other countries.

EXISTING ABS MEASURES OF UNDERUTILISED LABOUR

The ABS collects and publishes a wealth of information about the labour market activity and aspirations of the working age population. Each month, the ABS releases official estimates of employment and unemployment. These estimates come from the Labour Force Survey (LFS), which has been conducted monthly since 1978 and quarterly since 1964. They form part of the body of economic and social statistics which describe important elements of the performance of the economy and of the economic and social circumstances of individual members of the community.

ABS estimates of the number of people unemployed represent a relatively narrow measure of available labour resources which are not being utilised in the economy. This measure, and the unemployment rate, are also widely used as indicators of current economic conditions and of future economic performance. The official measures of unemployment are based on applying objective criteria which test if a person is without work, actively looking for work and currently available for work. All three of these criteria must be met for a person to be classified as unemployed.

However, there are different views on what constitutes underutilised labour resources. The official measure of unemployed persons is seen by some as understating the full extent of unemployment. Recognising the interest in the broader concepts of underutilised labour, and to assist in understanding the structure and dynamics of the labour market, the ABS already provides a wide range of data on available labour resources and the extent of their utilisation.

Part-time workers (i.e. persons working less than 35 hours per week) who would prefer a job in which they worked more hours can be regarded as persons whose labour is underutilised. Detailed information on part-time workers who would prefer to work more hours is available from the annual LFS supplementary survey Underemployed Workers, with summary information available quarterly from the LFS.

Another component of underutilised labour relates to persons who are outside the labour force, but have some of the characteristics of the unemployed; these persons are regarded as marginally attached to the labour force. Persons with a marginal attachment to the labour force want to work, and would be regarded as being unemployed if one of the standard conditions (i.e. looking for work or available for work) were relaxed. The annual LFS supplementary survey Persons Not in the Labour Force 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).

Statistics on the unemployed, the underemployed, and persons marginally attached to the labour force are available from the following ABS publications:

- *Labour Force, Australia, Preliminary* (Cat. no. 6202.0);
- *Labour Force, Australia* (Cat. no. 6203.0);
- *Underemployed Workers, Australia* (Cat. no. 6265.0); and
- *Persons Not in the Labour Force, Australia* (Cat. no. 6220.0).

SUPPLEMENTARY ABS MEASURES OF LABOUR UNDERUTILISATION

Despite the high profile of the unemployment rate, no single measure can fully capture the complexity of the labour market. In this paper, the ABS introduces a series of supplementary measures which, together with unemployment statistics, provide a wide range of indicators of underutilised labour. The supplementary measures are based on a number of population groups that are generally considered to be underutilised labour resources, including, in addition to the unemployed, people who are underemployed and people with a marginal attachment to the labour force. This wider coverage helps overcome some of the limitations inherent in the unemployment rate for measuring the degree to which available labour resources are not being utilised in the economy.

The supplementary measures of labour underutilisation have been presented in two ways: as a series of rates, calculated by expressing combinations of the selected population groups as proportions of an appropriate denominator; and as level estimates (or as a count) of the selected population groups. The rates and the level estimates are presented in a series of tables and graphs later in this paper.

Four measures of labour underutilisation — the official unemployment rate and three supplementary indicators — are outlined below. The population groups which form the basis for the rates are described in more detail in the next section.

MEASURES OF LABOUR UNDERUTILISATION

<i>Measure</i>	<i>Description</i>
Long-term unemployment rate	Those who have been unemployed continuously for 12 months or more, as a percentage of the labour force.
Unemployment rate	The unemployed as a percentage of the labour force.
Labour force underutilisation rate	The unemployed plus the underemployed, as a percentage of the labour force.
Extended labour force underutilisation rate	The unemployed, plus the underemployed, plus two groups of persons marginally attached to the labour force: <ul style="list-style-type: none"> (i) persons actively looking for work, not available to start work in the reference week, but available to start work within 4 weeks; and (ii) discouraged jobseekers; as a percentage of the labour force augmented by (i) and (ii).

UNEMPLOYMENT RATE AND LONG-TERM UNEMPLOYMENT RATE

The unemployment rate is the most widely used measure of underutilised labour. The unemployment rate is, for any population group, the number of unemployed persons as a percentage of the labour force in the same group. The labour force is the sum of employed and unemployed persons.

UNEMPLOYMENT RATE AND
LONG-TERM
UNEMPLOYMENT RATE
continued

Labour market analysts look at the behaviour of the long-term unemployment rate as well as the total unemployment rate. The long-term unemployment rate is calculated as the number of persons who have been unemployed continuously for 12 months or more as a percentage of the labour force. Movements in long-term unemployment often lag movements in total unemployment. Data for both the unemployment rate and the long-term unemployment rate have been available on a monthly basis from the ABS Labour Force Survey (LFS) for many years.

The long-term unemployed are included in the ABS supplementary measures of labour underutilisation because the economic and social consequences of being unemployed are affected by the length of time a person is unemployed. People unemployed for long periods of time may experience greater financial hardship and may have greater difficulties in finding employment because of the loss of relevant skills and employers' perceptions of their 'employability'.

The tables in this paper include statistics of the unemployed, including the unemployment rate and long-term unemployment rate, for males, females and all persons. More detailed statistics about unemployed persons are available in ABS publications and other products.

LABOUR FORCE
UNDERUTILISATION RATE

The labour force underutilisation rate represents the underutilisation of labour within the labour force. It is defined as the sum of the number of persons unemployed and those in underemployment, expressed as a proportion of the labour force. It can also be viewed as the sum of the unemployment rate and what could be termed the *underemployment rate*. The latter, which is defined here as the proportion of the labour force in *time-related underemployment*, is one of the analytical measures referred to (but not given a name) in the 1998 ILO Resolution Concerning the Measurement of Underemployment and Inadequate Employment Situations. See Appendix 1 for a description of the ILO concept of time-related underemployment.

Underemployment, like unemployment, reflects labour resources which have been offered but which are underutilised, and is an important component of underutilised labour. There is a strong correlation between movements in unemployment and underemployment over the economic cycle.

The labour force underutilisation rate is based on a headcount measure and is not an indicator of the 'volume' of underutilised labour. As explained later in this paper, ABS plans to develop further measures of labour underutilisation based on the number of hours (i.e. 'volume') of work sought by unemployed and underemployed people.

The tables in this paper include the labour force underutilisation rate, and the population groups that form the basis for the rate, classified by males, females and all persons. More detailed statistics about persons in underemployment are available in ABS publications and on request from the ABS.

EXTENDED LABOUR FORCE UNDERUTILISATION RATE

The extended labour force underutilisation rate takes the measure of underutilised labour beyond what is conventionally measured in the labour force. The measure includes, in addition to the unemployed and the underemployed, two groups of people with marginal attachment to the labour force:

- 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 jobseekers. These are persons wanting to work who are available to start work within four weeks, and whose main reason for not looking for work was that they believed they would not find a job for labour market related reasons.

These two groups of persons with marginal attachment to the labour force are each close to satisfying the ABS (and ILO) criteria for unemployment. Those in the first group would meet the definition of unemployment if the availability criterion were relaxed (by up to four weeks); those in the second group (discouraged jobseekers) would be classified as unemployed if the looking for work criterion were relaxed for persons who have given up looking because they believe they cannot find a job. More information about these two population groups is provided in the next section.

The extended labour force underutilisation rate is expressed as the sum of all the above groups (unemployed, underemployed, and the two marginally attached groups), as a proportion of the labour force augmented by the number of people in the two marginally attached groups.

The extended labour force underutilisation rate includes only a small subset of all persons with marginal attachment to the labour force. The population with marginal attachment to the labour force is a relatively large and heterogeneous group. It includes people who may have a strong likelihood of joining the labour force in the near future, as well as some who have little or no commitment to finding employment. The ABS does provide statistics about this large and diverse group, but does not include the whole group in its broadest supplementary measure of labour underutilisation. However, as explained later in this paper, there may be other subgroups (in addition to the two marginally attached groups identified above) which fit the requirements of underutilised labour resources. As part of future development of the supplementary measures of underutilised labour, the ABS will investigate the issues involved in widening the broadest measure to include any such subgroups.

The tables in this paper include the extended labour force underutilisation rate, and the population groups that form the basis for the rate, classified by males, females and all persons. More comprehensive statistics about persons with marginal attachment to the labour force are available in ABS publications and on request from the ABS.

COMPARABILITY OF MEASURES

A number of minor changes were made to definitions which affected the core labour force data series introduced at the time of the LFS questionnaire redesign in April 2001. These changes affect the comparability of population counts used to calculate the labour force underutilisation rate and the extended labour force underutilisation rate. Appendix 3 provides descriptions of these changes and their impact on measures of underutilised labour.

FREQUENCY OF MEASURES

The above measures of labour underutilisation draw together statistics about the unemployed, the underemployed, and persons marginally attached to the labour force. The choice of population groups has been guided both by their usefulness as indicators of underutilisation, and the availability of supporting data.

Information about unemployed persons, both total and long-term unemployed, is available on a monthly basis since 1978, and is published in *Labour Force, Australia* (Cat. no. 6203.0). As a result, the unemployment rate and the long-term unemployment rate are already available as long time series.

Information on underemployed persons (consistent with the ILO concept of time-related underemployment) is available annually only since September 1994. As a result, the labour force underutilisation rate can be derived on an annual basis, for September of each year, since 1994. The ABS is currently investigating the possibility of making a minor change to the Labour Force Survey questionnaire to enable underemployment data to be collected on a quarterly basis consistent with the ILO concept. This would enable the labour force underutilisation rate to be compiled quarterly.

Information about discouraged jobseekers, required to support the extended labour force underutilisation rate, is currently available only on an annual basis since September 1988.

DISSEMINATION

The ABS proposes to update the measures of labour underutilisation regularly, as more up-to-date information becomes available. The monthly unemployment rate will continue to be disseminated as part of the release of monthly labour force statistics. Information about persons in time-related underemployment and persons with marginal attachment to the labour force is collected in labour supplementary surveys each year in September. Supplementary measures derived from this information for September 2001 are expected to be released in an article in *Labour Force, Australia* (Cat. no. 6203.0) in mid-2002. The vehicle for regular dissemination of the supplementary measures will be the new quarterly publication *Australian Labour Market Statistics* (Cat. no. 6105.0), which is scheduled to replace the monthly 6203.0 publication in November 2002.

DISSEMINATION *continued*

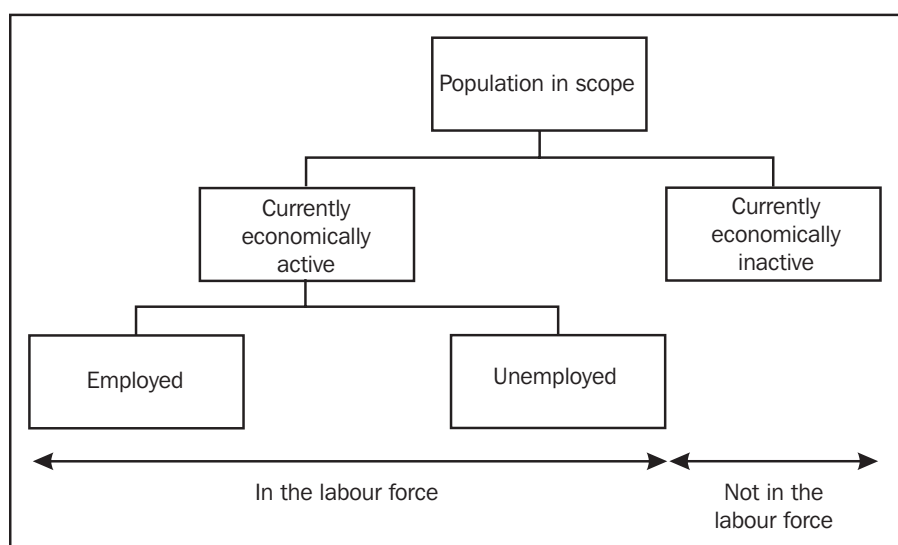
ABS expects the new measures of labour underutilisation to be widely used as supplementary measures to the unemployment rate. The measures will be included in the ABS's Measuring Australia's Progress (MAP) indicators, scheduled for release in April 2002. The measures will also be disseminated in future editions of ABS publications that feature statistics about work, such as *Australian Social Trends* (Cat. no. 4102.0).

POPULATION GROUPS USED TO MEASURE LABOUR UNDERUTILISATION

The ABS conceptual framework for labour force statistics provides a comprehensive basis for systematically describing and measuring the labour market activity of Australia's population. In this way, statistical measures can be developed to describe the diversity of the labour supply, and the extent to which it is utilised.

The labour force framework categorises the population aged 15 years and over into three mutually exclusive groups based on information on their labour market activity and availability for work in a short reference period. These population groups are the employed, the unemployed and persons not in the labour force. The employed and unemployed together comprise the labour force (i.e. the currently economically active population), which represents the labour supply available for the production of goods and services in the short reference period. The concept of economic activity underlying measures of the economically active population is compatible with the concept of economic activity used in the Australian national accounts. The third group (not in the labour force) represents the population currently economically inactive. A comprehensive description of the concepts and definitions underpinning Australian labour statistics is provided in *Labour Statistics: Concepts, Sources and Methods* (Cat. no. 6102.0).

DIAGRAM 1 LABOUR FORCE FRAMEWORK



The labour force framework can also be used to provide further distinctions between the various population groups, based on the degree to which labour resources are available and are being utilised in the economy. For example, persons who are employed can be divided into those who are fully employed (these could be either in full-time or part-time employment) and those who are not fully employed (which includes persons classified as being underemployed). Persons who are not in the labour force (i.e. neither employed nor unemployed) can be classified into a number of categories based on their association with the labour force. One such category covers persons with the strongest links to the labour force, who are described as having a marginal attachment to the labour force.

The ABS measures of labour underutilisation are formed from selected subsets of the unemployed, the employed, and those not in the labour force. More specifically, in addition to the unemployed, the measures draw on employed persons who are underemployed, and on those who, although not in the labour force, are considered to have a marginal attachment to the labour force. This section of the paper discusses the ABS concepts and definitions behind the selected population groups, and gives the rationale for their selection.

THE UNEMPLOYED

Unemployment is the most widely used representation of underutilised labour. Unemployed persons represent the currently available unused labour resources within the economy. The way the ABS measures unemployment has not changed markedly since the inception of the national Labour Force Survey (LFS) in 1964. The labour force status of a person is determined solely by their current work-related and job-search activities, and their current availability for work. The definitions of employment and unemployment used in this survey are in close alignment with international standards for labour force statistics. Appendix 1 provides a discussion of these international standards.

ABS LFS definition of unemployment

Unemployed persons are those aged 15 years and over who satisfy all three of the following criteria:

- The person must not be employed, i.e. they must be 'without work'. In essence, any person who did one or more hours of paid work during the survey reference week is defined as being employed, irrespective of whether they were also looking for work.
- The person must be 'looking for work'. A person must have, at some time during the previous four weeks, undertaken specific 'active' steps to look for work, such as applying to an employer for work, answering an advertisement for a job, visiting an employment agency, using a touchscreen at a Centrelink office, or contacting friends or relatives to search for work. The search may be for full-time or part-time work. In either case, however, the person must have done more than merely read job advertisements in newspapers.
- The person must be 'available to start work'. This is taken to mean that they were available to start work in the survey reference week (i.e. the week before the interview).

The criteria used to define a person as being unemployed closely follow international standards and practice. However, some analysts have criticised these criteria as being too stringent, and would prefer to see one or more of the criteria relaxed. For example, some commentators have encouraged the ABS to replace the one hour threshold used to define employment with a higher threshold (for example, 10 or 15 hours). The unemployed would then also include those persons who, as an alternative to being without work, accept jobs which offer a relatively small number of hours a week, while continuing to look for work involving more than the threshold number of hours.

ABS LFS definition of unemployment *continued*

The ABS, in common with most other national statistical offices of the OECD countries, has set one hour in a one week reference period as the minimum period of work for deciding whether or not a person is employed. The selection of an alternative higher cut-off point, which inevitably becomes an arbitrary decision, would be contrary to international standards and practice, and mean that Australian unemployment measures would not be comparable with those of other countries.

Other analysts have suggested that the definition of unemployment should also include persons who, although wanting to work, have ceased actively looking for work, and persons who have taken active steps to look for work but are, for various reasons, not immediately available to start work. The ABS is committed to retaining the internationally accepted standards for official statistics of employment and unemployment. ABS considers that it would be undesirable to have more than one definition of unemployment, and that separate sets of unemployment estimates based on different criteria would confuse, rather than assist, the analysis of unemployment.

Number of hours offered by unemployed persons

The number of people unemployed, and rates based on the number of people, are adequate measures of unemployment for many analytical purposes. However, measures derived by expressing underutilised labour resources in terms of the number of *hours* of underutilised labour represented by the unemployed can add considerable analytical value. Although the LFS collects a wide range of information about the labour market aspirations of the population, and identifies those people looking for part-time work only, it does not currently collect information about the aggregate number of hours of work sought by the unemployed. ABS is planning to use the LFS to collect this information on an annual basis from July 2002.

THE UNDEREMPLOYED

Underemployment refers to employed persons who work fewer hours than they want to. Persons who usually work part-time (i.e. less than 35 hours per week) and want to work more hours are often regarded as an underutilised labour resource. As previously stated, a person is classified as employed if they work one hour or more in the reference week. In conceptual terms, an underemployed person is employed but shares some characteristics with an unemployed person, in that they want, and are available for, more work than they currently have.

The way ABS measures underemployment is reflected in the conceptual framework shown in diagram 2. This separates employed persons into two mutually exclusive groups:

- workers who are not fully employed; and
- workers who are fully employed.

THE UNDEREMPLOYED
continued

Within each group there are full-time and part-time workers. Those workers who are not fully employed comprise:

- Part-time workers (usually work part-time and did so in the reference week), who want to work more hours. The framework further classifies these persons according to whether they were looking for and/or available to start work with more hours, either in the reference week or in the four weeks subsequent to the survey.
- Full-time workers who worked part-time hours in the reference week for economic reasons initiated by their employer. It is assumed that these workers wanted to work full-time in the reference week and would have been available to do so.

ABS definition of underemployment

All workers who are not fully employed could be considered as being in underemployment, in that they are wanting to work more hours. However, within this wider population, the group of particular interest is those persons in 'time-related' underemployment (as defined by the ILO), and ABS has included these persons in the two broader measures of labour underutilisation.

Appendix 1 contains a discussion of the ILO standards relating to underemployment. According to the ILO definition, time-related underemployment includes all persons in employment who satisfy the following three criteria: wanting to work additional hours; available to work additional hours; and working less than a threshold relating to working time.

Threshold relating to working time

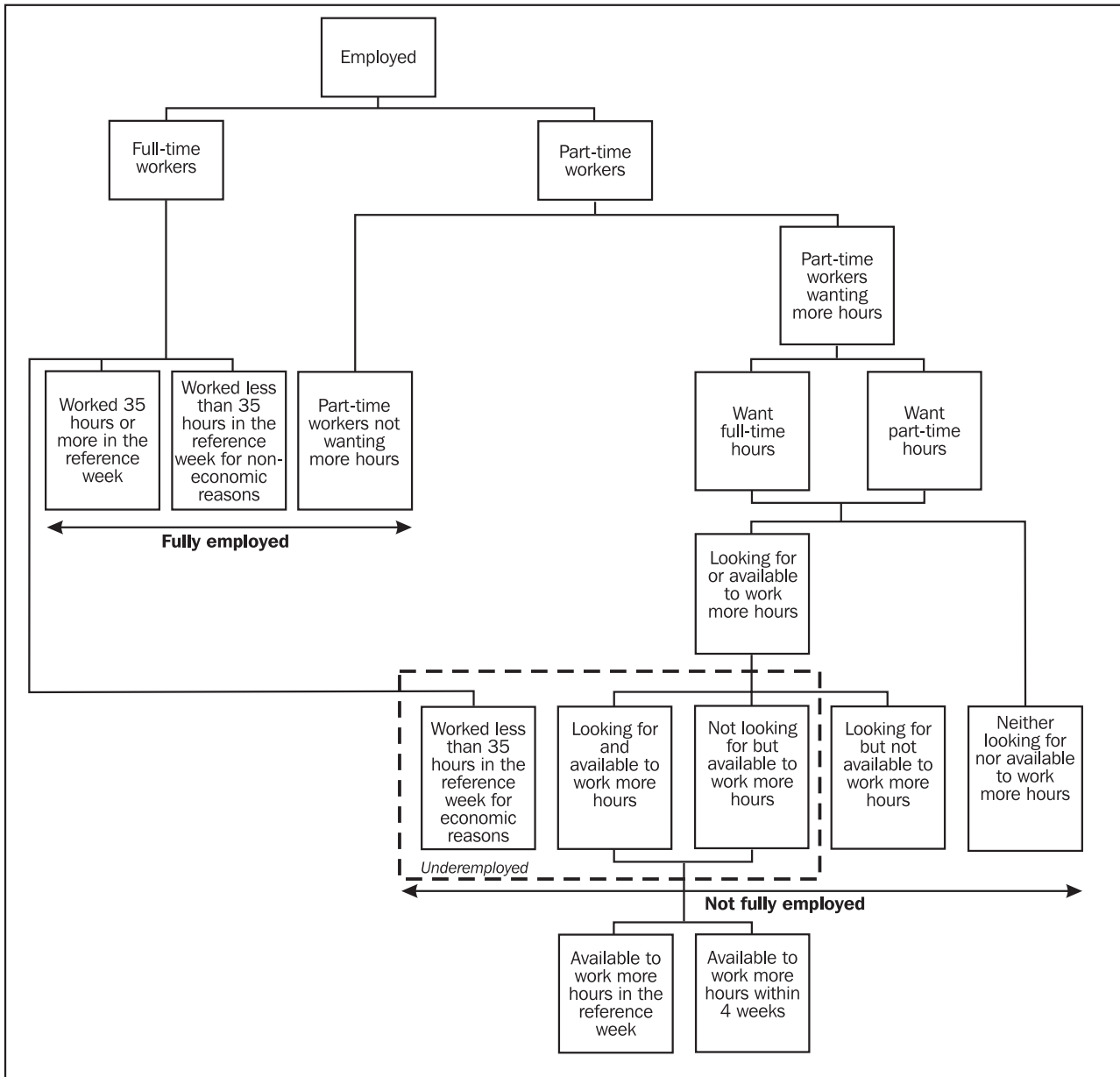
The international definition of time-related underemployment includes a threshold relating to working time. It also suggests that the threshold can be chosen according to national circumstances. Only persons actually working less than the threshold should be included in statistics of time-related underemployment.

The threshold used in the ABS underemployment framework is based on the boundary between full-time and part-time work. Only those employed persons actually working less than 35 hours in the reference week may be further classified as not fully employed. As a result, full-time workers wanting more hours are excluded from being considered as underemployed, and are also excluded from the measures of underutilised labour.

Volume of underemployment

The quantum of underutilised labour of underemployed persons, expressed in terms of the number of extra hours sought (up to 35 hours), can also be a useful analytical measure. Information about the number of hours usually worked and the preferred number of extra hours sought by underemployed persons is available from the annual LFS supplementary survey Underemployed Workers. This information will be used, together with comparable data for unemployed persons when these become available, in the future development of supplementary measures of underutilised labour.

DIAGRAM 2 ABS CONCEPTUAL FRAMEWORK FOR UNDEREMPLOYMENT



Other groups not fully employed

Persons in underemployment account for the majority (around 90%) of all workers who are not fully employed. However, some analysts may consider that the measure of underutilised labour resources should include all part-time workers wanting to work more hours. This broader group would include part-time workers wanting to work longer hours but who are not available to start work with additional hours. On the other hand, some analysts suggest a more narrowly defined group of underemployed workers for inclusion in measures of underutilised labour, and suggest applying criteria that are analogous to those used for determining unemployment (that is, actively looking for work and available for work in the survey reference week). These workers account for less than half of all workers who are not fully employed.

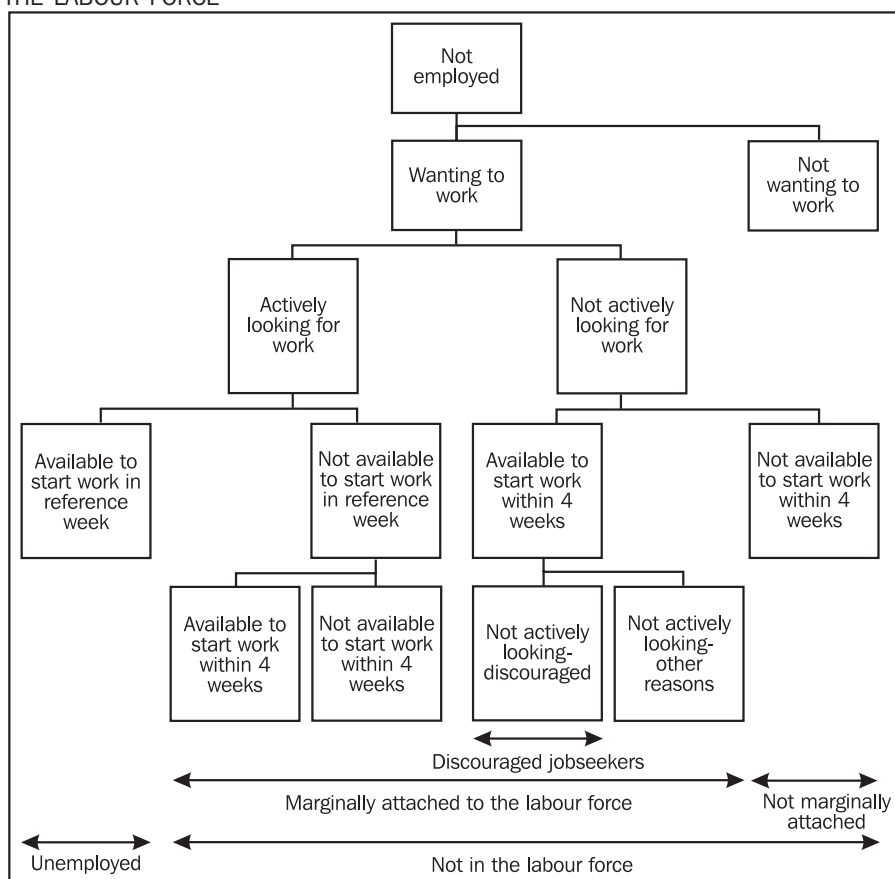
PERSONS WITH MARGINAL
ATTACHMENT TO THE
LABOUR FORCE

The ABS categorises the population into the various labour force status categories based on their labour market activity and their availability for work in a short reference period. People who are working, together with those who are looking for and available to start work, form the labour force. However, there are also people who would like to work but, for a variety of reasons, are not actively looking for work or are not currently available to start work. Some of these could enter the labour force in the short term, or could do so if labour market conditions improved. Although outside the labour force, some of these people could be considered to be part of a broader measure of underutilised labour resources.

The group of persons not in the labour force can be further dissected, as is illustrated in diagram 3. The diagram shows, for people not employed, a number of detailed categories to which persons can be classified in terms of the criteria used to establish labour force status (i.e. whether they were actively looking for work or were available to start work). Persons with a marginal attachment to the labour force are those who want to work and who meet one (but not both) of these two criteria. People marginally attached to the labour force can be further divided into subgroups based on the strength of their attachment to the labour force, as evidenced by their availability to start work in the reference week (or within 4 weeks), or whether they were actively looking for work.

The concept of marginal labour force attachment is very broad. It includes people who have a strong likelihood of joining the labour force in the near future as well as some who have little or no commitment to finding employment. Unlike the objective criteria for determining employment and unemployment, which are based on actual labour market activity and current availability for work, the criteria associated with marginal attachment to the labour force are more subjective, and the measurement against these criteria may be affected by the interpretation by survey respondents of the concepts used. For example, students may indicate that they want to work, but may have no firm intention to join the labour force before completing their studies.

DIAGRAM 3 ABS CONCEPTUAL FRAMEWORK FOR PERSONS NOT IN THE LABOUR FORCE



Discouraged jobseekers

A group of special interest within the population with marginal attachment 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 associated with the labour market. This group includes persons who believe they would not find a job for any of the following reasons:

- considered too young or too old by employers;
- lacked necessary schooling, training, skills or experience;
- difficulties with language or ethnic background;
- no jobs in their locality or line of work; or
- no jobs available at all.

Discouraged jobseekers are generally considered to be part of a broad measure of underutilised labour resources, and are included as one of the population groups in the broadest ABS supplementary measure of labour underutilisation. They share some of the characteristics with unemployed persons, although they have given up looking for work because they believe they cannot find a job.

People actively looking for work, not currently available to start work, but available within four weeks

The broadest measure of labour underutilisation also includes a further subset of the marginally attached — those persons wanting work, actively looking for work and available to start work within four weeks, but not available to start work immediately. People in this group are close to satisfying the criteria for defining unemployment, with the availability criterion being relaxed by up to four weeks.

Persons not actively looking for work, for non-labour market reasons

While discouraged jobseekers are of particular interest, they represent only a small proportion (approximately 10%) of persons who want to work, are without work, are available to start work within four weeks but are not actively looking for work. The majority of these people are not looking for a job for non-labour market related reasons such as: wanting to complete an educational course; looking after children or other family members; and ill health or physical disability. In many cases, their 'availability' is conditional on future changes to their personal circumstances.

This group is made up of a large number of people with a diverse range of labour market and other characteristics. The group is not as closely attached to the labour force as discouraged jobseekers, and the ABS is not including it in its broadest measure of underutilised labour. However, the group does warrant further investigation to determine if there are subgroups which might fit the requirements of underutilised labour resources (see Future Developments).

ADMINISTRATIVE DATA ON UNDERUTILISED LABOUR

Two non-ABS measures of underutilised labour, which are commonly referred to by labour market and social commentators, are based on Centrelink's administrative records relating to labour market income support payments. The Centrelink data provide measures of the number of unemployment allowance recipients (i.e. Newstart Allowance or Youth Allowance (other) recipients). Within the group of Newstart Allowance and Youth Allowance (other) recipients is a subgroup that the Department of Family and Community Services (DFaCS) classifies as jobseekers. Jobseekers are derived by DFaCS by excluding all people who did not receive a payment and all those known not to have been required to search for work. People excluded from jobsearch obligations include those who are undertaking training or development of self-employment opportunities, and those undertaking full-time voluntary work or a combination of voluntary and part-time work. Also included in the number of unemployment allowance recipients are people on the Work for the Dole scheme. Participants in this scheme continue to receive unemployment allowances, and are required to actively search for work. Monthly statistics are published by DFaCS in *Labour Market and Related Payments — a monthly profile*.

The DFaCS measures are difficult to relate to the ABS measures because they are based on quite different concepts, and differ significantly from the ABS measure of unemployment. In particular, unemployment allowance recipients, including jobseekers, may be employed part-time while continuing to receive their allowance, providing their income falls within the prescribed limit. The ABS classifies a person who worked for one hour or more during the survey reference period as employed. Other persons may be classified by the ABS as unemployed but not be included in the DFaCS measures — for example, those who do not apply for an unemployment allowance, or those who do not receive an allowance because their income and/or their partner's income exceeds the prescribed income limit.

The ABS considers participants in the Work for the Dole scheme to be undertaking unpaid work, and does not classify them as employed (unless they undertake paid work during the survey reference period). Since they are not employed (under the ABS definition), want to work, are actively looking for work and are available to start work, scheme participants would be considered by ABS to be unemployed.

FUTURE DEVELOPMENTS

The ABS is currently investigating a number of possible future developments to enhance the usefulness of the labour underutilisation measures. These include the development of hours-based (or 'volume') measures, the investigation of additional population groups whose labour is underutilised, and changes to data collections to improve the frequency of the measures.

Volume measures

The measures of labour underutilisation presented in this paper are limited to levels and rates based on the number of persons. This does not take into account the number of hours of underutilised labour. A more precise measure of underutilised labour could be compiled using the number of hours offered by the population groups included in the measures. ABS plans to develop an annual hours-based measure of the labour force underutilisation rate, as part of the future development of its supplementary measures, when the necessary data become available for unemployed persons.

ABS labour force surveys currently do not collect information about the number of hours sought by unemployed persons. This information will become available annually from July 2002, when it will be collected in the annual LFS supplementary survey Job Search Experience of Unemployed Persons. Currently, volume estimates could be derived using the information that is available on whether unemployed persons are looking for full-time work, or for part-time work, combined with the average number of hours worked by full-time and part-time workers. However, such estimates might not be sufficiently reliable to warrant their use.

The volume of hours of underutilised labour represented by persons in time-related underemployment is already available. Information about the number of hours usually worked and the preferred number of extra hours for persons in time-related underemployment is available from the annual LFS supplementary survey Underemployed Workers.

Over time, ABS may also consider an hours-based extended labour force underutilisation rate, although this would require the collection of additional data from people outside the labour force.

Additional population groups

ABS considers that the population groups described in this paper are the most appropriate ones, given the available data, on which to base the measures of underutilised labour. However, there may be others which should also be considered, such as other subgroups of persons with marginal attachment to the labour force.

Additional population groups
continued

While discouraged jobseekers are of particular interest, and are included in the supplementary measures, they represent only a small proportion of all persons with marginal attachment to the labour force. The majority are not looking for a job, but for non-labour market related reasons such as: wanting to complete an educational course; looking after children or other family members; and ill health or physical disability. In many cases, their 'availability' is conditional on future changes to their personal circumstances. This large and diverse group is not as closely attached to the labour force as discouraged jobseekers, and consequently is not included in the supplementary measures of underutilised labour.

The ABS is currently investigating whether other subgroups of the marginally attached (in addition to discouraged jobseekers) should be included in measures of underutilised labour. For example, persons who believe they cannot get work because employers would consider them unsuitable because of their disabilities could be regarded as an analogous situation to discouraged jobseekers who believe employers may consider them to be too old, or to lack skills and experience.

Greater frequency

Information about unemployed persons and the long-term unemployed is available on a monthly basis from 1978, and quarterly since 1964. As a result, the unemployment rate and the long-term unemployment rate are already available as a long time series. Information to support the other two labour underutilisation rates is currently available only on an annual basis.

Data on underemployment is available annually since September 1994. As a result, the labour force underutilisation rate can be derived on an annual basis, for September of each year, only since 1994. Although some underemployment data are currently collected quarterly in the Labour Force Survey, the data collected do not provide measures of time-related underemployment as defined in this paper. ABS is currently investigating the timing options for making the minor changes to the LFS questionnaire to enable time-related underemployment to be measured quarterly. This would enable the labour force underutilisation rate to be compiled quarterly.

Data on one of the groups of persons with marginal attachment (those actively looking for work and available within four weeks) are available annually since September 1988, and monthly from April 2001. Information for discouraged jobseekers is available annually only. As the extended labour force underutilisation rate includes underemployed persons, it can only be derived (on an annual basis) since 1994. While ABS has no plans at present to collect data on discouraged jobseekers on a more frequent basis, it will keep priorities for such data under review in the light of uses made of the extended labour force underutilisation rate.

BIBLIOGRAPHY

- ABS publications *Labour Statistics: Concepts, Sources and Methods, 2001* (Cat. no. 6102.0)
- Information Paper: Implementing the Redesigned Labour Force Survey Questionnaire, 2001* (Cat. no. 6295.0)
- Labour Force, Australia, Preliminary* (Cat. no. 6202.0) — Monthly
- Labour Force, Australia* (Cat. no. 6203.0) — Monthly
- Persons Not In the Labour Force, Australia* (Cat. no. 6220.0) — Annual
- Underemployed Workers, Australia* (Cat. no. 6265.0) — Annual
- Other publications
- Bregger, J.E. and Haugen, S.E. 1995, BLS Introduces New Range of Alternative Unemployment Measures, in *Monthly Labour Review*, October 1995, Bureau of Labour Statistics, Washington D.C.
- Central Statistical Office, Ireland, *Quarterly National Household Survey*, Dublin
- Department of Family and Community Services 2001, *Labour Market and Related Payments — a monthly profile, October 2001*
- International Labour Office 1982, *Thirteenth International Conference of Labour Statisticians — Report of the Conference*, Geneva
- International Labour Office 1998, *Sixteenth International Conference of Labour Statisticians — Report of the Conference*, Geneva
- Hussmans, R. Mehran, F. and Verma V. 1990, *Surveys of Economically Active Population, Employment, Unemployment and Underemployment: An ILO Manual on Concepts and Methods* International Labour Office, Geneva.
- Organisation for Economic Co-operation and Development 1987, *Employment Outlook, September 1987*, Paris
- Organisation for Economic Co-operation and Development 1995, *Employment Outlook, July 1995*, Paris
- Sorrentino, C. 1995, International Unemployment Indicators, 1983-93, in *Monthly Labour Review*, August 1995, Bureau of Labour Statistics, Washington D.C.
- Statistics Canada 1999, *Labour Force Update: Supplementary Measures of Unemployment, Summer 1999* (Catalogue no. 71-005-XPB), Ottawa.
- United Nations, International Monetary Fund, Organisation for Economic Co-operation and Development, World Bank and Commission of the European Communities 1993, *System of National Accounts 1993*. Brussels/Luxembourg, New York, Paris, Washington D.C.

TABLES AND GRAPHS

1 MEASURES OF LABOUR UNDERUTILISATION—POPULATION COUNTS BY SEX

September	<i>Unemployed</i>			<i>Persons not in the labour force(a)</i>	
	<i>Long-term unemployed</i>	<i>Total</i>	<i>Underemployed</i>	<i>Actively looking for work, not available in reference week but available to start work within 4 weeks</i>	<i>Discouraged jobseekers</i>
	'000	'000	'000	'000	'000
MALES					
1994	173.3	470.3	196.5	15.1	31.7
1995	142.5	448.8	220.4	13.7	39.0
1996	134.2	450.8	223.8	15.8	29.5
1997	153.2	452.9	214.9	14.6	39.7
1998	148.1	429.8	217.5	12.6	36.7
1999	123.0	392.1	181.8	18.3	36.9
2000	95.0	353.2	191.4	21.6	32.4
FEMALES					
1994	98.4	328.4	262.0	23.3	74.8
1995	68.3	286.1	297.3	19.1	72.9
1996	80.9	317.2	277.5	18.9	89.4
1997	84.6	306.5	292.5	21.1	78.7
1998	78.0	301.4	284.0	20.6	74.3
1999	68.6	287.7	273.7	27.2	68.9
2000	51.5	243.5	244.9	20.4	74.1
PERSONS					
1994	271.7	798.8	458.5	38.4	106.5
1995	210.8	734.9	517.8	32.8	111.9
1996	215.1	768.1	501.2	34.7	118.9
1997	237.8	759.4	507.3	35.7	118.4
1998	226.2	731.2	501.4	33.2	110.9
1999	191.6	679.8	455.5	45.5	105.8
2000	146.4	596.7	436.3	42.0	106.5

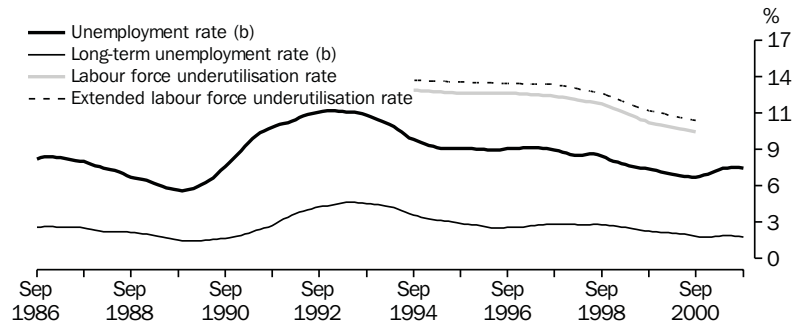
(a) Data on underemployed workers and persons not in the labour force use definitions applying before the April 2001 Labour Force Survey. See Appendix 3.

2 MEASURES OF LABOUR UNDERUTILISATION—RATES BY SEX

<i>September</i>	<i>Long-term unemployment rate</i>	<i>Unemployment rate</i>	<i>Labour force underutilisation rate(a)</i>	<i>Extended labour force underutilisation rate(a)</i>
	%	%	%	%
MALES				
1994	3.4	9.2	13.1	13.9
1995	2.7	8.6	12.9	13.8
1996	2.6	8.6	12.9	13.6
1997	2.9	8.6	12.7	13.6
1998	2.8	8.0	12.1	12.9
1999	2.3	7.2	10.6	11.5
2000	1.7	6.4	9.9	10.8
FEMALES				
1994	2.6	8.6	15.4	17.6
1995	1.7	7.3	14.9	16.9
1996	2.0	8.0	14.9	17.2
1997	2.1	7.6	14.9	16.9
1998	1.9	7.3	14.2	16.1
1999	1.6	6.8	13.4	15.3
2000	1.2	5.6	11.3	13.2
PERSONS				
1994	3.0	9.0	14.1	15.5
1995	2.3	8.1	13.8	15.1
1996	2.3	8.3	13.8	15.2
1997	2.6	8.2	13.6	15.0
1998	2.4	7.7	13.0	14.3
1999	2.0	7.1	11.8	13.2
2000	1.5	6.1	10.5	11.9

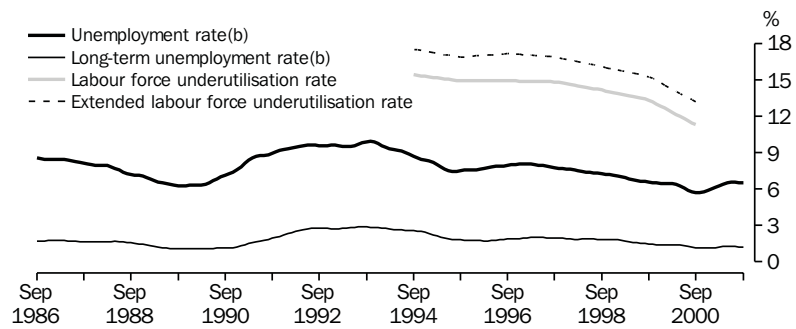
(a) Data on underemployed workers and persons not in the labour force use definitions applying before the April 2001 Labour Force Survey. See Appendix 3.

3 MEASURES OF LABOUR UNDERUTILISATION(a), Males



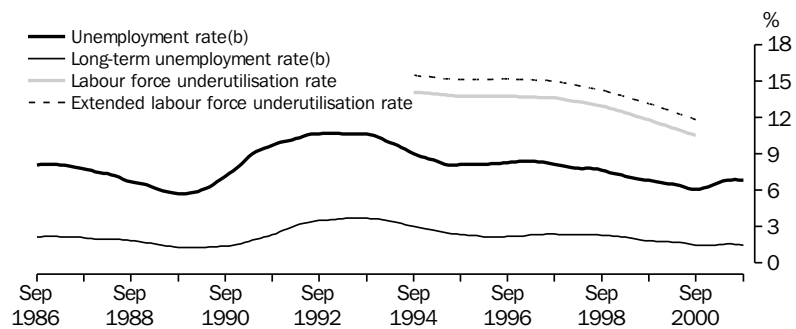
(a) Data on underemployed workers and persons not in the labour force use definitions applying before the April 2001 Labour Force Survey. See Appendix 3.
 (b) Trend series.

4 MEASURES OF LABOUR UNDERUTILISATION(a), Females



(a) Data on underemployed workers and persons not in the labour force use definitions applying before the April 2001 Labour Force Survey. See Appendix 3.
 (b) Trend series.

5 MEASURES OF LABOUR UNDERUTILISATION(a), Persons



(a) Data on underemployed workers and persons not in the labour force use definitions applying before the April 2001 Labour Force Survey. See Appendix 3.
 (b) Trend series.

The ABS bases its definitions of employment and unemployment on international standards adopted by the International Conference of Labour Statisticians (ICLS), a technical committee of the International Labour Organisation (ILO). The current definitions were adopted by the ICLS in 1982, following a review of the previous definitions which dated from 1954. However, the underlying conceptual basis for measuring employment and unemployment has remained essentially unchanged since 1954, reflecting its continued acceptance by the international community.

The ILO concept of work for purposes of measuring employment is based on the concept of production as defined by the United Nations System of National Accounts (SNA). This means that any economic activity, of whatever duration, falling within the SNA production boundary, is considered as work for the purpose of measuring employment.

For practical reasons, the ILO standards specify that the concept should be interpreted as paid work for at least one hour in a short reference period, such as one week or one day. This 'one hour' criterion in the definition of employment is also considered fundamental to the ILO definition of unemployment, which refers to a situation of being completely without work.

EMPLOYMENT

The international standard concept of employment (Thirteenth ICLS, 1982) is based on the principle that a person must have been engaged in some economic activity (work) over a short reference period. Employment is defined broadly in the international guidelines as all persons engaged in one or more hours of work during the reference period, as well as some persons temporarily absent from work.

According to the ILO definition, employed persons comprise those above the age specified for measuring the economically active population, in paid employment or self-employment, during a specified reference period. Paid employment includes persons who performed some work for wages or salary, in cash or in kind, and persons temporarily absent from a paid employment job but who retained a formal attachment to that job. Self-employment includes persons who performed some work for profit or family gain, in cash or in kind, and those with an enterprise but temporarily not at work during the specified reference period for some specific reason.

The notion of 'some work' is interpreted as work for at least one hour. This approach ensures consistency between measures of employment and measures of production of goods and services, as all work (however little) contributing to national production is included in measures of employment.

EMPLOYMENT *continued*

The ILO definition of employment specifies criteria for determining 'temporary absence from work'. Different criteria are used for absences from paid employment and self-employment. Persons absent from paid employment are considered employed provided they retain formal attachment to a job or business. Formal attachment occurs when one or more of the following criteria are met:

- the continued receipt of wage or salary during the absence from work;
- an assurance of a return to work following the end of the absence from work, or an agreement as to the date of return (or at least a reasonable expectation of a return to work);
- a short duration of absence from the job (which, wherever relevant, may be the duration for which workers can receive compensation benefits without obligation to accept other jobs).

The notion of formal attachment applies only in respect of absences from jobs involving paid employment. Persons in self-employment who are 'with an enterprise but not at work' (i.e. temporarily absent from work for some specific reason) are considered employed. The international standards do not set out formal criteria for temporary absence from self-employment because of the diverse working patterns of the self-employed. However, guidelines for the self-employed recognise that the continued existence of the enterprise and an acceptable duration of absence (indicated, for example, by the reason for absence) may be sufficient.

UNEMPLOYMENT

The international standard definition of unemployment (Thirteenth ICLS, 1982) requires the simultaneous satisfaction of each of the following criteria:

- without work;
- actively seeking work; and
- currently available for work.

Unemployed persons are therefore defined as persons who, during a specified reference period, meet all of the above criteria. In surveys applying the international standards, the active job search criterion is waived for persons waiting to start a new job that they have already obtained.

Without work

The purpose of the 'without work' criterion is to ensure that employment and unemployment are mutually exclusive. As precedence is given to employment, a person should only be classified as unemployed if they do not satisfy the criteria for employment. The 'without work' criterion refers to a total lack of work: that is, not in paid employment or self-employment, as defined in international standards for employment. Persons who should be considered without work therefore should not have undertaken any work at all (not even for one hour) during the reference period, nor should they have been temporarily absent from a job to which they had a formal attachment.

Actively seeking work The 'actively seeking work' criterion requires that at least one active step to seek work (in either a paid employment job or a self-employment job) must be taken in the reference period. Active steps to seek employment include: "registration at a public or private employment exchange; application to employers; checking worksites, farms, factory gates, market or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery, or equipment to establish own enterprise; arranging for financial resources; applying for permits and licences, etc." (Thirteenth ICLS 1982). According to the definition, the job search period may be extended into the period prior to the basic reference period for the survey. The purpose of extending the job search period in this way is to take account of the time lags which often follow initial steps to obtain work (e.g. while waiting for the outcomes of job applications). A four week reference period is suggested in the guidelines as the practical maximum for a survey of a monthly frequency.

The active job search criterion is waived for persons waiting to start a new job that they have already obtained and that is to begin after the end of the reference period (these persons are referred to as 'future starters'). According to the international standards, such persons need only meet the 'without work' and 'available for work' criteria. The active search criterion is waived because, having already secured employment, persons waiting to take up a job may not feel the need to look for work.

Currently available for work The availability criterion serves as a test of readiness to start work, in conformity with the aim of providing a current stock measure of the labour supply. In order to be classified as unemployed, persons must be available to start work in the reference period. Persons not available to start work in the reference period (for example, because of impediments to work such as family responsibilities, illness, etc.) should be excluded from estimates of unemployment. While the international standards recommend that the reference period for the availability criterion be the same as the basic reference period for the survey, it is recognised that many countries prefer to extend the time period forward beyond that reference period. Reasons for choosing a longer reference period include: the fact that not everyone who is seeking work can be expected to take up a job immediately when one is offered; and the fact that there are certain forms of employment where workers are employed on a pay period basis and are required to wait until the commencement of a new pay period before taking up work.

UNDEREMPLOYMENT

Current international standards recognise two forms of underemployment: time-related underemployment, which reflects insufficient hours of work in relation to an alternative employment situation that a person is willing and available to engage in; and inadequate employment situations, which refer to all those in employment who want to change their work activities and/or work environment for a set of reasons chosen according to national circumstances. Such reasons might include: insufficient use of skills and experience; inadequate income; and excessive hours. Employed persons may be simultaneously in time-related underemployment and inadequate employment situations.

Time-related underemployment

According to the international standard, time-related underemployment exists when the hours of work of an employed person are below a threshold, and are insufficient in relation to an alternative employment situation in which the person is willing and available to engage.

INTERNATIONAL DEFINITION OF TIME-RELATED UNDEREMPLOYMENT (ICLS 1998)

Persons in time-related underemployment comprise all employed persons (as defined in current international guidelines) who satisfy the following criteria:

Willing to work additional hours, i.e. wanted another job (or jobs) in addition to their current job (or jobs) to increase their total hours of work; to replace any of their current jobs with another job (or jobs) with increased hours of work; to increase the hours of work in any of their current jobs; or a combination of the above. In order to show how 'willingness to work additional hours' is expressed in terms of action which is meaningful under national circumstances, those who have actively sought to work additional hours should be distinguished from those who have not. Actively seeking to work additional hours is to be defined according to the criteria used in the definition of active job search used for the measurement of the economically active population, also taking into account activities needed to increase the hours of work in the current job.

Available to work additional hours, i.e. are ready, within a specified subsequent period, to work additional hours, given opportunities for additional work. The subsequent period to be specified when determining workers' availability to work additional hours should be chosen in light of national circumstances and comprise the period generally required for workers to leave one job in order to start another.

Worked less than a threshold relating to working time, i.e. persons whose 'hours actually worked' in all jobs during the reference period, as defined in current international guidelines regarding working time statistics, were below a threshold, to be chosen according to national circumstances. This threshold may be determined by e.g. the boundary between full-time and part-time employment, median values, averages, or norms for hours of work as specified in relevant legislation, collective agreements, agreements on working time arrangements or labour practices in countries.

Time-related
underemployment *continued*

The current international standard also notes that:

- countries should, in addition, endeavour to identify all workers who were willing and available to work additional hours during the reference period, regardless of the hours they actually worked (i.e. including those who worked more than the threshold hours); and
- countries may want to estimate the volume of time-related underemployment by aggregating the number of days, half-days or hours that each person in time-related underemployment is willing and available to work in addition to the hours actually worked during the reference period without reference to a threshold.

Inadequate employment
situations

Indicators of inadequate employment situations describe situations in the workplace which reduce the capacities and well-being of workers as compared to an alternative employment situation. However, as noted in the international standard, the statistical definitions and methods necessary to describe inadequate employment situations still have to be developed further. As such, the standard does not define inadequate employment situations. The international standard does, however, identify a number of inadequate employment situations for which countries may wish to consider producing separate indicators. These include:

- skill-related underemployment — persons in this form of inadequate employment include employed persons who, during the reference period, wanted or sought to change their current work situation in order to use their current occupational skills more fully, and were available to do so;
- income-related underemployment — persons in this form of inadequate employment include employed persons who, during the reference period, wanted or sought to change their current work situation in order to increase income limited by factors such as those listed below, and were available to do so. Factors contributing to income-related underemployment include: low levels of organisation of work or productivity; insufficient tools and equipment; insufficient training; and deficient infrastructure; and
- inadequate employment related to excessive hours — situations where employed persons wanted or sought to work fewer hours than they did during the reference period, either in the same job or in another job, with a corresponding reduction in income.

MARGINAL ATTACHMENT TO
THE LABOUR FORCE

According to international guidelines (ICLS 1982), the population not in the labour force comprises all people not currently employed or unemployed. Some of these people who are classified as not in the labour force may want to work but are classified as not in the labour force because they do not satisfy the criteria for unemployment (active job search and availability to start work).

These international guidelines suggest that, where the standard definition of employment is used, countries develop classifications of persons not in the labour force according to their relative strength of attachment to the labour market. The ILO, in its manual *Surveys of Economically Active Population, Employment, Unemployment and Underemployment*, considers that persons marginally attached to the labour force are those not economically active under the standard definitions of employment and unemployment, but who, following a change in one of the standard definitions (of employment or unemployment), would be reclassified as economically active.

The guidelines also recognise that, though not precise in concept (nor defined in the guidelines), the term 'discouraged worker' generally refers to people who want a job and are currently available for work but have given up any active job search because they believe they cannot find a job. Discouraged workers (or discouraged jobseekers, the term used by the ABS) are a small component of the marginally attached.

The ABS definitions of persons with marginal attachment to the labour force and of discouraged jobseekers are consistent with those outlined in international guidelines.

APPENDIX 2

APPROACHES TO MEASURING LABOUR UNDERUTILISATION IN OTHER COUNTRIES

Many national statistical agencies, including the ABS, regularly compile and disseminate detailed statistics of persons unemployed, in underemployment, and with marginal attachment to the labour force.

Some national statistical agencies also regularly produce indicators of the potential labour supply or of labour underutilisation to supplement their official unemployment statistics. For example, Statistics Canada, the Central Statistics Office of Ireland and the United States Bureau of Labour Statistics all produce such supplementary measures, as discussed below.

CANADA

Statistics Canada provides a list of measures of what it calls 'supplementary measures of unemployment'. These have replaced the series of supplementary measures produced from 1983 to 1995 which were based on the US BLS series.

The first four supplementary measures of unemployment are based on the number of unemployed, or components of it. The remaining rates include groups of people who are marginally attached to the labour force.

STATISTICS CANADA MEASURES OF UNDERUTILISED LABOUR

<i>Measure</i>	<i>Description</i>
R1	The number of persons unemployed for 12 months or more as a proportion of the labour force.
R2	The number of persons unemployed for 3 months or more as a proportion of the labour force.
R3	The Canadian unemployment rate, made comparable to the USA official rate.
R4	The number of unemployed persons, as a proportion of the labour force (the official unemployment rate).
R5	The number of unemployed persons plus discouraged searchers, as a proportion of the labour force plus discouraged searchers.
R6	The number of unemployed persons plus persons who are waiting for recall, replies, or long-term future starts, as a proportion of the labour force plus persons waiting for recall, replies or long-term future starts.
R7	A measure of both unemployment and underemployment (involuntary part-time) expressed in full-time equivalents.
R8	The number of unemployed persons plus discouraged searchers, persons waiting for recall, replies or long-term future starts and the underutilised portion of involuntary part-timers as a proportion of the labour force plus discouraged searchers, and persons waiting for recall, replies or long-term future starts.

The first two measures (R1 and R2) examine hardship by looking at the duration of unemployment. This refers to the number of continuous weeks that a person has been without work and searching for work or on temporary layoff.

R3 is the Canadian unemployment rate, made comparable to the USA official rate. Although both countries follow the ILO standards, and ask similar questions to determine labour force status, measurement differences exist. For example, official unemployment rates in the USA and Canada differ in their treatment of "active" and "passive" job searchers. The USA rate does not include persons whose only search method was passive (e.g. looking at job advertisements in newspapers), while the official Canadian unemployment rate includes both active and passive job searchers.

R5 incorporates unemployed persons plus discouraged searchers (in both the numerator and the denominator). Discouraged searchers are defined in Canada in much the same way as discouraged jobseekers in Australia.

R6 incorporates unemployed persons and another category of people with marginal attachment to the labour force who are not looking for work for economic reasons. These are persons who are not currently searching for work but are waiting to be recalled to a job by a previous employer, or who have applied for a job and are waiting for replies, or who had secured a job that is scheduled to start in 5 weeks or more. In 1998, the number of people in this category was about 50% higher than the number of discouraged searchers.

R7 is a more complex measure, incorporating the unemployed and a portion of underemployed part-time workers, with those underemployed and unemployed seeking part-time work adjusted to full-time equivalents. From 1997, Statistics Canada has defined the underemployed (or involuntary part-time) workers as those people who usually work less than 30 hours in their main job and are doing so because of business conditions or because they could not find work with 30 hours or more, and who have looked for work with 30 hours or more during the past 4 weeks.

The involuntary part-time workers included in R7 are expressed as 'full-time equivalents', to reflect the number of hours of potential labour supply lost to underemployment. In 1998, the average work week of involuntary part-time workers was 44% of that of full-time workers, so only 44% of involuntary part-time workers are included in R7.

Unemployed and employed people are similarly adjusted to express them as full-time equivalents. The result is that the numerator (unemployed and underemployed workers) and the denominator (the adjusted labour force that reflects the number of person-hours available in the labour supply) are expressed in full-time equivalents.

R8 is the most comprehensive of the supplementary measures produced by Statistics Canada, and takes into account groups included in R5 to R7. This includes the unemployed, discouraged searchers, those waiting to be recalled by a previous employer, those who have applied for a job and are waiting for replies, those who have lined up a job to start in five weeks or more (i.e. long-term future starts), and the underutilised proportion of involuntary part-timers. The denominator for this rate is the labour force, plus discouraged searchers, those waiting for recall or replies, and long term future starts.

IRELAND

Ireland's Central Statistics Office (CSO) presents regular 'Indicators of potential labour supply'. The three measures (S1 to S3) are all broader than the conventional unemployment rate.

- S1 is the unemployed plus discouraged workers as a proportion of the labour force plus discouraged workers.

IRELAND *continued*

- S2 is the unemployed plus marginally attached (the CSO definition) plus others not in education who want to work, expressed as a percentage of the labour force plus marginally attached (the CSO definition) plus others not in education who want to work.
- S3 is the unemployed plus marginally attached (the CSO definition) plus others not in education who want to work, plus underemployed part-time workers, expressed as a percentage of the labour force plus marginally attached (the CSO definition) plus others not in education who want to work.

UNITED STATES OF AMERICA

The US Bureau of Labour Statistics (BLS) produces six measures (U1–U6) which it labels ‘alternative measures of unemployment and other forms of labour resource underutilisation’. These replaced, in 1994, the U1 to U7 measures which BLS called the ‘alternative unemployment indicators’. Of the new measures, the first three are based on the conventional unemployment rate or components of it.

U.S. BUREAU OF LABOUR STATISTICS MEASURES OF UNDERUTILISED LABOUR

Measure	Description
U1	The number of persons unemployed for 12 weeks or longer, as a proportion of the labour force.
U2	The number of job losers and persons who completed temporary jobs, as a proportion of the labour force.
U3	The number of unemployed persons, as a proportion of the labour force (the official unemployment rate).
U4	The number of unemployed persons plus discouraged workers, as a proportion of the labour force plus discouraged workers.
U5	The number of unemployed persons plus discouraged workers, plus all other ‘marginally attached’ workers, as a proportion of the labour force plus all ‘marginally attached’ workers.
U6	The number of unemployed persons plus discouraged workers, plus all other ‘marginally attached’ workers, plus all persons employed part time for economic reasons, as a proportion of the labour force plus all ‘marginally attached’ workers.

U4 to U6 are broader than the unemployment rate.

- U4 incorporates the number of ‘discouraged workers’. These are people with marginal attachment to the labour force who are not looking for work for economic reasons. However, the group is more narrowly defined than the ‘discouraged jobseekers’ in Australia, in that they are required to have undertaken job search activity at some time in the last 12 months.
- U5 is measured as the number of unemployed people, plus the discouraged workers, plus the other marginally attached persons, divided by the labour force plus the marginally attached.
- U6, the broadest, includes the unemployed, discouraged workers, other marginally attached, and involuntary part-time workers.

International comparisons

In 1993 the US BLS prepared and published an international comparison of the BLS range of ‘alternative employment indicators’. The BLS is planning to undertake a similar exercise, using the new range of measures. The OECD published ‘supplementary measures of labour market slack’ in the Economic Outlook (1995). This examined involuntary part-time workers and discouraged workers in OECD countries.

APPENDIX 3

IMPACT OF LFS QUESTIONNAIRE REDESIGN ON MEASURES OF LABOUR UNDERUTILISATION

The ABS implemented a new LFS questionnaire in April 2001. At the same time, three minor definitional changes were made to core labour force data items to better align the survey with current international standards. The core labour force series have been revised from 1986. Additional information on changes to the LFS questionnaire is available in the ABS *Information Paper: Implementing the Redesigned Labour Force Survey Questionnaire* (Cat. no. 6295.0).

As a result of the definitional changes, there are slight differences between the labour force definitions used in the unemployment series and those used in the LFS supplementary surveys of Underemployed Workers and Persons Not in the Labour Force. Data from these two supplementary surveys are used to calculate the labour force underutilisation rate and the extended labour force underutilisation rate.

CHANGES TO LFS CORE DATA SERIES

The three minor definitional changes introduced in April 2001 revised the treatment of:

- people on short-term unpaid leave initiated by the employer (that is, people stood down for less than four weeks without pay);
- people who are unavailable to start work in the reference week due to temporary illness; and
- contributing family workers who are away from work.

An explanation of the first two changes is outlined below. The core labour force series from the LFS have been revised from April 1986 to March 2001 to adjust for these two changes. The statistical impact of the third change is considered insignificant.

IMPACT ON MEASURES OF UNDERUTILISED LABOUR

Although the core labour force series from the LFS were revised for two out of the three minor definitional changes, it was not practical to adjust the data from LFS supplementary surveys conducted before April 2001. However, an estimate can be made of the impact of these two definitional changes on the measures of labour underutilisation.

Short-term unpaid leave initiated by the employer

A change in the treatment of persons away from their job on short-term unpaid leave initiated by the employer was introduced to correct an anomaly in the LFS treatment of these persons. Before April 2001, persons who had been away from their job without pay for less than four weeks up to the end of the reference week, because of insufficient work (that is, persons temporarily stood down), were classified as unemployed. From April 2001, these persons are classified as employed, on the basis of their job attachment, in accordance with ILO guidelines.

Applying the new definition to monthly data for 1986–2001 resulted in between 7,600 and 38,300 persons per month (with a mean of 19,900) being reclassified from unemployed to employed. This decreased the unemployment rate by an average of 0.23 percentage points over that period.

Short-term unpaid leave initiated by the employer

If the new definition had been applied in the Surveys of Underemployed Workers before April 2001, there would have been an increase in the number of persons in time-related underemployment. The change would have increased the number of employed persons who usually work full-time but worked fewer (zero in this case) hours in the reference week for economic reasons (i.e. stood down, short time or insufficient work). It would also have increased the number of part-time workers, and a proportion of these would have wanted to work additional hours and would have been available for work with more hours. Although there is only limited information on which to base the estimates, it is expected that the labour force underutilisation rate in September 2000 would increase by approximately 0.1 percentage point as a result of this definitional change.

Unavailable to start work due to temporary illness

The previous LFS definition of unemployed persons included persons who are not working, are actively seeking work, but are unavailable to start work during the reference week due to temporary illness. However, ILO guidelines recommend that illness be treated similarly to other reasons for not being available to start work, and hence these people should be classified as not in the labour force. To conform with this recommendation, the LFS definition of unemployed persons was revised to exclude persons unavailable to start work due to temporary illness.

Applying the new definition to monthly data for 1986–2001 resulted in between 1,200 and 8,300 persons per month (with a mean of 4,300 persons) being reclassified from unemployed to not in the labour force. This decreased the unemployment rate by approximately 0.05 percentage points over that period.

If the new definition had been applied in the surveys of Persons Not In The Labour Force before April 2001, there would have been a slight increase in the number of persons with marginal attachment to the labour force. The change would have increased the number of 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. If it is assumed that all persons reclassified were available within four weeks, the extended labour force underutilisation rate in September 2000 would increase by 0.04 percentage points.

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2629600001019
ISBN 0 642 47832 5

RRP \$10.00