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Discussion Paper



Aboriginal unemployment statistics: policy implications of the divergence between official and case study data

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SERIES NOTE

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- to investigate issues relating to Aboriginal employment and unemployment;
- to identify and analyse the factors affecting Aboriginal participation in the labour force; and
- to assist in the development of government strategies aimed at raising the level of Aboriginal participation in the labour force and at the stimulation of Aboriginal economic development.

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Jon Altman Director, CAEPR Australian National University ABSTRACT PROPERTY AND A STORY OF THE ABSTRACT

Aboriginal unemployment in Australia has reached chronic proportions. Official 1986 Census data estimate the Aboriginal unemployment rate at 35.3 per cent, almost four times higher than the equivalent rate for non-Aboriginal Australians. This paper examines various official statistics on Aboriginal unemployment and their underlying definitional frameworks and methodologies. Comparisons are made with data from research surveys and case studies using a wide range of definitions. The paper concludes that official statistics significantly underestimate the true level of Aboriginal unemployment and obscure certain important characteristics of their labour force status. In particular, regional and community research studies report significant levels of long-term and 'invisible' unemployment and describe critical patterns of intermittent working and 'recycling' Aboriginal unemployment.

Government policy and associated programs directed toward improving Aboriginal employment levels rely heavily on official estimates of Aboriginal labour force status. The Aboriginal Employment Development Policy (AEDP) is a major initiative to improve Aboriginal employment levels, with a key objective of achieving employment equality by the year 2000. The paper argues that census data used to formulate the AEDP's statistical goals fail to accurately reflect the true extent and nature of Aboriginal unemployment, jeopardising the validity of assessments of Aboriginal unemployment levels and undermining the effectiveness of AEDP programs. Alternative approaches to estimating the level and characteristics of Aboriginal unemployment are urgently needed and are considered in the paper's conclusion.

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Foreword

When the Centre for Aboriginal Economic Policy Research (CAEPR) was established in the Faculty of Arts at the Australian National University in March 1990, the University's Faculty Research Fund made a grant to the Centre. This grant was intended for a literature-based study that would complement CAEPR's policy-oriented research agenda.

In 1991, a decision was made to use this grant for a special project that would examine important elements of the economic situation of Aboriginal people by highlighting differences between information collected, primarily by the Australian Bureau of Statistics (ABS) in large-scale official surveys like the five yearly Census of Population and Housing and other special and regular surveys like the Household Expenditure Survey and the monthly Labour Force Survey respectively; and that collected by researchers conducting community-based and regional studies.

In March 1991, Ms Diane Smith was appointed to undertake this special project. CAEPR Discussion Paper No. 13 focuses on Aboriginal unemployment statistics and the policy implications of the divergence between official and case study data. Perhaps the major policy implication of this discussion paper is that employment and training programs cannot be effectively targetted at clients most in need in the absence of unemployment statistics that accurately reflect both the extent and regional distribution of Aboriginal unemployment. The literature-based nature of her research on unemployment means that the resulting CAEPR Discussion Paper is somewhat longer than is the norm in this series. Nevertheless, I believe that this research will be of great value to policy-makers, especially as Ms Smith ends by making some concrete recommendations for improving the quality of estimates of the level and characteristics of Aboriginal unemployment.

Jon Altman Series Editor September 1991

While it is acknowledged by many that Aboriginal unemployment in Australia has reached chronic levels, there is considerable uncertainty about the exact degree or nature of the problem. Official estimates of Aboriginal unemployment are made by the Australian Bureau of Statistics (ABS) in its periodic Census of Housing and Population; by the Commonwealth Employment Service (CES) as a measurement of numbers of people registered for employment and currently unemployed; and by the Department of Social Security (DSS) when maintaining administrative records of recipients of unemployment benefits (UB).1 A major difficulty in assessing the exact situation results from the fact that official statistical data on Aboriginal unemployment collected by the ABS, CES and the DSS all vary substantially from each other as different definitions of unemployment and data collection procedures are used. While there is no reason in such circumstances why the total numbers counted as unemployed in each of these series of measurements should necessarily coincide (see Norris 1989), the official figures indicate marked discrepancies above and beyond expected variations.

Comparisons are made between these official figures and a range of published data from regional surveys and case studies. The latter invariably report higher levels of Aboriginal unemployment. A number of conceptual, methodological and cultural issues affecting the measurement of Aboriginal unemployment are raised by these comparisons which suggest that official statistics considerably understate the true level of unemployment and obscure certain critical characteristics of Aboriginal unemployment. Government policy and associated programs directed to improving Aboriginal employment levels rely heavily on comprehensive and accurate official estimates of Aboriginal participation in the mainstream labour force. Given the underestimation of Aboriginal unemployment levels by official measures, the paper concludes that alternative approaches to assessing the level and characteristics of Aboriginal unemployment are urgently needed. A number of alternative approaches are considered.

The ABS's definitional approach to Aboriginal unemployment

The Labour Force Surveys

The most widely recognised ongoing measure of levels of employment and unemployment Australia-wide is the Labour Force Survey (LFS) undertaken monthly by the ABS. Statistics obtained through these surveys are especially important for indicating the changing composition of the Australian labour force. Unfortunately, there is no Aboriginal identifier in the surveys and consequently, information on the Aboriginal labour force sample included cannot be extracted. The Australian Longitudinal Survey (ALS) conducted periodically by the ABS also obtains labour

market data on a large sample of individuals and does include an Aboriginal identifier. However, the total sample of Aboriginal people is extremely small (for example, 126 persons in 1985) and is biased towards urbanised, residentially stable Aboriginal populations (Miller 1989; Smith 1991).

The Miller Committee of Review of Aboriginal Employment and Training Programs (Miller 1985) noted its reliance on quantitative data from the ABS five-yearly Census and observed that the extent of Aboriginal unemployment was relatively unknown compared with unemployment amongst the non-Aboriginal population. Continuing failure to use an Aboriginal identifier in the monthly LFS means that little is known from official statistics about the changing nature of Aboriginal unemployment or Aboriginal attachment to the labour force.

The Census of Population and Housing

The main source of national quantitative data on Aboriginal employment and unemployment levels is the Census of Population and Housing. The ABS uses a set of strictly defined concepts of employment, unemployment and the labour force as their final units of analysis of data from the Census and Labour Force Surveys.

The currently economically active population: The International Labour Organisation (ILO) concept of the 'currently economically active population' has been adopted by the ABS as the basis for its definition of the Australian labour force. The 'currently active population' consists of those people aged 15 years and over who are classified as employed or unemployed during a current, specified brief period of time, such as, 'last week'. This group provides the broad unit of study within which the ABS records and quantifies each Australian's actual level of gainful work; that is, 'economic work' from which the individual can expect some remuneration, either in cash or in-kind (ABS 1986; Rogers 1985). Work by homemakers, volunteer workers, and the 'unpaid' work of huntergatherers, are not included as 'economic work' within the Census. Within this framework the ABS uses strict, operational definitions of 'employment' and 'unemployment' as devices for classifying each person with respect to their current work status.

Employment status: The 1986 Census included nine questions relating to economic work, which were asked of all persons aged 15 years and over. These questions focused on industry sector, labour force status, name of employer, journey to work, occupation and hours worked. Each person aged 15 years and over is first asked whether he or she had a full-time or part-time job of any kind in the week previous to the census interview. In response to this question, a respondent is considered to be employed if he or she: worked for one hour or more that week, for pay, profit or

payment in-kind; worked as an unpaid helper in a family business, if they worked for 15 hours or more; had a job from which they were on leave or temporarily absent, for less than four weeks; or were on strike or temporarily stood down.

Within this classification, employment is divided into full-time (working more than 35 hours per week), and part-time (working less than 35 hours per week, but one hour or more). The census question on hours worked creates a division into eight groupings (none, 1-15 hours, 16-24, 25-34, 35-39, 40, 41-48, 49 hours or more). Those persons who lost or obtained jobs during the survey week are classified by the ABS as employed (Steinke 1984: 405).

Unemployment status: The ABS assessment of unemployment is firstly one of exclusion; that is, a person is unemployed if they are not employed according to the above criteria. But importantly, they are only finally classified as unemployed if they are also actively seeking work and are currently available for work. A census question (No. 26), determines this status by asking whether the person has actively looked for work at any time during the four weeks previous to the census interview. Actively looking for work specifically means '... checking with or being registered with the Commonwealth Employment Service; writing, telephoning or applying in person to an employer for work; or advertising for work' (ABS Census Questionnaire, Household Form: 5). Only those people who are classified as '... taking active steps to find work' (Rogers 1985: 17) are classified as unemployed. Unemployment status is thus reckoned from an assessment of the four weeks prior to the specific point in time at which the census questionnaire is completed.

Labour force status: Aboriginal people who are classified as either employed or unemployed are said to comprise the Aboriginal labour force. All other Aboriginal persons within the working age population (persons aged 15-65 years) are considered to be outside the labour force. The latter category is a residual one of exclusion based on an individual's assessed failure to meet the criteria of capacity and current availability for work within the mainstream labour market. The category includes persons who are retired, pensioners receiving invalid and sickness benefits, those receiving supporting parents benefits, those who are not registered with the CES for employment, persons involved in so-called 'home duties', bonded trainees (including trainee teachers) and those in full-time study, cadets, and all others who are considered to not be currently and actively searching for work (Rogers 1985).

Each Aboriginal person of working age is thereby assigned to one of three mutually exclusive categories: employed or unemployed within the labour force, or not in the labour force. The ABS does recognise that within this last category there may be people who are discouraged from seeking employment for various reasons and classifies them as discouraged jobseekers, but only if they are available to start work within four weeks of being offered a job. This category of persons are not statistically counted in the Census, although estimates of the numbers of discouraged workers are made in the LFS, and in a specific survey of discouraged workers, where they are placed in a special category of being 'marginally attached' to the labour force (Rogers 1985). Various measurements of Aboriginal participation and performance within the mainstream economy are based on these classifications. Particular emphasis is invariably given to the actual number of Aboriginal people employed and unemployed; the associated rates (that is, the percentage of the labour force who are either unemployed or employed); and to the Aboriginal labour force participation rate (that is, the percentage of the working age population who are in the labour force).

The Census has no further quantitative data that describes the specific nature of Aboriginal unemployment, and it may well be outside the scope of the Census to deal with the issue. For example, data are not collected as to whether a currently unemployed person has worked at any other time during the previous year and if so, for how long; about the duration of their current spell of unemployment; or about the individual's job search experience over a longer period of time. Certainly, no questions are asked as to whether they have performed any 'work' other than the ABS defined 'economic work', or whether there is in fact, any employment available to people in certain geographic locations. Consequently, there is little clarification of the patterns of relationship between Aboriginal employment and unemployment, or of the specific nature of Aboriginal unemployment. Assignment to the Census and CES category of unemployed is first and foremost a measurement of current Aboriginal labour force participation in the dominant market economy.

Understanding the complexities of Aboriginal unemployment statistics

The Aboriginal labour force participation rate, and in particular the unemployment and employment components, are invariably referred to when indicating the progressive decline in Aboriginal labour market prospects. These rates are set out in Table 1. However, aggregate census data often obscures important regional and cultural variations underlying Aboriginal labour force status. It is important to break down census data on Aboriginal unemployment according to age and sex, and especially, to consider variations within the Aboriginal population itself based on its geographic distribution.

1986 Census data

Data from the 1986 Census indicate that the Aboriginal labour force participation rate was considerably lower than for the total population, 48 per cent compared to 60 per cent. Further, Table 1 shows that over a 15 year period from 1971, the growth in Aboriginal participation rates was small: from 45.6 to 48.3 per cent. Overall participation rates were maintained at a fairly constant rate by the decline in numbers of Aboriginal people in employment (decreasing by 10 per cent over 15 years) being balanced out by an increasing growth in the level of Aboriginal unemployment (by 13 per cent over 15 years).

Table 1. Labour force participation rates by sex and population: 1971-86.

Year	Labour force %	% not in labour forcea	Total working age	Year	Labour force %	% not in labour forcea	Total working age
Aboriginal males				Total r	nales	incura.	i anther
1971	66.9	33.1	28,943	1971	80.3	19.7	4,532,154
1976	68.8	31.2	45,649	1976	79.3	20.7	4,884,460
1981	63.4	36.6	44,919	1981	77.3	22.7	5,394,929
1986	63.1	36.9	66,419	1986	73.5	26.5	5,904,292
Aborigi	nal females			Total f	emales		
1971	23.6	76.4	28,005	1971	37.1	62.9	4,553,432
1976	30.2	69.8	45,677	1976	43.8	56.2	4,973,640
1981	31.9	68.1	46,901	1981	45.6	54.4	5,524,497
1986	34.5	65.5	70,714	1986	46.8	53.2	6,061,019
Aboriginal population				Total population			
1971	45.6	54.5	56,948	1971	58.7	41.3	9,085,586
1976	49.5	50.5	91,327	1976	61.4	38.6	9,858,098
1981	47.3	52.7	91,819	1981	61.3	38.7	10,919,426
1986	48.3	51.7	137,133	1986	60.0	40.0	11,965,311

a. In Table 1, the category 'not stated' has been included within 'Not in the labour force'.

Source: Adapted from Tesfaghiorghis and Altman (1991: 10-11).

Census data reveal that Aboriginal labour force participation rates varied according to geographic location: from 57 per cent in major urban centres to 45 per cent in rural localities (ABS 1991: 21). Over one third (23,300) of Aboriginal people regarded as not being in the labour force

lived in rural areas, many of them in isolated Aboriginal communities and outstations (ABS 1991: 21). In an analysis of census data on Aboriginal economic status according to Aboriginal and Torres Strait Islander Commission (ATSIC) regional council areas, Tesfaghiorghis (1991) shows that the variations in labour force participation rates were more pronounced between Aboriginal populations than between the Aboriginal and non-Aboriginal populations. The highest labour force levels in some ATSIC regions were 2.5 to 3.3 times higher than that of regions with the lowest levels and in many areas the majority of the working age population was not in the labour force.

There are a number of standard ways of representing census data on unemployment using the ABS-adopted ILO definitions. Unemployment can be measured in terms of the incidence of unemployment, sometimes referred to as the unemployment/population ratio; that is, the numbers officially classified as unemployed measured as a percentage of the total working age population (as opposed to a percentage of the labour force). In the 1986 Census 17 per cent of the total Aboriginal working age population was unemployed, compared with 5.6 per cent of the total working age population. Over the 15 years from the 1971 Census, the proportion of unemployed Aboriginal people has grown from four people in a 100 to 17 in a 100, compared to the current total population unemployment ratio of approximately six in a 100 (see Tesfaghiorghis and Altman 1991). This increase is partly a function of Aboriginal population growth and perhaps of better statistical collection methods; but it also represents a real growth in the proportion of Aboriginal people classified as unemployed and suggests that Aboriginal people are remaining without work for longer periods (see Gregory 1984: 17).

In comparison with the incidence of unemployment, the unemployment rate measures the numbers of people officially classified as unemployed as a percentage of the labour force and is a more exclusive approach to estimating unemployment. Data from the 1986 Census presented in Table 2 indicate an unemployment rate of 35.3 per cent, representing some 23,400 people. This unemployment rate has increased by 26 per cent from 1971 to 1986. Measured within the defined framework of the labour force, Aboriginal unemployment in 1986 was almost four times higher than that of the total population which had an unemployment rate of 9.2 per cent.

Finer level descriptions can be made of Aboriginal unemployment according to sex, age and regional variations reported by the Census. Within the Aboriginal working age population, the numbers of people classified as being in the labour force and outside the labour force are almost inversely identical for men and women. Sixty-three per cent of Aboriginal men in the working age population are in the labour force,

whilst some 37 per cent are not. For women the reverse is approximately the case. While Aboriginal women have far lower levels of participation than men, their overall participation over the last 15 years has increased by 11 per cent. Over the same time, Aboriginal men's involvement in the labour force has declined by about 4 per cent (Tesfaghiorghis and Altman 1991: 12).

Table 2. Unemployment rates (per cent) by sex and population: 1971-86.

Sex	1971	1976	1981	1986
Aboriginal population	on			the state of
Male	9.6	18.3	25.9	36.0
Female	8.3	16.8	22.1	34.1
Total	9.3	17.8	24.6	35.3
Total population				
Male	1.5	4.1	5.5	9.0
Female	2.3	5.0	6.8	9.6
Total	1.7	4.4	5.9	9.2

Source: Adapted from Tesfaghiorghis and Altman (1991: 14).

Aboriginal men's participation in the labour force has decreased across all age groups, while women in all age groups have increased their participation. In particular, women aged from 20 to 44 years have increased their participation by 15 per cent. Whilst the withdrawal of Aboriginal men from participation in the labour force has in fact been proportionally less than that for the total male population (4 per cent as compared with just over 9 per cent decrease) Aboriginal women have increased their overall participation rate in comparison to women in the total population, by 11 per cent compared to 8 per cent.

According to census data one in three men in the prime working age group (25 to 54 years) were unemployed in 1986. Whilst Aboriginal males had higher employment and unemployment levels than females in absolute terms, trends suggest that Aboriginal women are increasingly becoming unemployed, partly as a result of their rapid entry into the labour force. In other words, while Aboriginal women have increasingly joined the labour force, the incidence of employment amongst the female Aboriginal working age population over the last 15 years has increased by 1 per cent, whereas the incidence of their unemployment has increased by

9.9 per cent (see Daly 1991; Tesfaghiorghis and Altman 1991). At the moment, Aboriginal women appear to be joining the labour force to become unemployed.² Youth unemployment is especially high amongst the Aboriginal population (see Kirby 1985; M. Miller 1985; P. Miller 1989). Young men in the age range 15-19 years have decreased their participation in the labour force by 6 per cent over the last 15 years, and the unemployment rate for Aboriginal youth of both sexes runs at 45 per cent. In general, Aboriginal unemployment at every age grade was at least three times higher in 1986 than that of the total population.

When unemployment levels are considered by State and Territory, census data indicate that those with smaller Aboriginal populations and fewer remote populations (Victoria and Tasmania and the Australian Capital Territory) have lower overall unemployment levels, while States with larger populations and greater numbers living in remote and rural areas (such as Western Australia, New South Wales and Queensland) have higher overall levels of unemployment, of between 16 and 20 per cent. The puzzling anomaly is the Northern Territory which has an official unemployment rate of 13.4 per cent that is slightly lower than Victoria's. The Miller Report (1985: 51) noted a similar anomaly in the 1981 unemployment level and argued then that it reflected a low level of census recording rather than a relative absence of unemployment. This would still seem to be the case. An important explanation for this seemingly low level of Aboriginal unemployment is the fact that the Northern Territory also has the lowest labour force participation rate of all other States and Territories (see Ross 1990: 3; Tesfaghiorghis and Gray 1991: 58-9).

Approximately 71,000 Aboriginal people of working age (including some 6,994 in the 'not stated' census category) are officially classified as being outside the labour force; they account for approximately 52 per cent of the working age population. This figure is some 12 per cent higher than the percentage of the total working age population outside the labour force. It is important to note when considering official labour force statistics on Aboriginal employment and unemployment, that only half of the Aboriginal population between 15 years and over is being considered. The other half, for definitional reasons, is not considered to be part of the Aboriginal labour force; although many may well regard themselves as unemployed and wanting work. About 5 per cent, some 7,000 Aboriginal people, did not respond to the labour force status question on the 1986 Census. Just over half of these people come from rural and remote areas, and at 8 per cent, the rural rate of non-response was about double that for the urban rate (ABS 1991: 21). It may well be that for residents in such areas, where labour markets are small or non-existent, census questions about labour force status are either irrelevant or incomprehensible.

Commonwealth Employment Service data

In 1981 the compilation by the CES of monthly Aboriginal unemployment statistics ceased (owing to recommendations by the Fraser Federal Government's 'Razor Gang'). A further and current CES directive means that no data on levels of unemployment are made available to the public. Information on CES levels of Aboriginal unemployment used below are obtained from published sources.

The CES acts as an employment agency and job seekers wishing to use its services can register for employment. Via registration they become eligible to obtain unemployment benefits from the DSS. When people apply to register they are asked if they are currently employed, that is, working more than 15 hours a week. Those who are not are counted as unemployed as long as they are seeking full-time work and available to commence work. Jobless people looking for part-time work only are not registered as unemployed by the CES and are consequently not eligible for unemployment benefits from the DSS. This category of persons is both large and increasing amongst the total population (Steinke 1984: 408) and may also be increasing in the Aboriginal population.

Census figures for Aboriginal unemployment are now consistently lower than numbers recorded by the CES.³ Norris (1989: 173) points out that this variance between Census and CES data also exists for the total population where 1986 CES unemployment figures were 42.7 per cent greater than those obtained by the ABS Labour Force Survey in 1986. The 1981 Census reported 10,652 Aboriginal people unemployed, while in March 1981 the CES registered some 19,564 unemployed (Cousins and Nieuwenhuysen 1983: 14, 41). In September 1986, the CES figure (Department of Aboriginal Affairs 1987: 34) for the total number of registered unemployed Aboriginal people was 29,231, over 6,000 more than the number of unemployed Aboriginal people recorded in the 1986 Census count two months earlier.

A significant factor determining unemployment is the existing length of unemployment: the longer a person is unemployed, the longer they can expect to stay unemployed (Norris 1989: 191-5; Gregory and Foster 1984: 415). In contrast to the Census, CES data include estimates of the duration of unemployment. At the time of the 1986 Census, CES data reported approximately 24 per cent (6,972 persons) of registered unemployed Aboriginal people as long-term unemployed, that is, unemployed for 12 months or more. In June 1990, CES data indicate that the numbers of Aboriginal long-term unemployed had risen to approximately 30 per cent (10,684 persons) of those Aborigines registered as unemployed; almost twice the rate for non-Aboriginal people in the same period (Junankar and Kapuscinski 1991: 10).

There are methodological problems in comparing CES and census data. The CES unemployment figures are based on registrations of Aboriginal people who indicate that they are either unemployed or are working for less than 15 hours per week. As noted above, the ABS takes a more restrictive definition of unemployment whereby an individual is only classified as unemployed if working for less than one hour a week. The CES measure is generally not regarded as exact because it includes some people who have become ineligible but still receive benefits, and those who are eligible but do not claim them or have had their benefit stopped as a result of non-compliance with administrative procedures. CES figures only include those people who have access to their offices or who are contacted by CES vocational officers and who are seeking full-time work, whilst the category of unemployed in ABS surveys include those who may be seeking part-time work and job-hunting by means other than the CES (Steinke 1984). The reliability of CES figures is also partially undermined by the fact that Aboriginal identity is decided by CES officers, not by self-identification as in the Census.

According to its use of a more flexible operational definition of unemployment, CES figures will invariably be higher than those obtained by the ABS. However, it is argued in turn that CES figures are themselves underestimates of the actual level of unemployment, both for the total and the Aboriginal population (Cousins and Nieuwenhuysen 1983: 14; Miller 1985: 71; Steinke 1984: 411). Aboriginal mobility and residence in remote areas means that there is often a time lag between going onto and off unemployment benefits (see Loveday 1985; Cousins and Nieuwenhuysen 1983: 14). An early survey of CES registrations by the Department of Aboriginal Affairs (DAA) estimated that actual Aboriginal registrations could have been 15-30 per cent greater than the figures indicated (Cousins and Nieuwenhuysen 1983: 14).

The DSS adopts CES registration of unemployment as its criterion for payment of unemployment benefits. Given the potential receipt by all people registered with the CES of unemployment benefits from DSS, the CES 1990 figures indicate some 35,188 Aborigines as unemployed and receiving benefits (Junankar and Kapuscinski 1991). Demographic projections by Tesfaghiorghis and Gray (1991) indicate a potential Aboriginal working age population of some 192,323 by the year 2000. On the basis of that projection Altman (1991a: 163) estimates an Aboriginal labour force of 73,500 in 1991 (assuming similar participation rates as at 1986). By measuring the CES 1990 estimate of unemployed Aborigines as a percentage of this projected labour force, the result is an unemployment rate of 48 per cent in 1991. In 1989/90 data from the Aboriginal and Torres Strait Islander Commission (ATSIC) indicate that some 13,800 people had foregone unemployment benefits to transfer to the Community Employment Development Projects (CDEP) scheme.

Much depends on whether CDEP payments are classified as employment, or as unemployment benefit equivalents and therefore unemployment (see below). If the latter, and CDEP numbers are included with CES registrants, then the potential, current Aboriginal unemployment rate based on CES data increases markedly from 48 per cent to a massive 67 per cent.

DAA and ATSIC data

Up until 1985 the DAA assessed the state of Aboriginal employment and unemployment in its community profile statistics. DAA community profile data focus on Aboriginal townships on Aboriginal land or reserves, outstations and other small groups, town populations to a maximum of 500 people, and town camps; 'other urban' and 'major urban' locations were excluded. Community profile data indicated consistently high levels of unemployment.

Unpublished data from early DAA community surveys of Queensland Aboriginal communities, report unemployment rates between 65 and 85 per cent for Cape York communities (Altman and Nieuwenhuysen 1979: 39), and early DAA estimates for non-metropolitan urban and rural areas of New South Wales indicated unemployment rates averaging 54 per cent, with some exceeding 80 per cent (ibid: 126). The 1981 DAA community profiles enumerated some 69,000 Aborigines, close to 43 per cent of the total Aboriginal population recorded in the 1981 Census. Data from these profiles indicated that unemployment in so-called Aboriginal towns and outstations averaged over 60 per cent, and averaged 58 per cent for Aboriginal populations in all communities throughout Australia in an estimated total labour force (in Aboriginal communities) of 35,456 (Department of Aboriginal Affairs 1981: 38-41). The 1981 Census Aboriginal unemployment rate was 24.6 per cent. DAA community data for 1983 indicated that some 80 per cent of the Aboriginal working age population in surveyed communities were not formally employed.

The DAA warns users of the various limitations of the coverage and reliability of its profile data and the series has been discontinued. DAA profile and survey estimates do not use the ABS-adopted definition of labour force, employment and unemployment. Data were collected by departmental area officers using a definition of unemployment that invariably refers to people who are jobless within a community's total working age population. Community profile unemployment figures are closer to a measurement of the incidence of unemployment where the definition of unemployment used is more flexible than that adopted by the ABS, partially explaining why their estimates are much higher than either census or CES data. As Altman (1988: 203) also notes, they do not acknowledge that a proportion of this population is informally employed in subsistence activities and manufacturing artefacts for sale; although

official surveys such as the Census similarly fail to recognise subsistence production as a form of economic work.

The DAA community profile data obtained for particular communities indicate higher levels of joblessness in both remote and rural areas, in proportional terms, than officially recorded measures (see Miller 1985: 72-3). Evidence from field-based case studies tends to confirm these higher estimates of unemployment. It may well be that some Aboriginal people in remote areas who fit into an expanded definition of unemployment would regard themselves as working in the informal Aboriginal economy. If the latter activities were included as 'economic work' and classified as employment, then some of these people would enter the category of the employed, albeit within a wider definition of the labour force (see Altman 1985, 1991b). Unfortunately, ATSIC no longer collects quantitative data on rates or levels of Aboriginal employment and unemployment for communities. ATSIC legislation encourages regional councils to gather social and economic data relevant to their areas for planning purposes. Collection of uniform data on levels of Aboriginal unemployment in all ATSIC regions should be important components of such baseline data.

Field-based research data on Aboriginal unemployment

Unofficial estimates of Aboriginal unemployment fall into two very broad categories. One consists of fieldwork studies using direct observation, usually of smaller, discrete Aboriginal populations (such as an outstation, sets of families at a settlement, or groups within one community). The other broad category is based on research surveys using questionnaires with specified definitions and analytical objectives. The latter type of research studies are often able to cover a more diverse sample of the Aboriginal population. The common characteristic of both approaches is an ability to formulate operational definitions of employment and unemployment, some of which are more rigorous, or more directly comparable with official definitions than others. Both types of research provide valuable explanations of factors causing local variations in Aboriginal unemployment levels as well as important data on significant characteristics of unemployment which are often obscured by official data.

Data from case studies

The majority of field-based case studies have been carried out in remote Aboriginal communities, primarily in the Northern Territory, where unemployment levels reflect the existence of restricted and unstable labour markets. Altman (1987a: 77-8) estimated the incidence of employment and unemployment at the Mutitjulu community in Uluru

National Park in 1985-6. Employment included full-time, part-time and casual work. Those remaining in the Mutitiulu working age population, which totalled 74, can be classified as unemployed. Unemployment so defined, in August 1985 was 66 per cent. Altman noted, however, that the population was extremely mobile and this was reflected in levels of employment and unemployment. Thus in May 1986 the working age population had risen to 84 and additional local employment opportunities saw unemployment fall to 37 per cent. By November 1986, unemployment had risen again to 44 per cent. Over the entire period, unemployment averaged 49 per cent, but such an averaging obscures important fluctuations in people's employment status. Similar rates were reported by Altman (1987b: 13) for the Warmun Aboriginal community in the East Kimberley where there was 57 per cent unemployment amongst a working age population of 160. The majority of Warmun people employed were in part-time work as a result of limited local job opportunities. Regular, short-term work was popular in Warmun because of its analogies with seasonal employment in the pastoral industry, which was itself still popular as an occupation.

Estimates of unemployment were made by Young (1981) for three Northern Territory communities in 1978-79. The total labour force of 217 people at Yuendumu was defined as those in employment and those registered and receiving unemployment benefits, of which the latter comprised some 37 per cent (ibid: 108). However, almost 60 per cent of adult men and over 80 per cent of adult women did not belong to this strictly defined labour force. Like Altman, Young (ibid: 103-4) reported that employment opportunities at Yuendumu were extremely unstable, subject especially to the availability of funds for wages, casual jobs associated with projects and seasonal job demand. When funding was cut a year after Young's initial study, women's employment suffered: one-third of those employed lost their jobs. It is not known whether these women subsequently entered Young's defined unemployed component of the labour force by receiving unemployment benefits, or simply exited from the labour force. In 1986, Ellanna et al. (1988: 85) found a much higher unemployment rate of 66 per cent at Yuendumu, when the labour force was similarly defined by them as comprising '... those with jobs together with those receiving unemployment benefits'. The labour force participation rate was a low 49 per cent in a working age population of 351.

Employment at Willowra at the time of Young's initial research was primarily associated with the pastoral industry and subject to associated fluctuations in labour requirements. During the summer months only 7 per cent of the male working age population (numbering 58) were employed in 1979, rising to 28 per cent in the middle of the year. High male unemployment levels were normal. The incidence of female

unemployment was even higher, ranging from 86 to 95 per cent of the female working age population of 80 (ibid: 148-51). Similarly high unemployment levels were found at Numbulwar, where the incidence of unemployment was 46 per cent for males and 80 per cent for females of working age (ibid: 218). The research data of both Altman and Young indicate high unemployment levels and extremely low labour force participation rates in remote Aboriginal communities, and describe labour markets characterised by instability with respect to demand for labour and considerable segmentation on the basis of sex and age.

Aboriginal unemployment surveyed in New South Wales

In his 1980 survey of New South Wales country towns, Rowley found 50 per cent of the Aboriginal workforce unemployed (see Young 1982: 18-9). By comparison, the Census unemployment rate for Aboriginal people reported a year later for New South Wales rural areas was 40 per cent. At the time of the next Census in 1986, a survey by Ross (1987) found the Aboriginal unemployment rate in non-metropolitan areas of New South Wales to be significantly higher again.

Ross (1987) carried out a survey of employment and unemployment amongst New South Wales Aboriginal people between November 1986 and July 1987. Data were collected from 677 working age Aborigines using the ABS definition of employment and unemployment. The data were drawn from five geographical areas corresponding to Aboriginal Land Council regional boundaries and comprising approximately 48 per cent of the New South Wales Aboriginal population at the time of the 1986 Census.

Ross (1987) found extremely high unemployment rates: 75 per cent for men, 60 per cent for women and 71 per cent overall. The surveyed labour force participation rate was just over 55 per cent, with marked variation evident between the sexes: some 65 per cent of Aboriginal women were not in the labour force, compared to 27 per cent of men. He stressed that the overall surveyed unemployment rates hid significant variations according to region, age group, educational background and marital status. In particular there was marked variation in the female rates of unemployment between regions, from a high of 84 per cent in one region, to a low of 41 per cent in another. Ross (ibid: 9) argued that the data supported the hypothesis that as male participation rates fall, females join the labour force seeking to minimise the economic impact on their families of men's increasing unemployment. The unemployment rate for male teenagers was over 83 per cent and for teenage females almost 73 per cent.

A core of long-term unemployed Aboriginal people in rural New South Wales were identified in the survey: 67 per cent had not had a job for at

least two years and of these, a significant 22 per cent had never had a job. This figure was more than two and a half times the CES estimate of the percentage of total Aboriginal long-term unemployment, even allowing that Ross's criteria included those unemployed for two years and more, where the CES's percentage included those unemployed for 12 months and longer. Overall, Ross found that three out of every four persons unemployed had been so for all of the past year. While some 76 per cent of those unemployed in Ross's survey had been so for more than 12 months, only 11 per cent of the total New South Wales population were in a similar position. On the other hand, unemployed people in the total New South Wales population were much more likely than unemployed Aborigines to be classified as short-term (0-8 months) unemployed, 64 per cent compared to 8 per cent (ibid: viii).

The unemployment histories of the currently employed recorded by Ross revealed low job security. Only 37 per cent had been employed for all of the year previous to the interview, while the remaining 64 per cent who were employed had all been unemployed at some time during the same period. Indeed, for the latter employed group the average number of 21 weeks spent employed was only slightly greater than the average period of 18 weeks they had spent unemployed. Aboriginal people's participation within the rural New South Wales labour force is characterised by an oscillation between being employed for short periods and unemployed often for long periods.

Ross explored the impact of different definitional frameworks on statistical results by comparing his findings, arrived at using an ABS approach, with measures based on different definitions of unemployment. The ABS-based definition used by Ross to estimate unemployment resulted in lower figures than other approaches: Ross's ABS-based unemployment rate was 70.4 per cent; compared to a rate of 75.4 per cent arrived at if all recipients of unemployment benefits were counted in the surveyed labour force; 73.8 per cent when discouraged workers were included; and 74.9 per cent when Aboriginal people enumerated their own employment status. As Ross notes, using these different measures to analyse his own survey data also results in considerable variations when considering the incidence of unemployment. The incidence of unemployment, measured using the CES approach, is some 30 per cent higher than Ross's ABS-based level. For females, it is over 50 per cent greater and for males, 22 per cent greater than his ABS measure. It is interesting to note that a surveyed measure of unemployment arrived at by Aboriginal self-enumeration resulted in a rate of unemployment closer to the CES estimate than that based on the ABS approach.

1986 Census data were not available for comparative purposes at the time that Ross published the early results of his survey. With their subsequent

availability, the massive divergence between census Aboriginal unemployment rates for total New South Wales and any of Ross's alternative measurements, including his own ABS-based approach, becomes immediately apparent. 1986 Census data report an overall unemployment rate of 40 per cent, 41.5 per cent for males and 37.5 per cent for females. This rate is 30 per cent less than Ross's unemployment rate of 70.4 per cent, arrived at using an identical definition to that of the ABS.

Even given his use of the same definitional framework as the ABS, Ross found a vastly worse unemployment situation than indicated by Census data. The significant difference between Ross's data and the 1986 Census data is not caused by a marked divergence in the recorded percentage of the Aboriginal working age population in the labour force. Ross found approximately 55 per cent of surveyed Aborigines in the labour force and the ABS reported 53 per cent. Likewise, Ross's reported level of labour force participation by Aboriginal women differed little from the Census (35 per cent and 37 per cent respectively), while his labour force participation rate for men of 73 per cent was only slightly higher than the census figure of 68 per cent. The divergence results from individual categorisation as employed or unemployed (within the labour force). The 1986 Census data for New South Wales reports an overall Aboriginal rate of some 60 per cent employed and 40 per cent unemployed, while Ross reports a rate of 30 per cent employed and 70 per cent unemployed.

A later assessment by Ross (1990) of factors influencing Aboriginal labour market success in New South Wales enables a more specific comparison to be made of his 1986-7 survey results with census data for rural New South Wales (see Table 3). Census data were collated by Ross according to the Aboriginal Land Council regions used in his survey. Four of these, the Western, North-western, Wiradjuri and Far South Coast, are directly comparable to regions Ross surveyed using an ABS definition of unemployment. In this more direct comparison the ABS regional unemployment rate is still considerably lower than Ross's rate for the same region (see Table 3). The degree of difference ranges from 14.7 per cent in the Western Land Council region to just over 33 per cent for the Far South Coast. Divergences are more marked for male unemployment rates, excepting in the Far South Coast region where the ABS Census rate is a very significant 55 per cent lower for unemployed females compared to Ross's female unemployment rate.

There are methodological difficulties involved in directly comparing Ross's data with census results. Ross's clustered sample is much smaller than the Census which aims to cover fully the Aboriginal population. Ross also makes a number of relevant points regarding his survey which partially explain this divergence. Firstly, unlike the Census, his survey

was completely voluntary and the front-line data collectors were local Aboriginal people who assisted respondents with the questionnaires. The surveys were co-ordinated through local Aboriginal organisations which on occasions influenced the approach to data collection. For example, the Wiradjuri Land Council collected information within their region and suggested that rather than concentrating on three or four main towns, a more comprehensive coverage be made of smaller Aboriginal communities as well.

Table 3. New South Wales Aboriginal unemployment rates (per cent): by sex and Aboriginal Land Council regions.

NSW Land Council region	1986 Census rate	Ross rate	% difference
North West	Sec. of Sec. 19.		
Male	60.4	78.6	+18.2
Female	50.9	63.0	+12.1
Total	55.6	74.8	+19.5
Western			
Male	53.6	73.1	+19.5
Female	56.9	61.5	+4.6
Total	55.2	69.9	+14.6
Wiradjuri			
Male	38.8	77.1	+38.3
Female	42.3	41.2	-1.1
Total	40.5	64.3	+23.7
Far South Coast			
Male	38.7	74.6	+35.9
Female	29.0	83.9	+54.9
Total	33.85	77.7	+33.1

Source: Adapted from Ross (1987, 1988, 1991).

Ross (pers. comm.) believes that the close involvement of Aboriginal people in administering the survey played a major role in achieving a better response from Aboriginal people. Local Aboriginal opinion also suggested that many rural Aboriginal people are antagonistic towards census data collection and suspicious of how the information might be used. As a result, they are less willing to identify their labour force status, and are especially reluctant to identify themselves as unemployed on the official forms, being sensitive to the negative connotations associated with that status by the wider population. The survey was targetted towards rural New South Wales where the population was expected to suffer

greater unemployment than in metropolitan regions (see Ross 1990: 7). Ross (pers. comm.) also felt that the fact that his respondent sample was younger than the ABS's Census would tend to concentrate the selection towards the unemployed.

Even given the factors noted above as possibly causing a higher recording of unemployment levels in Ross's study, the degree of divergence between his findings and those reported by the ABS for approximately the same time and covering the same geographical areas of New South Wales, is considerable. If Ross's data overestimate the unemployment rate, the ABS Census appears to seriously underestimate levels of Aboriginal unemployment. Ross's survey highlighted many important characteristics of Aboriginal labour force status in non-metropolitan New South Wales and revealed the significant variations in unemployment levels within the Aboriginal population itself.

Aboriginal unemployment surveyed in the Katherine region

A series of surveys in Katherine by researchers from the North Australian Research Unit (NARU) report similar divergences from official measures of Aboriginal unemployment. The surveys highlight especially the impact of using different definitional criteria on measures of unemployment. In a survey of Aboriginal housing needs in Katherine in 1984, Loveday and Lea (1985) found an unemployment rate of 35 per cent when pensioners and housewives were excluded from the final definition of workforce. The authors initially classified these people within the 'domestic' category as part of the employed workforce. However, as they noted, only 16 were actually in paid jobs and 62 were unpaid housewives. It might be argued that the latter group of women could be included within an expanded definition of unemployed (or indeed, within an expanded definition of employed), in which case, assuming that they want work, the level of unemployment would rise to 71 per cent. If they were included as part of the employed workforce, as Loveday and Lea initially did, the Aboriginal unemployment rate would fall to approximately 24 per cent. The ABS approach standardly excludes housewives from the workforce, either as employed but unpaid, or as unemployed and desiring a job.

A later survey reported a much higher level of unemployment (Loveday 1985). In analysing data, Loveday (ibid: 126) again excluded approximately half of the Aboriginal female population of Katherine from analysis on the assumption that '... half of them would have family responsibilities which keep them out of the paid workforce'. People over 60 years of age were also excluded. Contrary to the ABS requirement for active job search, Loveday included within the category of people defined as 'not employed', those without jobs who were not actively seeking

work. The result was an overall incidence of unemployment of 48 per cent.

Loveday (1987) later suggested that the lower 1984 surveyed unemployment rate (35 per cent) was, if anything, an underestimate as a result of a less well-designed set of questions. Even so, his figures contrast markedly with official measures of Aboriginal unemployment in Katherine at the same time. The Aboriginal unemployment figure reported by Loveday's 1985 survey in Katherine was twice the number registered with the local CES office. The Katherine labour market was chronically oversupplied with unskilled and low-skilled labour at the time, leading, Loveday suggested, to a significant number of 'discouraged workers' who had given up looking for work: 65 per cent of all Aboriginal town residents and 59 per cent of camp residents were not looking for jobs (Loveday 1985: 124-7).

In 1986, Loveday (1987) conducted a third survey to gauge the economic impact of the Tindale Airforce Base on the Katherine Aboriginal population. In this survey he excluded from his definition of unemployment those people not actively seeking work, in line with ABS practice. From a total estimated workforce of 266, Loveday's data indicated an unemployment rate of approximately 57 per cent, some 9 per cent higher than his previous rate and 22 per cent higher than his first surveyed result. By comparison, 1986 Census figures for Katherine Aborigines indicated an unemployment rate of only 24 per cent, less than half Loveday's rate. Additional to his unemployment rate were a pool of approximately 15 per cent of respondents for whom he could obtain no data '... because they have fallen through the social security net' (1987: 29). These people may have been unemployed, but were neither registered with the CES nor in receipt of any form of unemployment entitlement. They formed part of Katherine's 'hidden' Aboriginal unemployed.

In both the 1985 and 1986 surveys, Loveday emphasised the important variations in unemployment rates between different Aboriginal residential groups within Katherine. Of town residents interviewed in 1985, 46 per cent were 'not employed', while 43 per cent were 'unemployed' in 1986. Of camp residents, 82 per cent were 'not employed' in 1985, with 76 per cent 'unemployed' in 1986.⁵ Loveday's data emphasise the fact that within a single community there can be considerable differences in Aboriginal people's experience of unemployment levels. Taylor (1989: 50) found similar, substantial differences in Aboriginal unemployment within Katherine, with town camp residents again experiencing the highest unemployment. These variations are often overlooked and obscured by aggregate census data. For example, the 1986 Census (see Tesfaghiorghis 1990: 79) reports an unemployment rate for Katherine of 24.4 per cent

which is almost identical with Taylor's estimate for Aboriginal town residents. However, Taylor's unemployment rate for people residing in town camps was 72 per cent, three times higher than the Census rate. His overall unemployment rate for Katherine Aborigines at 37 per cent was 13 per cent higher than the Census figures.

A crucial characteristic of Aboriginal unemployment experience in Katherine, namely the process of 'recycling', was highlighted by Loveday's survey series. Respondent's work experience included a substantial amount of part-time, casual and seasonal employment, with many having 'spells' of unemployment for part of each year and with some periods of unemployment totalling many years for certain individuals (Loveday 1985: 129, 135). A more realistic depiction of this pattern is to view unemployment as the norm, with 'spells' of employment in between. Loveday (1987: 32) suggested that this 'recycling' of the unemployed was occurring but was not being picked up by CES records. The pattern arises when a person registered with CES as unemployed is placed in a job, loses it again soon afterwards, goes back to register again and subsequently gets another brief job. His assessment of the individual records of CES registrants led him to conclude that this recycling of individuals, who are frequently unemployed over long periods of time, could be substantial.

The unemployment situation of Aboriginal people living in the immediate region of Katherine is worse than in the town itself. Most Aborigines live outside Katherine in the rural areas, with almost three-quarters living in Aboriginal towns and the remainder living in small groups at outstations and pastoral excisions (Taylor 1988: 204). The 1986 Census (see Tesfaghiorghis 1990: 79) indicates higher unemployment rates for Beswick and Elsey Balance, at 46 per cent and 30 per cent respectively, than for Katherine (24 per cent). As with Katherine, data from case studies of some of these communities indicate much higher levels of unemployment than reported by the 1986 Census. When unemployment rates were defined as the percentage of the local workforce (primarily taken as the total working age population) not fully employed, Ellanna et al. (1988: 223-34) found unemployment at Barunga and Beswick (when CDEP 'employment' was excluded) to be 73 per cent and 70 per cent respectively. At the small community of Eva Valley 100 per cent unemployment was reported before the CDEP scheme was introduced. The researchers were of the opinion that these high figures were typical of many remote Aboriginal communities in the Northern Territory. No doubt their maximal definition of unemployed resulted in more jobless people being included within the category of unemployed and one presumes that active job search was not enforced as a criteria given the obvious lack of any sizeable labour market at the communities.

High unemployment is common for Aborigines throughout Australia. According to official statistics, over half of the Aboriginal working age population does not even participate in the labour market. Evidence from surveys and case studies indicates that the unemployment level of Aboriginal people is likely, if anything, to be far higher than official data imply. In a number of cases census statistics appear to underestimate Aboriginal unemployment by as much as 30-40 per cent. The difference in results partially stems from the use of a more flexible approach by field surveys to defining Aboriginal unemployment and employment; in particular relaxing the job search criteria and including self-enumeration of work status.

Measuring Aboriginal unemployment: conceptual, methodological and cultural issues

There is no unique measure of unemployment in Australia and which series of data is used is a matter of judgement (Norris 1989). However, measurements of unemployment are not neutral. There is some substance to the assertion that the use of particular definitions create, rather than reveal or record, associated levels of unemployment. There are a number of factors involved in the divergences between the various series of measurements some of which have particular implications for estimating levels of Aboriginal unemployment.

The cultural parameters of Aboriginal work

Official measurements of unemployment and employment are characteristically based on non-Aboriginal assumptions and values oriented to the market economy and its underlying work ethic. A number of commentators (see Coombs et al. 1989; Edmunds 1990; Sansom 1988) have argued that what constitutes work for some Aboriginal people is based on values and behaviours fundamentally at odds with western notions of the wage contract, hierarchical employment structures and participation in the labour force. Even money is said to be used more for its relative value within a system of Aboriginal social relations (Sansom 1988), so that Aboriginal economic motivation may itself reflect different cultural priorities.

Coombs et al. (1989: 86), reporting on the findings of the East Kimberley Impact Assessment Project, concluded that

Aborigines do not face the general Australian economy with their time fully available for employment or divided simply between 'work' and 'leisure'. Rather they come with their time significantly allocated to distinctly Aboriginal purposes and activities. Employment or involvement in the Australian economy involves a trade-off between the potential to earn cash and a range of other activities.

The Royal Commission into Aboriginal Deaths in Custody (Commonwealth of Australia 1991: 502) argues strongly that these cultural and social obligations are not confined to Aboriginal people in remote areas (see also Keen 1988). Culturally-based Aboriginal work patterns and social obligations in urban and rural regions also have an impact on the nature of individual attachment to the mainstream labour force.

Whilst supply-side factors such as the low levels of education and job skills, proficiency in English, marital status and residential location all have an impact on Aboriginal levels of unemployment and employment, cultural factors such as attitudes to mainstream employment, commitments to 'Aboriginal work' and patterns of mobility, as well as the historical background to Aboriginal work patterns (see Arthur 1990; Barwick 1970; Castle and Hagan 1984; Finlayson 1991; McGrath 1987), also play a role in determining Aboriginal participation in the mainstream labour force.

Not in the labour force?

The use of the unemployment and employment rate as the main indices of employment status throughout the nation becomes crucial when analysing Aboriginal data where a substantial portion of the population is simply not in the formal labour force (Ross 1990: 2; Jones 1991). Though official estimates of Aboriginal unemployment rates are high, they are, in fact, referring to only half of the adult Aboriginal working age population. In 1986, over 63,852 Aboriginal persons of working age were classified as being outside the labour force. As Jones (ibid: 35) notes, the real extent of Aboriginal unemployment, reckoned as it is within a comparatively low level of labour force participation, is understated relative to other groups which have higher participation rates.

Evidence from case studies indicates that a number of Aboriginal people currently counted as not being in the labour force, may in fact be jobless and wanting work in the mainstream labour market, but for a number of reasons, including lack of job opportunities, are not actively looking for work. Research evidence suggests not only that census data significantly underestimate the degree of Aboriginal unemployment, but also that more flexible definitions, which include some persons officially placed in the category of 'not in the labour force', reveal even greater levels of unemployment.

On the other hand, not all Aboriginal people seek full, or even partial, participation in mainstream employment. Whilst some Aboriginal people do want full-time, permanent wage employment (see Commonwealth of Australia 1991; Daylight and Johnstone 1986; Edmunds 1990; Loveday 1985), others have a deliberately chosen, casual attachment to the labour

force. Aboriginal withdrawal from, or low engagement in the labour force cannot always be easily accommodated under the heading of 'discouraged worker' or 'hidden unemployment'. Rather, central to the experience of some Aboriginal people may in fact be 'the partial irrelevance' to them of the formal labour market (Jones 1991).

While being classified as 'not in the labour force', Aboriginal people may nevertheless be engaging in productive 'work' within their own communities. Altman and Taylor (1989) report that among a small group of Gunwinngu people in Arnhem Land, all adults spent an average of 25 hours per week, year-round, involved in subsistence production. For this group, the labour force participation rate is effectively 100 per cent when the notion of economic work is widened to include such activities. In which case neither the tag 'unemployed', nor 'not in the labour force' accurately reflects their employment status. The classification of Aboriginal work status into those who are employed or unemployed and therefore in the labour force, and those who are by exclusion not in the labour force, is first and foremost ethnocentric and denies the economic significance of certain non-wage activities. The issue is whether such activities should be assimilated into a more flexible definition of the labour force, by expanding the component definitions of employment and unemployment to encompass Aboriginal values.

Recycling unemployment and the intermittent worker effect

The case study evidence reviewed here suggests that there may be substantial variability in Aboriginal work schedules which oscillate between periods of employment and unemployment. Research studies indicate that this pattern is more than simply 'frictional' unemployment, where people spend short periods of time out of employment as a result of imperfect information or having to search for jobs (Norris 1989: 181). Loveday (1987) referred to the 'recycling' of unemployed Aboriginal people in Katherine. For some, periods of employment or training are often interspersed with extremely long periods of time spent without a job. These people may well 'miss out' on being classified as 'long-term unemployed' because of their periodic spells of employment. Nevertheless, their primary work status is one where they are predominantly unemployed. There are a number of reasons for this pattern, ranging from the lack of job opportunities, to cultural factors, the history of Aboriginal involvement in seasonal industries, and the impact of short-term government training and employment projects. Unfortunately, there is almost no data available, apart from Loveday's, on the extent of this long-term pattern of recycling unemployment, or its economic (and social) impacts on Aboriginal people.

With regard to cultural factors influencing work patterns, an American Indian Policy Review Commission (see Kleinfeld and Kruse 1982)

suggested that census questionnaires should include questions that allow Native American respondents socially acceptable ways of indicating their desire for work and work preferences, and of acknowledging that they may prefer a lifestyle combining intermittent participation in the wage economy with non-wage activities. A similar recommendation is pertinent to the Australian Census of Population and Housing. The emphasis in the Census on individuals obtaining regular, wage-earning income overlooks important cultural and social differences in Aboriginal labour force behaviour. As Kleinfeld and Kruse found from their surveys with some 1,400 Inuit, when questions were oriented towards establishing the respondent's desire for work, as opposed to the standard Alaskan definitions (closely resembling ABS definitions), the estimation of Inuit unemployment doubled from 24 per cent to just over 48 per cent.

The same point applies to assessments of Aboriginal unemployment. Some Aborigines are intermittent workers within the labour force as a result of culturally determined choices and not necessarily because of being 'discouraged' from seeking employment. At the same time, it is clearly the case that in some areas of remote and rural Australia, low levels of Aboriginal participation in the labour force and high levels of Aboriginal unemployment are associated with the lack of available jobs and can be more accurately described as recycling unemployment. This recycling can be taken as an indicator of the extent of unemployment experienced by Aboriginal people and requires the collection of more accurate longitudinal data.

The Community Development Employment Projects (CDEP) scheme Census data from 1971 to 1986 indicate that overall, Aboriginal unemployment levels have continued to increase as the labour market deteriorates, but more importantly, as the working age population increases (Tesfaghiorghis and Gray 1991). Given all these factors, it is likely that the 1991 Census will see a further deterioration in this situation as Aboriginal employment declines, and the incidence and rate of unemployment rise owing to the current recession.

This trend is partially obscured by the introduction of the CDEP scheme in many remote and rural communities, resulting in the artificial expansion of their labour markets. When community participation in CDEP is classified as being employed, it is unclear what will constitute official unemployment in those communities where individuals are no longer able to register with the CES for unemployment benefits. One example of the inconsistencies created by this practice has already been noted by Tesfaghiorghis (1990: 78-9). In a comparison of labour force status of Aboriginal people at Barunga, Beswick, Katherine and in Elsey Balance statistical region based on 1986 Census data, Tesfaghiorghis noted the anomaly of seemingly low unemployment rates for Barunga. In

comparison to a total unemployment rate of 45.5 per cent at Beswick, 30.3 per cent in Elsey Balance and 24.4 per cent in Katherine, unemployment at Barunga was a remarkably low rate of 4.6 per cent. This low rate resulted from the fact that Barunga was participating in the CDEP scheme and residents were classified in the Census as being employed.

In the 1986 Census the classification of some 4,000 CDEP participants as employed has reduced the Aboriginal unemployment rate from 41 per cent to 35 per cent (see Altman 1991b: 3). In the 1991 Census it is likely that the current 18,000 plus Aboriginal people already participating in the scheme will also be counted as employed thereby inflating the numbers employed and correspondingly reducing unemployment (see Commonwealth of Australia 1991: 387). Altman (1991a: 163) argues that current CDEP participant numbers could account for as much as 25 per cent of the estimated Aboriginal and Islander labour force, reducing the official Aboriginal unemployment rate to a level similar to the national average in 1991.

The CDEP scheme does not require individuals to undertake further job search once the community has joined the scheme. As a result of participation in the scheme, individuals are categorised as being employed, whereas previously the same people, as welfare recipients, were either classified as unemployed, or if not actively looking for jobs or not on unemployment benefits, were classified as being 'not in the labour force'. As noted above, the CDEP scheme can 'create' a labour market where one did not exist. Especially interesting in this process is the fact that CDEP participants are being encouraged to include so-called 'traditional' areas of activity such as hunting and gathering, ceremonial activity and so on, within the areas of work covered by CDEP payments (Miller 1985: 188, 352; Altman and Sanders 1991: 8-9). To the extent that this occurs, such activities are effectively being included by the ABS within their standard definition of employment, where previously they were strictly excluded from consideration as economic work.

The classification of Aboriginal employment status, especially in the context of the CDEP scheme, raises the question of exactly what kind of labour market exists in communities where the primary employers are Aboriginal organisations operating on government funds, and government departments involved in Aboriginal employment and training (see Taylor 1991a: 74). For example, when the 1986 Census incidence of employment amongst the total Aboriginal working age population is adjusted for CDEP figures (approximately 4,000) and for those employed by the public sector (some 18,223), the adjusted incidence of employment within the private sector is a mere 17.9 per cent. (The adjusted employment rate for private sector employment is reduced from an overall rate of 64.7 per

cent to 46.8 per cent.). Given that many Aboriginal people working for government-funded Aboriginal community organisations are classified in the Census as being employed within the private sector, it appears one is left with a very small labour market for Aboriginal people which is not based on public sector funding.

Measuring Aboriginal women's unemployment

There are issues raised with respect to measuring the unemployment status of Aboriginal women which highlight some reasons why official estimates diverge from case study data. Gale and Wundersitz (1982: 131) noted the difficulties in measuring female unemployment levels in Adelaide owing to the fact that Aboriginal women did not register for unemployment benefits if they could not find work, since most were eligible for a preferred, more secure form of pension (see also Daly 1991). Yet, they report that many of the women in their survey would work if they could have obtained employment. Their choice of other forms of government transfers effectively excludes them from official categorisation as unemployed within the labour market. Bradley (1987), Young (1983) and Wade-Marshall (1982) point out that official Northern Territory CES registrations do not adequately reflect the state of unemployment amongst Aboriginal women because some may not claim unemployment benefits as they either do not know they were eligible or lack the confidence to make a claim. Young (1983: 131) highlighted the exclusion of co-wives in polygynous marriages from registering for unemployment benefits.

A recent review by the DSS of income support for the unemployed noted the anomalies caused in measurements of female unemployment within the total Australian population which apply to Aboriginal women as well (Cass 1988: 70). Whilst Australian women in 1987 comprised 27 per cent of unemployment beneficiaries, they constituted some 42 per cent of people recorded as unemployed by the ABS. In particular, a significant proportion of unemployed married women are not receiving social security entitlements. Married women with spouses in employment or receiving unemployment benefits are unlikely themselves to be able to register for the same benefits, even if unemployed and looking for work. Either their husband's wage income does not entitle them to receive unemployment benefits owing to the income test, or the husband may be unemployed and receiving the benefit himself at the married rate, which precludes the wife applying independently. The DSS review by Cass (ibid: 103) points out that in 95 per cent of the cases where both husband and wife are unemployed, it is the husband who receives the unemployment benefit, at married rates. The review suggests that this assumption of spousal dependence may well have contributed to the very high proportion of wives of unemployed men who are classified as not in the labour force (close to 70 per cent compared to 52 per cent of all married women).

For similar reasons, CES figures for Aboriginal unemployment may seriously underestimate the number of jobless Aboriginal women (see also Miller 1985: 65-6). For example, while CES unemployment estimates are invariably higher than other official rates, figures (see Department of Aboriginal Affairs 1987: 34) for registered Aboriginal unemployment at September 1986 indicated that Aboriginal women comprised 27 per cent of beneficiaries, while simultaneously they constituted 36 per cent of Aborigines recorded as unemployed by the 1986 Census. In turn, married Aboriginal women formed a much higher proportion of Aboriginal women not in the labour force than do married Aboriginal men in the equivalent category; 42 per cent compared with 25 per cent. And women who are widowed, separated or divorced represented some 19 per cent of Aboriginal women not in the labour force as compared to 6 per cent of Aboriginal men with similar marital status. Married, unemployed Aboriginal women are likely to be the most easily overlooked in official measures of unemployment.

A research survey of Aboriginal employment and unemployment in Townsville revealed some of the nuances involved in Aboriginal selfenumeration of labour force status that are particularly telling with respect to women (Lloyd 1987). Many of the Aboriginal respondents in the survey used social security categories to label themselves and others ('supporting mother', 'invalid pensioner', 'old age pensioner'). These identities were felt to be mutually exclusive to the category of being 'unemployed' which was equated with the receipt of unemployment benefits. In this way Aboriginal respondents failed to label women as unemployed if they were receiving other pensions. This was in spite of the fact, as Lloyd noted, that on a number of occasions these women indicated they were looking for work. For this reason Lloyd suggested that the survey was biased against recording the unemployment status of women. In the case of official surveys such as the Census which use a more restrictive definition of unemployment, it may well be that they are excluding certain categories of Aboriginal women to a greater extent than Lloyd's survey with its maximal definition of unemployment.

A dynamic model of Aboriginal unemployment

Research evidence indicates Aboriginal labour force participation is characterised by fluctuations between periods of employment and unemployment and between participation in, and withdrawal from the labour force. In such circumstances the nature of Aboriginal work patterns mean they are more readily categorised as unemployed rather than employed and more readily excluded from the labour force entirely.

Aboriginal involvement in the mainstream economy cannot be adequately described according to a static labour supply model. Census measures of employment and unemployment tend to view the Aboriginal workforce in equilibrium at a single point in time (at most a month prior to the interview date), and hence obscure the important, longer-term fluctuations noted by Loveday, Ross and other researchers. This deficiency in the available statistics is all the more noticeable given that other surveys such as the regular Labour Force Survey which aims to assess the ebb and flow of Australian labour force participation, does not provide identifiable data about the Aboriginal workforce.

Research by Foster and Gregory (1982) into the dynamics of gross labour market flows in Australia has highlighted the impact of relatively large flows between the components of the labour market, emphasising the importance of duration of unemployment and job tenure in this process. They suggest that the Australian labour market is far from stable. It may well be that the characteristic features of Aboriginal unemployment described in this paper are associated with relatively large flows into and out of employment, and that Aboriginal people may face an even more unstable labour market. Longitudinal data sets based on a series of expanded measures are urgently needed in order to arrive at a dynamic 'life-cycle' model of Aboriginal labour force status. Such a model would more accurately reflect the Aboriginal experience of 'recycling' unemployment, intermittent working, the cultural patterns of Aboriginal work schedules, and the economic costs of increasing long-term unemployment.

Policy implications

In order to assess the relative standard of living of any group it is necessary to have a measurement of employment and unemployment that is generally applicable and allows for comparison. However, such consistency must have regard to the appropriateness of operational definitions for particular groups, and their validity in accurately reflecting labour force status. The divergence between official statistics on Aboriginal unemployment levels and data from research case studies indicates the need for a reassessment of the reputed levels of Aboriginal unemployment. In particular, field research indicates that the strictly defined concept of the labour force used by the ABS results in an underestimation of actual levels of Aboriginal unemployment and does not adequately represent important cultural differences in the work patterns of some Aboriginal people.

Official definitions need to be supplemented with alternative measures of Aboriginal unemployment to reflect more fully the dynamic patterns of Aboriginal work practises. Longitudinal data, especially, are required on the duration of Aboriginal unemployment, the recycling of unemployment (and training) and on job tenure, in order to ascertain the size of flows between components of the Aboriginal labour force and their impact on the Aboriginal unemployment rate. Unfortunately, it appears that there has actually been a decrease in the availability of official statistical information on Aboriginal labour force status since Miller (1985: 41, 64) emphasised the lack of relevant statistical information. The CES has ceased releasing Aboriginal unemployment figures and ATSIC no longer collects detailed community profile data. The ABS Labour Force Survey has no Aboriginal identifier and the Aboriginal sample in the Australian Longitudinal Survey is too small and is biased towards urban, residentially stable persons, thus precluding the possibility of statistically rigorous use.

It is noted with concern that government policies and associated programs aimed at reducing Aboriginal unemployment and raising employment levels are based primarily on official statistics which appear to significantly underestimate the actual number of jobless Aboriginal people and which obscure, or fail to record, crucial characteristics of Aboriginal labour force status. These deficiencies in the available official data have further, serious implications when the substantial demographic changes in the Aboriginal population noted by Tesfaghiorghis and Gray (1991) are taken into account. The authors estimated a projected 2.6 per cent per annum growth in the Aboriginal working age population up to the year 2001, from some 130,900 in 1986 to roughly 192,300 persons in 2001 (ibid: 60). In particular, there will be a fast growth in the young and middle-age Aboriginal age groups in the working age population (ibid: 53). The Federal Government's Aboriginal Employment Development Policy (AEDP) of 1986 is a major initiative to improve the employment status of Aboriginal people. One of the AEDP's central objectives is employment equality for Aboriginal people with other Australians by the year 2000. This paper argues that the census data relied upon in the formulation of the AEDP's statistical objectives understate the true level of current Aboriginal unemployment. An over-reliance by government on official statistics collected five-yearly, with little other supplementary data, seriously jeopardises the validity of assessments of Aboriginal unemployment levels and consequently undermines the potential efficacy of programs under the AEDP.

Conclusion: alternative approaches to measuring Aboriginal unemployment

A comparison of case study and census data reveals that the more restrictive definitions on which the latter are based, effectively result in an underestimation of Aboriginal unemployment levels. The differences between official statistics and data from case studies are primarily the result of definitional and methodological variations. Research studies are able to use more flexible definitions of what constitutes work and employment within Aboriginal communities and have obtained valuable empirical data on crucial characteristics of Aboriginal unemployment that are lacking in Censuses.

Research by Gregory and Foster (1984) indicates that the burden of unemployment in Australia falls on a very small percentage of the labour force: approximately 2 per cent of the labour force in 1980-81 accounted for 50 per cent of measured unemployment. Given the high levels of Aboriginal unemployment and specifically long-term unemployment, it is likely that in the current depressed economic circumstances, the burden of unemployment will be falling increasingly upon Aboriginal people. The restrictiveness of the ABS definition of labour force status mean it is inadequate for measuring such crucial processes In order to obtain comprehensive and accurate estimates of Aboriginal unemployment, official statistics need to be supplemented with alternative approaches. Some of these are now outlined.

The 'usually' active population

The concept of the 'currently active population' which informs the notion of labour force used by the ABS is not appropriate for assessing adequately the labour market position of many Aboriginal people. The concept refers to those people above a certain age who supply labour for the production of goods and services during a specified brief period of time (standardly 'last week'). The alternative concept of the 'usually active population' is more applicable to the labour force in so-called developing countries where a high proportion of employment is affected by seasonal and cultural factors. The 'usually active population' refers to all people above a certain age who were employed or unemployed during the major part of a longer reference period, such as the preceding 12 months.

In regions where employment is characterised by seasonality and shorter, repetitive periods of work, and in economic conditions where employment and unemployment status fluctuate considerably, measuring labour force status over a brief period can be misleading. Measurement of a population as usually active, over a longer period of time, will reflect the more dynamic and irregular characteristics of Aboriginal employment status.

The duration of Aboriginal unemployment

Given the contraction of the rural economy, the displacement of Aboriginal seasonal workers owing to increased mechanisation, and the general reduction of employment opportunities, the duration of periods of unemployment could be expanding for many Aboriginal workers. The length of time people spend unemployed is a useful way of conceptualising and assessing the severity of unemployment (Gregory and Foster 1984). Both CES and research case study data indicate that the severity of long-term unemployment is especially prevalent among Aboriginal people.

McMahon and Robinson (1984) argue that given the social and economic damage associated with long-term unemployment, a more useful measure would be the long-term unemployment rate; that is, persons unemployed 26 weeks or longer as a percentage of the labour force. Ascertaining the Aboriginal long-term unemployment rate in different locations would be an important additional indicator of Aboriginal economic disadvantage. However, official statistics on Aboriginal long-term unemployment are rare. The DSS review of income support for the unemployed in Australia noted that the only reasonably reliable source of this information for Aboriginal people is CES data (Cass 1988: 246). In 1986, 31 per cent of Aboriginal people registered with the CES had been unemployed for nine months or longer, as compared with 25 per cent of total CES registrations. The review recognised that owing to patterns of CES registration and inadequate coverage of remote areas where durations of unemployment are likely to be longer, this figure was likely to be considerably understated. Indeed, case study evidence suggests that CES data do underestimate, in cases by as much as half, the level of Aboriginal long-term unemployment.

Ross (1987) found that three out of every four unemployed Aboriginal people in non-metropolitan New South Wales had been unemployed for all of the past year; that is, they were defined as long-term unemployed according to CES criteria. Even more seriously, he reported a massive 45 per cent of the Aboriginal unemployed had not held a job for at least two years, and a further 22 per cent had never been employed. Combining the two resulted in a level of Aboriginal long-term unemployment of 67 per cent in rural New South Wales. Similar results were obtained by Lloyd (1987) for Aboriginal unemployment in Townsville where 61 per cent of the sample were classified as long-term unemployed (9 months or longer) and 27 per cent of those respondents had never held a job. Of those surveyed, 30 per cent were not registered with the CES as unemployed because they were either too young to be eligible or because they lacked transportation and had difficulty in regularly filling in the required forms. The researcher found strong evidence of 'invisible' unemployment and especially of the 'discouraged worker' effect amongst many of the long-term unemployed. Given these preliminary indications from regional studies, it is clear that more comprehensive, detailed data on the

extent and nature of Aboriginal long-term unemployment are urgently needed.

'Invisible' unemployment

The ABS periodically attempts to measure the numbers of people categorised as 'discouraged workers' or as 'marginally attached' to the labour force in an effort to more accurately estimate what is referred to as 'hidden' or 'invisible' unemployment (see Castle and Mangan 1984; Norris 1989; Rogers 1985; Stricker and Sheehan 1981). In Australia this wider coverage of the available workforce still rests on the adoption of the restricted ILO definition of unemployment, as opposed to an extended definition also proposed by the ILO which relaxes the criterion of seeking work. The latter approach recognises that, particularly in developing countries, there would be people who want to work and are available to work, but are discouraged from job-seeking. In the extended definition these people would be classified as unemployed, both within a measure of the unemployment rate and the incidence of unemployment. Such a definition is appropriate to the situation of many Aboriginal people.

Census estimates of unemployment, as defined by the ABS, understate the true magnitude of Aboriginal and total Australian joblessness. The Miller (1985: 71) and Kirby (1985: 34) Reports argue that the concept of hidden unemployment is more applicable to Aborigines than to others because of the large numbers living in very isolated areas where few employment opportunities exist. Unfortunately, there is very little information on the extent of of 'invisible' unemployment amongst the working age Aboriginal population. In New South Wales, Ross (1987: 33) attempted to measure the incidence of hidden unemployment and found that discouraged Aboriginal workers were predominantly female. Indeed, for every two Aboriginal women officially considered to be unemployed, he found another who was a discouraged worker. Extrapolating from this ratio, if the numbers of discouraged female workers were added to the 1986 Census count of unemployed Aboriginal females the incidence of unemployment amongst New South Wales Aboriginal women would increase from 14 per cent to 21 per cent. An estimate of the extent of 'invisible' Aboriginal unemployment is important, because when added to official measures it would provide a measure of the extent of Aboriginal joblessness.

Regional unemployment rates

The Aboriginal population is heterogeneous and the impact of high unemployment levels, in terms of social, economic and cultural costs, will vary from one area to another. Research from case studies indicates that there are considerable variations in Aboriginal unemployment rates owing to residential location. These differences are often obscured by aggregate census data. Ross (1987: 1991) documented regional variations

within rural New South Wales by gender and found that female unemployment ranged from a high of 84 per cent on the Far South Coast to a low of 41 per cent in the Wiradjuri area. For males, the highest rate was in the North-west region (79 per cent) and lowest in the Western region (73 per cent). Fine-grain analyses of 1986 Census data by Taylor (1991b) for residents at Northern Territory outstations indicates that whilst they are only slightly less attached to the labour force than Aborigines elsewhere in the Territory, they have much higher levels of unemployment for both males (49 per cent) and females (61 per cent) than for other Northern Territory Aborigines (34 and 29 per cent respectively).

Given the absence of a labour market in many remote areas, levels of unemployment and labour force participation may well be worse than reported for Aboriginal communities in rural and urban regions. Detailed data on the nature and extent of employment and unemployment according to a range of factors (such as gender, marital status and residential location) are needed at the regional level in order to tailor employment programs to the specific needs of clients in different areas.

A maximal and minimal definition of Aboriginal unemployment In exploring the consequences of using more flexible approaches to the measurement of unemployment for the total Australian population, McMahon and Robinson (1984) found that the more restrictive ABS unemployment rate resulted in an estimate of 10 per cent, whereas using the maximal definition of jobless almost doubled the figure to 19 per cent. Using a similarly expanded definition of unemployment could clearly result in a significant increase in Aboriginal unemployment levels. As the researchers noted, the current ABS measure of unemployment is by no means a neutral measure.

The ABS operational definition of unemployment results in an Aboriginal unemployment rate of 35 per cent, with an incidence of unemployment amongst the total Aboriginal working age population of 17 per cent. Research studies reviewed here have shown that using more flexible definitions of unemployment increases the level and rate of Aboriginal unemployment significantly. An approach which allows for maximum definitional flexibility is one where restrictive criteria are eliminated, (in particular, those of active job search, registration with the CES, and looking for full-time work), and so-called 'discouraged workers' and all jobless are included. For example, in 1986 the total Aboriginal working age population was 137,133, of which some 42,878 persons were classified as employed, leaving some remaining 94,255 without jobs. Without any further adjustments to this figure, the maximal rate of Aboriginal unemployment, arrived at using this widest inclusion of all those considered to be 'not employed', is 68.7 per cent in 1986. Adjusting

this maximal unemployment rate by deducting the total number of Aboriginal tertiary students (some 3,192 in 1986) results in a rate of 67.9 per cent. When male and female maximal levels of unemployment are estimated in a similar fashion and adjusted for the number of respective tertiary students, the maximal male unemployment rate is 58.6 per cent and the maximal female unemployment rate is 76.7 per cent.

If data were available, further necessary adjustments could be made by deducting the number of Aboriginal recipients of social security transfers (such as sole parents, invalid and aged pensioners), and by deducting the numbers of Aboriginal people in various training programs, although it is probably the case that trainees are in fact already classified within the Census as employed. The adjusted maximal rate of Aboriginal unemployment is almost twice as high as that estimated by ABS census data. Whilst the former rate is based on the most inclusive definition of Aboriginal unemployment, the ABS rate represents a minimal, restrictive assessment. The actual level of Aboriginal unemployment obviously lies somewhere in between these two extremes, but is undoubtedly higher than official estimates. Of course obtaining more comprehensive statistical measures of Aboriginal unemployment may well have consequences similar to those implied by a recent comment concerning the British Central Statistical Office; namely, that 'better statistics ... rarely turn out to mean cheerier ones' ('Crunchier numbers', The Economist 14 September 1991: 61). More accurate and appropriate measures of Aboriginal unemployment will inevitably reveal a situation considerably worse than currently indicated by official statistics.

Notes

- In July 1991 Unemployment Benefit was replaced by Job Search Allowance. Initial registration procedures have changed little with the transition. However, new requirements such as contractual obligations regarding training and more frequent interviews, take effect after the first 12 months on Job Search when the unemployed person enters another phase called Newstart. As this paper analyses 1986 Census data and case study material referring to Unemployment Benefit, the relevant terminology has been retained.
- This trend is partially confirmed by the relative increase in CES registrations and associated receipt of Unemployment Benefit by Aboriginal men and women over the period of 1983-86. While male registrations increased by 24 per cent, female registrations increased by 40 per cent (Department of Aboriginal Affairs 1987: 34).
- 3. Total registered CES unemployment levels only began to exceed total surveyed estimates from 1974 onwards (see Steinke 1984: 400).
- For the period of 1983-85 long-term unemployment was defined by the CES as 9 months and over. This changed to 12 months and over in 1986 (see Junankar and Kapuscinski 1991: 10).

5. In the former survey, jobless people not actively searching for work were included, but subsequently excluded from the 1986 definition of 'unemployed'. Including jobless persons who were not seeking work (part of the category of 'discouraged workers') increased Loveday's unemployment rate by 3 per cent for town residents and 6 per cent for camp residents.

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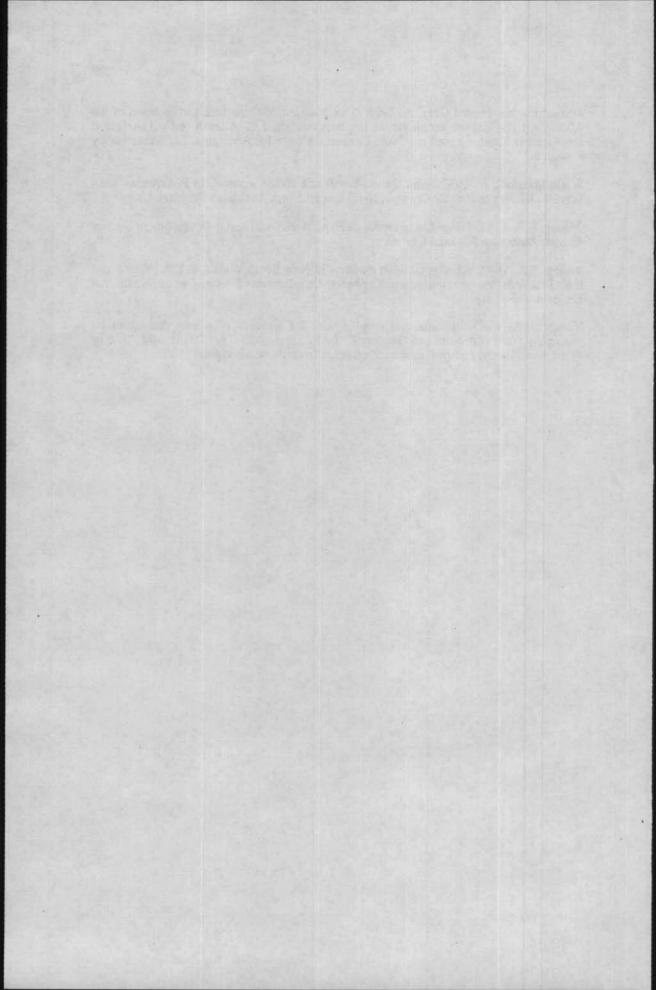
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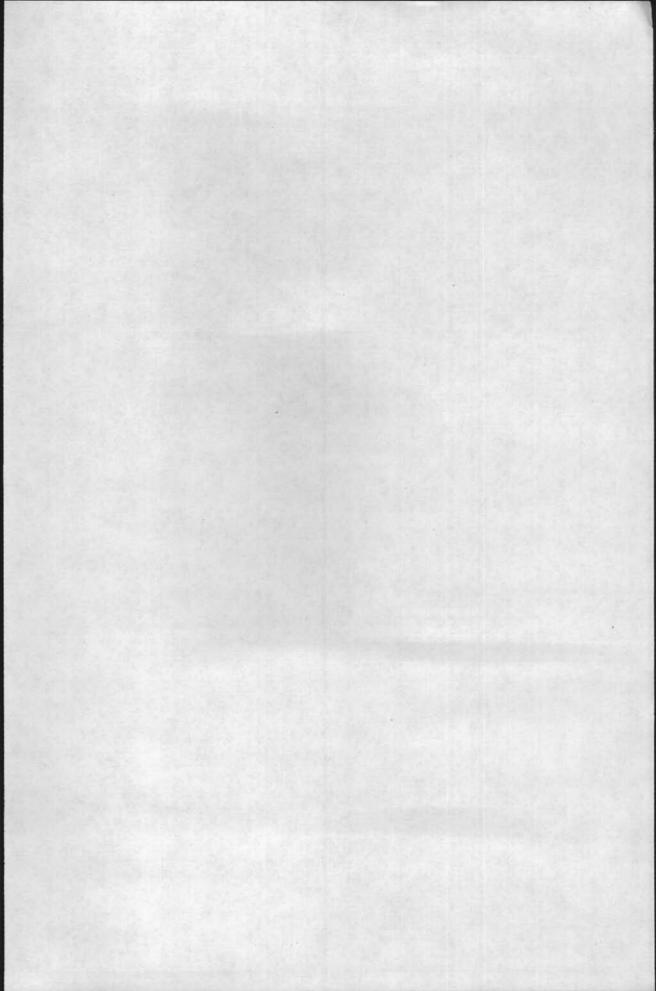
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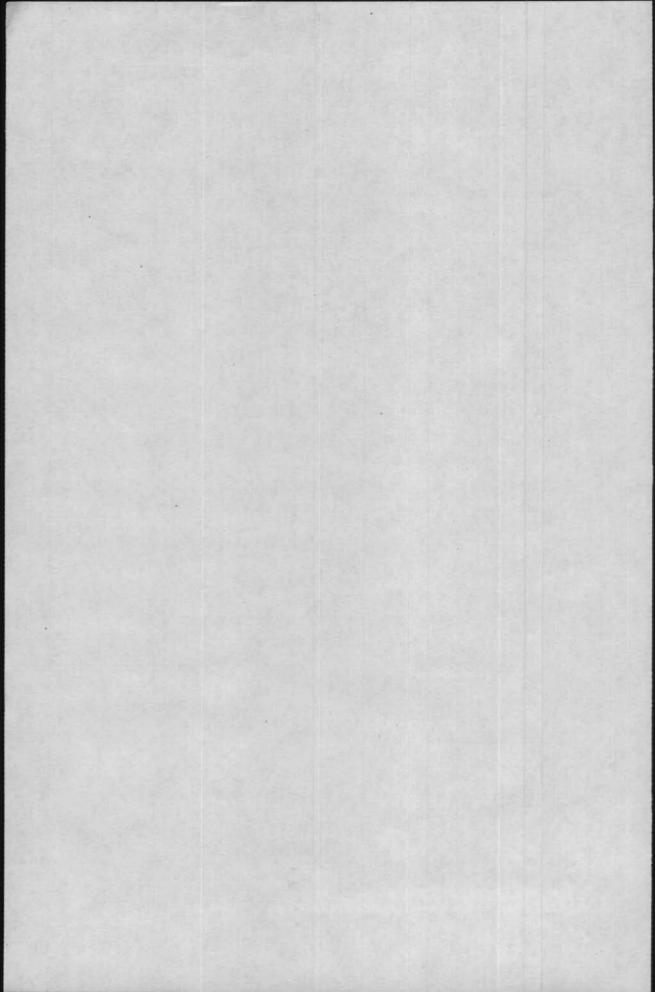
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