

The Australian National University



**C**entre for  
**A**boriginal  
**E**conomic  
**P**olicy  
**R**esearch

Discussion Paper



**The relative economic status of  
indigenous people in South  
Australia, 1986-91**

**J. Taylor and L. Roach**

**No. 58/1994**

ISSN 1036-1774  
ISBN 0 7315 1732 6

## SERIES NOTE

The Centre for Aboriginal Economic Policy Research (CAEPR) was established in March 1990 under an agreement between the Australian National University and the Commonwealth of Australia (Aboriginal and Torres Strait Islander Commission). CAEPR operates as an independent research unit within the University's Faculty of Arts. CAEPR's principal objectives are to undertake research to:

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

The Director of the Centre is responsible to the Vice-Chancellor of the Australian National University and receives assistance in formulating the Centre's research agenda from an Advisory Committee consisting of five senior academics nominated by the Vice-Chancellor and four representatives nominated by the Aboriginal and Torres Strait Islander Commission, the Department of Employment, Education and Training and the Department of Social Security.

CAEPR DISCUSSION PAPERS are intended as a forum for the dissemination of refereed papers on research that falls within the CAEPR ambit. These papers are produced for discussion and comment within the research community and Aboriginal affairs policy arena. Many are subsequently published in academic journals. Copies of discussion papers can be purchased from Reply Paid 440, Bibliotech, Australian National University, Canberra ACT 0200. Ph (06) 249 2479 Fax (06) 257 5088.

**As with all CAEPR publications, the views expressed in this DISCUSSION PAPER are those of the author(s) and do not reflect an official CAEPR position.**

Jon Altman  
Director, CAEPR  
Australian National University

## **ABSTRACT**

A mid-term review of the Aboriginal Employment Development Policy (AEDP) has recently been completed. While much of the associated policy-rhetoric and assessment of policy outcomes has been aimed at the national level, the fiscal environment in which AEDP goals are to be achieved is invariably one of regional labour markets and administrative systems operating in the economic context of States and Territories. In view of this reality, this paper responds to a need for regional-level analyses of change in the economic status of indigenous people compared to that of non-indigenous people in each State and Territory. Using 1986 and 1991 Census-based social indicators for South Australia, attention is focussed on relative shifts in population growth and intra-State distribution, labour force and income status, and levels of welfare dependency (measured as non-employment income). A major finding is that while the gap in labour force status between indigenous and non-indigenous people has narrowed, the relative income status and level of welfare dependency of indigenous people has not improved. This suggests that increased emphasis on the quality of AEDP outcomes, and not just quantity, will be necessary if the overall aims of the AEDP are to be accomplished.

## **Acknowledgments**

The rationale for individual State and Territory analyses of change in the economic status of indigenous Australians emerged from discussions with colleagues at the Centre for Aboriginal Economic Policy Research (CAEPR). We are particularly indebted to Jon Altman for comments on early versions of this paper. The data used were purchased from the Australian Bureau of Statistics (ABS) to inform Phase 2 of the 1993 review of the Aboriginal Employment Development Policy. A large part of the exercise was devoted to the design, acquisition and tabulation of these data. Raw table figures were provided on floppy disk by the National Aboriginal and Torres Strait Islander Statistics Unit of ABS in Darwin. Statistical manipulation was conducted by INTSTAT Australia Pty Ltd and by Liu Jin, Research Officer at CAEPR. Krystyna Szokalski provided her usual high standard of editorial assistance and Nicky Lumb contributed careful proof-reading.

John Taylor is Research Fellow and Linda Roach is Research Assistant at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, Australian National University.



## Foreword

During the second half of 1993, CAEPR undertook Phase 2 of the evaluation of the AEDP on a consultancy basis for the Aboriginal and Torres Strait Islander Commission (ATSIC). The major outputs from this consultancy have been published as CAEPR Research Monograph No. 5 *The Relative Economic Status of Indigenous Australians 1986-91* and No. 6 *Regional Change in the Economic Status of Indigenous Australians 1986-91*, both authored by Dr John Taylor. These monographs were based on special tables summarising and cross-tabulating 1986 and 1991 Census data ordered from ABS.

The large amount of data generated from the censuses could not be fully summarised in the two research monographs and as part of its consultancy, CAEPR also provided ATSIC with 32-page statistical summaries for each State and Territory for the use of the AEDP Review Secretariat and Review Committee. These summaries form the basis of a series of CAEPR Discussion Papers that focus on intercensal changes between 1986 and 1991 in the comparative economic status of indigenous Australians at the State and Territory level. The first five discussion papers in this series, CAEPR Discussion Papers No. 55 to No. 59, co-authored by Dr John Taylor and Ms Linda Roach, take an intentionally standard approach to the analysis of these data. Subsequent discussion papers on the situation in Queensland, the Northern Territory and the Australian Capital Territory will vary somewhat from this standard approach: Queensland data will be presented for Aboriginal and Torres Strait Islander people separately; and the analysis of Northern Territory and Australian Capital Territory data will take into account the somewhat unusual population distribution in each jurisdiction.

This set of State-oriented discussion papers are a little different from most of CAEPR's research output, but are regarded as analytically valuable for two main reasons. First, CAEPR's research charter requires it to examine the economic situation of indigenous Australians at the State and Territory, as well as national and regional, levels of aggregation. Second, while ABS output on indigenous Australians is available in standard publications based on the 1986 and 1991 Census, there is little published that rigorously and systematically compares the economic status of indigenous Australians with non-indigenous Australians over time. It is hoped that each of these five discussion papers will be especially useful for policy development purposes at the State level.

Jon Altman  
Series Editor  
April 1994

A mid-term review of the Aboriginal Employment Development Policy (AEDP) has recently been completed (Bamblett 1994). The AEDP was originally developed as an immediate Commonwealth response to the *Report of the Committee of Review of Aboriginal Employment and Training Programs* (Miller 1985) and launched in association with the 1986-87 Commonwealth Budget. Subsequently, the AEDP was expanded and officially launched in November 1987. In late 1992, the Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University negotiated with the Aboriginal and Torres Strait Islander Commission (ATSIC) and the Commonwealth Department of Employment, Education and Training (DEET) to provide an analysis of official census statistics to assist the review process. This resulted in the publication of two monographs on national and inter-regional changes in the economic status of indigenous Australians between 1986 and 1991 (Taylor 1993a, 1993b).

The *Aboriginal Employment Development Policy Statement* (Australian Government 1987) highlighted that the overall objective of the AEDP is to assist indigenous Australians to achieve broad equity with other Australians in terms of employment and economic status. This objective was incorporated in three specific goals that emphasise both equity and statistical equality. These are:

- the achievement of employment equality with other Australians, that is to increase the proportion of indigenous Australians of working age, in employment to equal that of the total population;
- the achievement of income equality with other Australians, that is to increase median individual incomes to the median of the total population; and
- to reduce the welfare dependency of indigenous Australians to a level commensurate with that of other Australians, with a particular emphasis on unemployment-related welfare.

It has been understood for some time that an assessment of AEDP outcomes, in broad policy and statistical terms, would be almost entirely dependent on labour force statistics collected in the five-yearly Census of Population and Housing (Altman 1991: 168-70, 1992). In this context, it was fortunate that a degree of correlation emerged between the 1986 Census, the official launch of the AEDP, the availability of 1991 Census data in 1993 and the timing of its mid-term review. With this in mind, the terms of reference for Phase 2 of the evaluation of the AEDP agreed upon between the inter-agency AEDP Review Co-ordinating Committee and CAEPR stated specifically:

In order to assist in assessing the impact of the AEDP, conduct a detailed analysis of 1986 and 1991 Census data to ascertain the degree

to which the AEDP objectives have been achieved and in particular examine:

- the extent to which the income status of indigenous people has improved since 1986;
- the extent to which the employment status of indigenous people has improved since 1986;
- the extent to which the dependency of indigenous people on welfare (non-employment income) has declined since 1986.

Where possible, the analysis should also seek to identify:

- comparative changes in income status, employment and welfare dependence over the period since 1986 for the general Australian population;
- changes in overall macroeconomic conditions and employment opportunities in the mainstream labour market;
- other relevant factors like demographic, gender and locational issues impacting on the achievement of AEDP targets.

In recognition of renewed policy interest in regional issues, both within ATSIC and the Federal Government (Kelty 1993), and to allow information on the contemporary economic status of indigenous Australians to be disseminated as widely as possible, these issues have now been analysed for each State and Territory and the findings are presented in a series of CAEPR Discussion Papers. This paper is concerned with South Australia. Unlike Australian Bureau of Statistics' (ABS) State publications on indigenous people (ABS 1993), the focus of attention here is on intercensal change in labour force and income status with direct comparison drawn between indigenous and non-indigenous populations.

### **Population size and distribution, 1986-91**

To analyse change in the economic status of indigenous people in South Australia compared to that of the rest of the State's population, an appreciation of respective population growth rates and spatial distributions is crucial. This is because different pressures are brought to bear on the need for new job creation by variable rates of growth in working-age population while the economy itself varies in its capacity to create employment in different places.

Previous analyses at the national level have identified an urban/rural gradient in regard to broad levels of economic status among indigenous Australians (Gray and Tesfaghiorghis 1991; Tesfaghiorghis 1991; Taylor

1993a, 1993b). It has also been noted that the delivery of economic policy initiatives under the AEDP has a rationale based on the size of localities where clients live. Community-based programs are predominant in small, mostly rural places where labour markets are poorly developed, while mainstream initiatives are more evident in urban places (Taylor 1993a: 5-6). Given the policy significance of these structural distinctions, the subsequent analysis is organised according to the ABS section-of-State classification, although for analytical convenience the standard four-way taxonomy has been reduced to three components by amalgamating data for bounded localities and the rural balance to create a single 'rural' category (0-999 persons).<sup>1</sup>

### *The indigenous population*

In contrast with earlier intercensal periods, the change in the census count of indigenous people in South Australia between 1986 and 1991 accords broadly with expectations, giving some cause for confidence, for the first time, in its interpretation (Luther, Gaminiratne and Gray 1993). One of the features of indigenous population distribution in South Australia over the past two decades has been a gradual increase in the proportion resident in Adelaide as well as in other major urban areas such as Port Augusta, Whyalla and Ceduna. For example, between 1971 and 1986, the proportion of the State's indigenous population living in Adelaide increased substantially from 25 per cent to 40 per cent while the proportion living in other urban areas also increased from 21 per cent to 32 per cent. Accordingly, the rural share of the indigenous population diminished over the same period from 54 per cent in 1971 to only 28 per cent in 1986.

The beginnings of this shift away from a predominantly rural pattern of settlement towards residence in Adelaide and other urban centres can be traced to the 1950s. The migration flows involved in this redistribution and their underlying causes have been well researched and documented (Gale 1967, 1972; Gale and Wundersitz 1982; Hugo 1989: 117-131). Briefly, movement to Adelaide from mission and government reserves was stimulated by a search for employment and was added to by the better provision of urban social services as well as high rates of incarceration leading to enforced relocation. Once these metropolitan links were established, movement out of rural areas was sustained by a process of chain migration involving kin networks. In Gray's (1989: 133) view, this population shift was also encouraged by a more active program of housing provision for indigenous people in Adelaide. Finally, the growing tendency for urban-based indigenous people to self-identify in the census, though unquantifiable, has undoubtedly played a role in augmenting urban population numbers (Altman 1992: 8).

Analysis of indigenous population change by section-of-State for the most recent intercensal period between 1986 and 1991 indicates that the trend



towards 'metropolitanisation' has continued and Adelaide clearly dominates as the primary focus of indigenous settlement (Table 1). At the same time, there has also been something of a rural revival with the smallest localities experiencing the highest rates of growth and accounting for an increased share of the population. It is the country towns which now display signs of demographic reversal and a tendency to lose population through out-migration. This pattern of distributional change acquires added policy significance in view of contrary tendencies apparent among the rest of the population in South Australia.

**Table 1. Change in indigenous population by section-of-State: South Australia, 1986-91.**

	1986		1991		1986-1991	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Major urban	5,696	39.8	6,688	41.2	992	17.4
Other urban	4,580	32.0	4,648	28.6	68	1.5
Rural	4,016	28.2	4,899	30.2	883	22.0
Total	14,292	100.0	16,235	100.0	1,943	13.6

*The non-indigenous population*

Shifts in proportional distribution by section-of-State were less apparent among the majority of the South Australian population (Table 2). At the same time, the redistribution tendencies exhibited are significant for being opposite to those displayed by indigenous people. Thus, in contrast to the marked growth of indigenous population in rural areas, the rest of the State's rural population maintained a long-standing pattern of exodus (Hugo 1989: 24-5).

**Table 2. Change in non-indigenous population by section-of-State: South Australia, 1986-91.**

	1986		1991		1986-1991	
	No. (million)	Per cent	No. (million)	Per cent	Net change	Per cent change
Major urban	0.91	68.2	0.95	68.7	33,729	3.6
Other urban	0.22	16.4	0.23	16.6	9,405	4.2
Rural	0.20	15.4	0.20	14.7	-2,444	-1.2
Total	1.32	100.0	1.38	100.0	40,690	3.0

On the other hand, non-metropolitan towns recorded a relatively high rate of growth in their non-indigenous population (Table 2) but experienced only a slight increase in indigenous population (Table 1). Aside from these differences in spatial redistribution, the overwhelming contrast with the indigenous population remains the far greater concentration of the majority of the State's residents in Adelaide and their receding presence in rural areas. It should also be noted that in certain parts of South Australia and over large areas, such as in the Pitjantjatjara lands in the north of the State, indigenous people constitute by far the majority of the population.

*Change in the working-age population, 1986-91*

As foreshadowed by Gray and Tesfaghiorghis (1991), the rate of growth in the indigenous population of working age continued to outstrip that of the rest of the working-age population during the 1986-91 intercensal period. This was the inevitable outcome of demographic processes set in train during the early 1970s, culminating in distinct shifts in the age structure of the indigenous population across Australia. Table 3 indicates that the rate of increase of the indigenous working-age population in South Australia was 3.7 times higher than that of the rest of the population. In addition to higher rates of natural increase, this variation may be partly explained by net gains to the indigenous working-age population due to interstate migration compared to a net loss among the rest of the population. Between 1986 and 1991, the balance of migration flows in and out of the State among indigenous people of working age led to a net gain of 141 persons representing a rate of increase of around 16 per thousand of the average intercensal population. While this increment is not excessive it compares favourably with a net loss of 4,723 non-indigenous residents of working age which constituted a rate of depletion of 5 persons per thousand.

**Table 3. Change in population aged 15-64 years among indigenous and non-indigenous Australians: South Australia, 1986-1991.**

	1986	1991	Net change	Per cent change
Indigenous	8,367	9,439	1,072	12.8
Non-indigenous	885,773	916,407	30,634	3.5

**Labour force status, 1986-91**

Three standard social indicators are used here to highlight the extent and direction of relative change in indigenous labour force status: the employment rate, representing the percentage of those aged 15-64 years

who indicated in the census that they were in employment during the week prior to enumeration; the unemployment rate, expressing those who indicated that they were not in employment but had actively looked for work during the four weeks prior to enumeration as a percentage of those in the labour force (those employed plus those unemployed); and the labour force participation rate, representing those in the labour force as a percentage of those of working age.

Between 1986 and 1991, the overall employment rate of indigenous people in South Australia showed some sign of improvement, rising from 36.1 per cent to 41.3 per cent (Table 4). It is instructive to consider this positive trend in a wider labour market context as corresponding figures for the rest of the State's working-age population showed only slight improvement, from 64.1 per cent to 64.8 per cent. Thus, a marginal degree of convergence in employment levels between the two groups has been achieved in recent years, although it should be noted that the rate for indigenous people remains substantially below the State average. At the same time, the relative improvement in indigenous labour force status has been achieved against a background of sustained higher growth in the population of working age.

**Table 4. Change in labour force status of indigenous and non-indigenous Australians: South Australia, 1986-91.**

	Indigenous		Non-indigenous	
	1986	1991	1986	1991
	(1)	(1)	(2)	(2)
Employment rate	36.1	41.3	64.1	64.8
Unemployment rate	34.7	28.4	9.4	11.7
Participation rate	55.2	57.7	70.7	73.4
Ratios (1/2)				
Employment rate	0.56	0.64		
Unemployment rate	3.70	2.42		
Participation rate	0.78	0.78		

All figures exclude those who did not state their labour force status.

A similar closure of the gap in labour force status between indigenous people and the rest of the population is apparent from intercensal shifts in unemployment rates (Table 4). The results point to a significant decline in the indigenous unemployment rate at a time when the non-indigenous rate has risen noticeably. Using the data in Table 4, it can be calculated that the indigenous unemployment rate as a ratio of the non-indigenous

unemployment rate fell from being 3.7 times higher in 1986 to 2.4 times higher in 1991.

It is important to qualify discussions of relative employment and unemployment rates with data on relative rates of labour force participation since the proportion of the indigenous population formally attached to the labour market has historically been well below the State average. Evidence from the 1991 Census indicates that this is still the case (Table 4). Despite the fact that the indigenous labour force participation rate increased slightly from 55.2 per cent in 1986 to 57.7 per cent in 1991, the non-indigenous participation rate also rose from 70.7 per cent to 73.4 per cent, thus maintaining its substantially higher levels.

A number of points are relevant in interpreting these data. First, the much higher intercensal growth rate of the indigenous working-age population means an increase in the indigenous participation rate at a level equivalent to the rest of the population has required a proportionally greater increase in numbers joining the labour force. Likewise, with regard to the employment rate, greater success in gaining employment has been required among indigenous people simply to maintain this at a constant level, to say nothing of actually improving it. Another factor, which has dampened the rate of growth in labour force participation in some other States, is the move to encourage higher levels of Aboriginal attendance and retention in educational institutions under the Federal Aboriginal and Torres Strait Islander Education Policy.

In this context, it is worth noting that the growth of 4.2 per cent in the proportion of indigenous people aged 15 years and over who were reported by the census as attending an educational institution in South Australia, was lower than the national average rate of 14.6 per cent. The actual numbers recorded were 1,883 in 1986 increasing to 1,963 in 1991. While this growth in attendance at educational institutions may result in employment dividends at some later stage, its most likely immediate impact would have been to dampen growth in the labour force participation rate. At the same time, standard explanations advanced by labour economists of apparently intractable low participation, due to a variety of factors operating to discourage indigenous people from seeking employment, may also have some validity (Daly 1992).

#### *Section-of-State and gender variations*

A modified picture of intercensal change in labour force status emerges from a disaggregation of the data by section-of-State and gender. The magnitude and net direction of such shifts are shown in Tables 5 and 6, while the actual rates from which these are calculated are shown in Tables 7 and 8.



**Table 5. Net change in labour force status of indigenous Australians by section-of-State and gender: South Australia, 1986-91.**

	Major urban Net change	Other urban Net change	Rural Net change	Total Net change
Males				
Employment rate	1.7	5.8	4.5	4.3
Unemployment rate	-3.9	-5.1	-8.0	-6.3
Participation rate	-1.6	3.9	-1.4	0.1
Females				
Employment rate	4.5	4.9	9.0	6.2
Unemployment rate	-4.8	-5.2	-4.8	-5.7
Participation rate	3.4	4.3	7.9	5.1

**Table 6. Net change in labour force status of non-indigenous Australians by section-of-State and gender: South Australia, 1986-91.**

	Major urban Net change	Other urban Net change	Rural Net change	Total Net change
Males				
Employment rate	-2.7	-3.1	-4.0	-3.0
Unemployment rate	3.3	3.3	3.1	3.0
Participation rate	0.0	-0.4	-1.5	-0.3
Females				
Employment rate	4.7	6.4	2.3	4.6
Unemployment rate	0.8	0.0	1.5	-0.8
Participation rate	5.8	7.2	3.5	5.7

While improvements in the labour force status of indigenous people have occurred regardless of residence by settlement size, a distinction emerges between Adelaide and the population elsewhere. Among males, the increase in employment rate and decline in unemployment was clearly highest in non-metropolitan towns and rural areas, with those in Adelaide showing only slight improvement. This variation is less apparent among females, although those living in rural areas experienced considerably greater enhancement of their employment status. Overall, indigenous females fared better than their male counterparts largely due to their greater ability to secure employment in Adelaide, as well as a general tendency to increase their level of labour force participation. One point worth noting is that the variation in changing labour force status between indigenous males and females follows the pattern found in the workforce generally (Table 6).

This may indicate that in Adelaide, where opportunities are restricted to mainstream labour markets, indigenous people are more prone to the economic forces shaping work patterns in the population generally.

**Table 7. Change in labour force status of indigenous Australians by section-of-State and gender: South Australia, 1986-91.**

	Major urban		Other urban		Rural		Total	
	1986	1991	1986	1991	1986	1991	1986	1991
<b>Males</b>								
Employment rate	41.5	43.2	37.3	43.2	53.6	58.1	43.8	48.1
Unemployment rate	40.5	36.6	45.1	40.0	24.6	16.6	37.2	30.9
Participation rate	69.8	68.2	68.1	72.0	71.0	69.6	69.6	69.7
<b>Females</b>								
Employment rate	28.7	33.2	23.8	28.7	35.5	44.4	28.8	35.0
Unemployment rate	32.0	27.2	39.5	34.4	18.6	13.7	30.7	25.0
Participation rate	42.2	45.6	39.3	43.7	43.6	51.5	41.6	46.7

**Table 8. Change in labour force status of non-indigenous Australians by section-of-State and gender: South Australia, 1986-91.**

	Major urban		Other urban		Rural		Total	
	1986	1991	1986	1991	1986	1991	1986	1991
<b>Males</b>								
Employment rate	75.1	72.4	75.9	72.8	79.9	75.9	76.0	73.0
Unemployment rate	9.8	13.1	10.6	13.9	8.1	11.1	9.6	12.9
Participation rate	83.2	83.2	84.9	84.5	86.9	85.4	84.1	83.8
<b>Females</b>								
Employment rate	52.2	56.9	46.6	53.1	56.5	58.8	52.0	56.6
Unemployment rate	9.2	10.0	11.1	11.1	7.3	8.8	9.2	10.0
Participation rate	57.5	63.3	52.5	59.7	60.9	64.5	57.2	62.9

In non-metropolitan parts of the State, the change in labour force status differs quite markedly between indigenous people and the rest of the population. This contrast is most evident in rural areas where, regardless of gender, increases in indigenous employment rates have been substantial and unemployment rates have shown a marked decline. The rural employment rate, for example, increased by around 4 percentage points for males and almost 9 percentage points for females, while unemployment rates correspondingly fell by as much as 8 percentage points for males and

5 percentage points for females. Equivalent figures for the rest of the population reveal the opposite trend with a lowering of employment status among males and general increases in the level of unemployment. As a consequence of these differential shifts based on settlement size, the situation revealed by 1986 Census data whereby the labour force status of indigenous people in rural areas was noticeably higher than in Adelaide and other urban centres, has been strengthened. Comparing indigenous males in Adelaide with those in rural areas, for example, the metropolitan employment rate is now only three-quarters (74.3 per cent) of the level found in rural areas, the unemployment rate is more than twice as high, and the level of labour force participation is slightly lower. Similar discrepancies are apparent among females. Interestingly, this pattern of rural pre-eminence is also evident among the rest of the population although the urban/rural contrast is much less marked (Table 8).

Relatively favourable shifts in the labour force status of indigenous people are unlikely to have occurred from the effect of market forces. More realistically they reflect the impact of widespread program intervention. In rural areas and some country towns this has primarily taken the form of participation in the CDEP scheme.<sup>2</sup> At the time of the 1986 Census there were 12 communities in the CDEP scheme in South Australia with 1,090 participants. By 1991, 18 communities were participating in the scheme with a total of 1,622 participants. Of these, 1,344 were resident in rural communities and 278 in the towns of Port Lincoln and Ceduna.

#### *Employment growth and the AEDP*

The likelihood that AEDP initiatives have served to enhance the relative standing of indigenous people in the labour market is suggested by their much higher rates of intercensal employment growth compared to other residents of South Australia, albeit starting from a much lower base (Table 9). Between 1986 and 1991, the number of indigenous people in employment grew by 957 representing an increase of 33 per cent, more than six times the rate recorded for the rest of the population.

**Table 9. Employment growth among indigenous and non-indigenous Australians: South Australia, 1986-91.**

	Number employed		Change	
	1986	1991	Net	Per cent
Indigenous	2,864	3,821	957	33.4
Non-indigenous	558,987	586,925	27,938	5.0
Total	561,851	590,746	28,895	5.1

In estimating the proportion of this employment growth due to participation in the CDEP scheme, much depends on assumptions made regarding the ratio of CDEP scheme workers to participants as the participant schedules include non-working spouses. A 60 per cent ratio is employed here as a best estimate using the scant evidence available from the 1993 review of the scheme (Deloitte Touche Tohmatsu 1993: 51). Clearly, a higher ratio would increase the contribution of CDEP scheme employment to total employment with associated policy significance.

Using the minimum ratio, it is estimated that expansion of the CDEP scheme accounted for an increase of 973 jobs between 1986 and 1991, with 806 of these generated in rural areas and 167 in Port Lincoln and Ceduna. According to Table 10, however, the net increase in rural jobs for indigenous people was only 476 and in other urban areas only 156. The policy message from this is clear. Without increased participation in the CDEP scheme, employment in non-metropolitan South Australia would have decreased, and substantially so in rural areas. Accordingly, rural labour force status would have been far worse than indicated by 1991 Census data, as would the overall situation in country towns. In Adelaide, the rate of job growth for indigenous people was far less than in rural areas but achieved without access to the CDEP scheme. Furthermore, indigenous residents of Adelaide recorded much higher growth in jobs than the rest of the metropolitan population suggesting that the public and private sector initiatives of the AEDP left some mark, although precisely in what manner, to what extent and over what time frame, is difficult to determine.

**Table 10. Employment growth among indigenous and non-indigenous Australians by section-of-State: South Australia, 1986-91.**

	Per cent employed		Change	
	1986	1991	Net	Per cent
Indigenous				
Major urban	39.8	38.3	325	28.5
Other urban	26.6	23.8	156	20.7
Rural	33.9	37.8	476	49.1
Total	100.0	100.0	957	33.4
Non-indigenous				
Major urban	68.6	68.9	20,844	5.4
Other urban	15.0	15.6	8,045	9.6
Rural	16.4	15.5	-951	-1.0
Total	100.0	100.0	27,938	5.0

Unfortunately, it is not possible to be precise about the impact of CDEP scheme participation on employment change given that calculations are



based on assumptions regarding the ratio of actual workers in the scheme to those registered as participants. Furthermore, the data are drawn from an administrative database which is not strictly comparable with census data. If anything, the estimate of the CDEP scheme's contribution to intercensal employment growth is likely to be a minimum figure judging by early returns from ATSI's newly instituted CDEP Census (Taylor 1993b: 35-6). If this is so, then the loss of rural and urban jobs in the non-CDEP scheme sector would have been greater still.

Likewise, information on the number of placements in the Training for Aboriginals Program (TAP) and other DEET labour market programs in South Australia over the course of the intercensal period are difficult to obtain. However, figures made available by DEET for the year 1989/90 indicate that a total of 841 indigenous people commenced placements in all labour market programs in the State. Even though this level of placement was not sustained throughout the five-yearly intercensal period, and assuming that some placements were made in rural areas, the gap between recorded urban job growth and placement data is striking. One explanation may be that many TAP placements do not represent 'new' entrants to 'new' jobs, but simply reflect the recycling of individuals several times through a constant, or even declining, pool of positions (Johnston 1991: 73). Another may be found in the short duration of subsidies and program support combined with the failure of some participants to remain in programs. Finally, any positive employment outcomes from program placements may simply have disappeared by census time (Daly 1993). Thus, improvements in labour force status, particularly among males, that may have been expected to occur in urban areas due to the application of private and public sector employment programs administered by DEET do not emerge from the data.

Whatever the case, it is apparent that in urban areas particularly, the AEDP has fallen behind in its task of achieving employment equality or substantially improving employment status, particularly for indigenous males. The worsening labour market position of indigenous males is further underlined by the fact that just over half of all new jobs for indigenous people (54 per cent) went to females. Because of their far fewer numbers in the labour force, however, indigenous females experienced a much higher rate of employment growth (Table 11). This is consistent with the general gender pattern of job growth in the State, although it is worth emphasising that the non-indigenous males experienced negative overall growth in employment at a time when their indigenous counterparts gained. Thus, in the deteriorating labour market conditions of the early 1990s one important impact of the AEDP, and the CDEP scheme in particular, may simply have been to ameliorate potentially worse employment statistics for indigenous males.

**Table 11. Employment growth among indigenous and non-indigenous Australians by gender: South Australia, 1986-91.**

	Per cent employed		Change	
	1986	1991	Net	Per cent
Indigenous				
Males	59.0	55.6	437	25.9
Females	41.0	44.4	520	44.3
Total	100.0	100.0	957	33.4
Non-indigenous				
Males	59.7	56.5	-2,338	-0.7
Females	40.3	43.5	30,276	13.4
Total	100.0	100.0	27,938	5.0

### Income status, 1986-91

A key goal of the AEDP is to achieve an improvement in income levels for indigenous Australians to a point where they are equal to those of the general population. In this endeavour, much depends, not just on accelerating the rate of employment growth among indigenous people above that of the rest of the workforce, but also on ensuring that the types of jobs created generate incomes that are commensurate with those of the general population. Given the relative improvement in the labour force status of indigenous people in South Australia there would appear to be statistical grounds for expecting that the income gap between indigenous and non-indigenous Australians may have narrowed.

**Table 12. Change in income status of indigenous and non-indigenous Australians: South Australia, 1986-91.**

	Income (\$000s)			
	Indigenous		Non-indigenous	
	1986	1991	1986	1991
Mean	8.3	11.8	12.5	17.9
Median	6.4	9.0	10.5	15.2
Ratio of indigenous/non-indigenous				
Mean	0.67	0.66		
Median	0.61	0.59		

Overall, however, the census indicates little change with mean income for the indigenous adult population as a ratio of that for the rest of the

population, showing a slight fall from 0.67 in 1986 to 0.66 in 1991 (Table 12).<sup>3</sup> Median income was somewhat lower as a ratio of the non-indigenous median and also displayed a slight decline. This lack of improvement in relative incomes may partly be explained by the fact that one-third of new jobs for indigenous people have been generated by participation in the CDEP scheme which provides for income at levels more or less equivalent to welfare entitlements. At the same time, it suggests that employment created independently of the scheme has also been in relatively low-wage occupations. If further expansion of employment opportunities for indigenous people continues to be provided by low wage work, such as currently provided by the CDEP scheme, there seems little prospect that the overall income gap between them and the rest of the population in South Australia will narrow. If anything, it is likely to widen further. This is of crucial policy significance as it signals that improvements in labour force status alone are not sufficient to enhance income status. Of equal importance to job creation is the nature of the work involved and the income it generates.

#### *Income change by section-of-State*

The proposition that overall income levels are influenced as much by the nature of work as by the rate of employment growth is supported by data showing change in the income status of indigenous people by section-of-State (Table 13). Despite the fact that intercensal improvement in the labour force status of indigenous people has been most noticeable in rural areas, income levels remain inversely related to settlement size.

**Table 13. Change in income status of indigenous and non-indigenous Australians by section-of-State: South Australia, 1986-91.**

	Major urban 1986 1991		Income (\$000s)				Total 1986 1991	
			Other urban 1986 1991		Rural 1986 1991			
Indigenous								
Mean	8.9	12.9	8.0	11.6	7.8	10.3	8.3	11.8
Median	6.7	10.1	5.9	9.0	6.4	7.7	6.4	9.0
Non-indigenous								
Mean	12.8	18.4	12.0	17.1	11.5	16.1	12.5	17.9
Median	11.0	15.9	9.9	14.4	9.0	12.9	10.5	15.2
Ratio of indigenous/non-indigenous								
Mean	0.69	0.70	0.67	0.68	0.68	0.64	0.67	0.66
Median	0.61	0.64	0.60	0.63	0.72	0.60	0.61	0.59

At the same time, the rural/urban income gap appears to be increasing. For example, the ratio of mean income for rural-based indigenous people

compared to those in Adelaide decreased from 0.87 in 1986 to 0.80 in 1991. Comparing rural incomes with other urban incomes, the ratio of mean incomes also declined from 0.97 in 1986 to 0.88 in 1991. A similar trend is apparent for other residents of the State with the ratio of rural to major urban mean incomes falling slightly from 0.90 in 1986 to 0.88 in 1991. The widening of the urban/rural income gap among indigenous people is not surprising given the composition of much rural employment as part-time work with remuneration based on close welfare equivalents via the CDEP scheme. Notwithstanding signs of improvement in labour force status, rural areas remain structurally disadvantaged compared to urban areas where a much greater proportion of jobs are full-time and award-based.

#### *Income change by gender*

The primary cause of the widening gap between indigenous and non-indigenous income was a relative decline in the income level of indigenous males (Table 14). Using the figures for nominal mean income in 1986, indigenous male income was 75 per cent of the total mean for the non-indigenous population. By 1991, this proportion had fallen to 72 per cent. In contrast, mean income for indigenous females rose as a proportion of total non-indigenous mean income from 58 per cent in 1986 to almost 60 per cent in 1991.

**Table 14. Change in income status of indigenous and non-indigenous Australians by gender: South Australia, 1986-91.**

	Males		Income (\$000s) Females		Total	
	1986	1991	1986	1991	1986	1991
Indigenous						
Mean	9.4	12.9	7.3	10.7	8.3	11.8
Median	7.0	9.3	6.1	8.8	6.4	9.0
Non-indigenous						
Mean	16.4	22.3	8.5	13.3	12.5	17.9
Median	15.5	20.3	6.2	10.5	10.5	15.2
Ratio of indigenous/non-indigenous						
Mean	0.57	0.58	0.86	0.81	0.67	0.66
Median	0.46	0.46	0.98	0.84	0.61	0.59

If these figures are expressed in terms of 1989-90 prices (using a Consumer Price Index of 73.5 in 1985-86 and 105.3 in 1990-91), the real gender-based shift in incomes is apparent with indigenous male incomes falling slightly from a real mean of \$12,789 in 1986 to \$12,250 in 1991 and the female equivalent showing a counter-tendency by rising from



\$9,931 to \$10,161. This marginal convergence in male and female incomes is consistent with the trend revealed by Treadgold (1988) for the intercensal periods between 1976-86 and is most likely linked to the better performance of females in sectors of the labour market less affected by the vagaries of the economy. Also, it probably reflects growing gender differentials in the nature of work with indigenous females employed for relatively longer hours and in more skilled employment (Taylor 1993a).

Despite the income gains experienced by indigenous females, they failed to keep up with the rate of growth in income experienced by their non-indigenous counterparts. Nominal mean income for indigenous females, for example, increased by 46 per cent during the intercensal period. Non-indigenous females, on the other hand, increased their mean income by 56 per cent starting from a higher base (Table 14). Thus, ratios of indigenous to non-indigenous incomes reveal that the gap between female incomes has widened, while that between males has remained relatively unchanged. At the same time, in monetary terms, indigenous females remain behind indigenous males with the average income for indigenous females rising by an equivalent amount to that of indigenous males but from a lower base.

### **Welfare dependency**

In the AEDP, welfare dependency is equated with dependency on unemployment benefit. Altman and Smith (1993: 21) take the view that this definition is somewhat narrow, reflecting the labour market focus of the AEDP. They take a broader definition of welfare to include all transfer payments from the Federal Government to indigenous citizens. Such a wider definition is also necessitated by the limited availability of official sources of income data for indigenous Australians. At an aggregate level, the most comprehensive indication of the reliance of indigenous people on welfare income is available from census data. This is derived from a cross-tabulation of individual incomes by labour force status. Using this source, Table 15 shows the proportion of total income accruing to each category of the labour force, and to those not in the labour force, in 1986 and 1991.

Overall, there is little change in the contribution of employment income to total income. If anything, a slightly higher proportion of income among the indigenous population derives from employment while among the rest of the population it is slightly less. This seems to suggest that the longer-term trend of a decline in employment income relative to total income, noted by Daly and Hawke (1993) for the period 1976-91, has been arrested by improvements in employment income during the most recent intercensal period. However, the most likely reason for this is an increase in the proportion of total employment income derived from CDEP scheme participation and it might be questioned whether income based on notional

citizen entitlements should properly be classified as welfare-related rather than employment-based.

**Table 15. Change in total income of indigenous and non-indigenous Australians by labour force status: South Australia, 1986-91.**

	1986		1991	
	Income (\$ million)	Per cent	Income (\$ million)	Per cent
Indigenous				
Employed	36.4	59.8	59.3	61.9
Unemployed	7.3	12.1	11.0	11.6
Not in the labour force	17.1	28.1	25.4	26.5
Total	60.8	100.0	95.8	100.0
Non-indigenous				
Employed	9,209.5	87.7	13,097.2	86.6
Unemployed	301.4	2.9	588.0	3.9
Not in the labour force	987.0	9.4	1,436.4	9.5
Total	10,498.0	100.0	15,121.7	100.0

At the same time, even if income from the CDEP scheme is accepted as employment income, the proportion of total income derived from non-welfare sources remains fixed at a much lower level much lower among indigenous people than among the rest of the population. This is despite their relatively greater improvement in labour force status. Thus, the policy objective of a reduction in welfare dependency among indigenous people to a level commensurate with that of other Australians is no closer to being achieved in South Australia than before the introduction of the AEDP.

Actual shifts in mean employment and non-employment incomes are shown in Table 16. The most striking feature is that mean employment incomes for indigenous people have increased at a considerably slower rate than for others in employment. This is further indicated by the decline in ratios of indigenous/non-indigenous employment income from 0.79 in 1986 to 0.73 in 1991. As already noted, this is to be expected given that a substantial share of new employment income for indigenous workers is essentially fixed at a rate roughly equivalent to unemployment benefit (now Jobsearch and Newstart allowances). As for non-employment income, the mean individual income of unemployed indigenous people in 1986 was \$5,270, which was substantially less than half (40 per cent) of the mean income recorded for those in employment. By 1991, this gap had closed somewhat but unemployed indigenous people still had incomes that were less than half of those recorded for indigenous people in employment (48 per cent).

**Table 16. Change in mean employment/non-employment income of indigenous and non-indigenous Australians: South Australia, 1986-91.**

Labour force status	Mean income (\$000s)		Change	
	1986	1991	Net	Per cent
Indigenous				
Employed	13.23	16.96	3.72	28.1
Unemployed	5.27	8.07	2.79	52.9
Not in the labour force	5.52	7.91	2.40	43.5
Total	8.40	11.85	3.46	41.1
Non-indigenous				
Employed	16.85	23.21	6.36	37.7
Unemployed	5.41	8.23	2.82	52.1
Not in the labour force	4.22	6.94	2.72	64.5
Total	12.55	17.94	5.39	42.9
Ratio of indigenous/non-indigenous				
Employed	0.79	0.73	-0.05	-7.0
Unemployed	0.98	0.98	0.01	0.5
Not in the labour force	1.31	1.14	-0.17	-12.8
Total	0.67	0.66	-0.01	-1.3

### Policy implications

This analysis of change in the relative economic status of indigenous people in South Australia during the intercensal period 1986 to 1991 provides the first comprehensive indication of the impacts of the AEDP in the State since it was implemented in 1987. The results, in terms of stated policy objectives, appear to be mixed. On the one hand, employment and unemployment rates among the indigenous population show distinct signs of improvement leading to a closing of the gap in these indicators (albeit slowly) with the rest of the population. On the other hand, when the data are disaggregated by section-of-State and the nature of employment growth is investigated, the achievement is revealed to be a predominantly rural phenomenon and related to the expansion of the CDEP scheme since the last census.

In contrast with the growth of the rural employment, urban-based public and private sector jobs show a much slower rate of increase. While this runs counter to expectations, given the strength of program efforts to encourage urban employment, it appears that the impact of AEDP public and private sector programs, in the context of a depressed mainstream labour market, has been to ameliorate what might otherwise have been a far worse outcome. This proposition cannot be validated from census data alone and requires close scrutiny of DEET's program placement and post program monitoring data in order to examine the precise nature and spatial application of labour market programs, as well as their links with

employment outcomes. However, in terms of acquiring new jobs in urban labour markets, it is clear that indigenous people performed at least as well, if not better, than other job-seekers during the intercensal period and this suggests that focused labour market programs have left their mark.

The relative lack of improvement in the income status of indigenous people in South Australia in the context of much improved labour force status emphasises the need for quality, as well as quantity, in job creation schemes if the overall aims of the AEDP are to be achieved. This is given added weight when account is taken of growing income inequalities for the population as a whole (Saunders 1992). Indigenous people appear to lag behind in an economy which is increasingly divided between the 'haves' and 'have-nots'. From a labour market perspective, one difficulty continues to be the substantial proportion of indigenous adults of working age who are not in the labour force. This accounts, in large part, for the persistence of relatively high levels of welfare dependence. Given that much new employment growth has involved a shift into CDEP scheme employment of individuals formerly on unemployment benefit or outside the labour force, it could be argued that levels of welfare dependence are actually higher than revealed by the census. This is because income derived from such employment merely represents the transfer of social security entitlements under a different guise.

Aggregate State-level data showing economic change clearly have the capacity to conceal important intra-State and gender variations. In brief, the improvements in labour force status evident at the State level are less apparent in urban areas, particularly among males, and considerably enhanced in rural areas. Despite this, rural incomes remain firmly behind those in urban areas. Likewise, the labour force and income status of indigenous women show distinct improvement compared to those of men, which in income terms at least, has regressed. This clearly underlines the importance of assessing policy impacts on the economic status of indigenous people at varying scales of analysis and for different sub-groups in the population.

Given a continuation of intercensal trends in economic status among indigenous people in South Australia a number of outcomes seem likely in the medium term. Given continued growth in CDEP scheme employment, the gap in labour force status between indigenous and non-indigenous residents will further recede, but overall, indigenous people will remain half as likely to be in employment and two to three times more likely to be unemployed. Depending on the rate of growth in CDEP scheme participation, reliance on welfare (non-employment) income may show a tendency to decline but levels of such support will remain notably higher among indigenous people not least because of sustained lower labour force participation. One unknown factor is whether enrolments in educational



institutions will start to translate into increased employment in private and public sector jobs. Much will depend here on the pace and nature of economic recovery while special labour market programs and other funding regimes for indigenous organisations have a demonstrated capacity to provide some buoyancy even in depressed economic circumstances. Whatever ensues, it is important that the enhancement of occupational status, and not just labour force status, be the key target of policy. To date, improvements in labour force status have not impacted on the gap in average incomes. For this to change, indigenous people will need to acquire employment at a faster rate and in positions that provide an income at least commensurate with those obtained by the rest of the workforce.

### Notes

1. The ABS sections-of-State within each State and Territory are as follows: major urban - all urban centres with a population of 100,000 and over; other urban - all urban centres with a population of 1,000 to 99,999; bounded locality - all population clusters of 200 to 999 persons; rural balance - the rural remainder of the State or Territory.
2. The Community Development Employment Projects (CDEP) scheme is a Commonwealth Government program in which unemployed indigenous people of working age forgo their entitlements to payments from the Department of Social Security but receive the equivalent from a local community organisation in return for work. For a full description of the scheme and the policy issues surrounding it, see Altman and Sanders (1991) and Sanders (1993).
3. In estimating mean incomes, the mid-point for each income category has been taken on the assumption that individuals are evenly distributed around this mid-point. The open-ended highest category is problematic, but following Treadgold (1988) it is arbitrarily assumed that the average income received by individuals in this category was one and a half times the lower limit of the highest category. Clearly, estimates of mean incomes will vary according to the upper level adopted. In this analysis the full range of income categories has been utilised with \$50,000+ as the highest category in 1986 and \$70,000+ in 1991.

### References

- Altman, J.C. 1991. 'Conclusion', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Altman, J.C. 1992. 'Statistics about indigenous Australians: needs, problems, options and implications', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Altman, J.C. and Sanders, W. 1991. 'The CDEP scheme: administrative and policy issues', *Australian Journal of Public Administration*, 50 (4): 515-25.
- Altman, J.C. and Smith, D.E. 1993. 'The welfare dependence of Aboriginal Australians: policy implications', *Social Security Journal*, March 1993: 19-43.

- Australian Bureau of Statistics 1993. *Western Australia's Aboriginal People*, cat. no. 4107.5, ABS, Perth.
- Australian Government 1987. *Aboriginal Employment Development Policy Statement: Policy Paper No. 1*, Australian Government Publishing Service, Canberra.
- Bamblett, A. (Chair) 1994. *Review of the AEDP*, Aboriginal and Torres Strait Islander Commission, Canberra.
- Daly, A.E. 1992. 'Replacement ratios for female sole parents: the position of Aboriginal women', *Australian Bulletin of Labour*, 18 (4): 297-311.
- Daly, A.E. 1993. 'The evaluation of labour market programs: some issues for Aboriginal policy formulation from experience in the United States', *Labour Economics and Productivity* 5 (1): 45-61.
- Daly, A.E. and Hawke, A.E. 1993. 'Work and welfare for indigenous Australians', *CAEPR Discussion Paper No. 48*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Deloitte Touche Tohmatsu 1993. *No Reverse Gear: A National Review of the Community Development Employment Projects Scheme*, Report to the Aboriginal and Torres Strait Islander Commission, Canberra.
- Gale, F. 1967. 'Patterns of post-European Aboriginal migration in South Australia', *Proceedings of the Royal Geographical Society of South Australia*, 67, pp. 21-37.
- Gale, F. 1972. *Urban Aborigines*, Australian National University Press, Canberra.
- Gale, F. and Wundersitz, J. 1982. *Adelaide Aborigines. A Case Study of Urban Life 1966-1981*, Development Studies Centre, Australian National University, Canberra.
- Gray, A. 1989. 'Aboriginal migration to the cities', *Journal of the Australian Population Association*, 6 (2): 122-44.
- Gray, A. and Tesfaghiorghis, H. 1991. 'Social indicators of the Aboriginal population of Australia', *CAEPR Discussion Paper No. 18*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Gray, A. and Tesfaghiorghis, H. 1993. 'Aboriginal population prospects', *Journal of the Australian Population Association*, 10 (2): 81-101.
- Hugo, G.J. 1989. *Atlas of the Australian People: South Australia*, Australian Government Publishing Service, Canberra.
- Johnston, E. 1991. *Review of the Training for Aborigines Program*, Report to the Ministers for Employment, Education and Training, and Aboriginal Affairs, Department of Employment, Education and Training, Canberra.
- Kelty, B. (Chair) 1993. *Developing Australia: A Regional Perspective*, Report to the Federal Government by the Taskforce on Regional Development, Australian Government Publishing Service, Canberra.
- Luther, N.Y. Gaminiratne, K.H.W. and Gray, A. 1993. 'Consistent correction of census, vital registration, and migration data for the Aboriginal populations of three regions of Australia: Northern Territory, South Australia and Western Australia during the period 1986-91', unpublished paper, East-West Population Centre, Hawaii.

- Miller, M. (Chair) 1985. *Report of the Committee of Review of Aboriginal Employment and Training Programs*, Australian Government Publishing Service, Canberra.
- Sanders, W. 1993. 'The rise and rise of the CDEP scheme: an Aboriginal 'workfare' program in times of persistent unemployment', *CAEPR Discussion Paper No. 54*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Saunders, P. 1992. 'Poverty, inequality and recession', *Economic Papers*, 11 (3): 1-23.
- Taylor, J. 1993a. *The Relative Economic Status of Indigenous Australians, 1986-91*, CAEPR Monograph No. 5, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Taylor, J. 1993b. *Regional Change in the Economic Status of Indigenous Australians, 1986-91*, CAEPR Monograph No. 6, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Tesfaghiorghis, H. 1991. 'Geographic variations in the economic status of Aboriginal people: a preliminary investigation', *CAEPR Discussion Paper No. 2*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Treadgold, M.L. 1988. 'Intercensal change in Aboriginal incomes, 1976-1986', *Australian Bulletin of Labour*, 14 (4): 592-609.

**CENTRE FOR ABORIGINAL ECONOMIC POLICY RESEARCH  
(CAEPR)**

**RECENT DISCUSSION PAPERS**

- 19/1992 *Estimating the reliance of Aboriginal Australians on welfare: some policy implications*, J.C. Altman and D.E. Smith.
- 20/1992 *Establishing trends in ATSIC regional council populations using census data: a cautionary note*, J.C. Altman and K.H.W. Gaminiratne.
- 21/1992 *Do fluctuations in the Australian macroeconomy influence Aboriginal employment status?*, J.C. Altman and A.E. Daly.
- 22/1992 *Industry segregation among employed Aborigines and Torres Strait Islanders*, J. Taylor.
- 23/1992 *The evaluation of labour market programs: some issues for Aboriginal policy formulation from experience in the United States*, A.E. Daly.
- 24/1992 *First counts, 1991 Census: a comment on Aboriginal and Torres Strait Islander population growth*, K.H.W. Gaminiratne.
- 25/1992 *Patterns and trends in the spatial diffusion of the Torres Strait Islander population*, J. Taylor and W.S. Arthur.
- 26/1992 *Aborigines, tourism and sustainable development*, J.C. Altman and J. Finlayson.
- 27/1992 *Political spoils or political largesse? Regional development in northern Quebec, Canada and Australia's Northern Territory*, C. Scott.
- 28/1992 *Survey or census? Estimation of Aboriginal and Torres Strait Islander housing need in large urban areas*, J. Taylor.
- 29/1992 *An analysis of the Aboriginal component of Commonwealth fiscal flows to the Northern Territory*, D.E. Smith.
- 30/1992 *Estimating Northern Territory Government program expenditure for Aboriginal people: problems and implications*, D.E. Smith.
- 31/1992 *Estimating Aboriginal and Torres Strait Islander fertility from census data*, K.W.H. Gaminiratne.
- 32/1992 *The determinants of Aboriginal employment income*, A.E. Daly.
- 33/1992 *Occupational segregation: a comparison between employed Aborigines, Torres Strait Islanders and other Australians*, J. Taylor.
- 34/1992 *Aboriginal population change in remote Australia, 1986-91: data issues*, J. Taylor.
- 35/1992 *A comparison of the socioeconomic characteristics of Aboriginal and Torres Strait Islander people*, J. Taylor and K.H.W. Gaminiratne.
- 36/1992 *The CDEP scheme: a census-based analysis of the labour market status of participants in 1986*, J.C. Altman and A.E. Daly.
- 37/1993 *Indigenous Australians in the National Tourism Strategy: impact, sustainability and policy issues*, J.C. Altman.
- 38/1993 *Education and employment for young Aborigines*, A.E. Daly.
- 39/1993 *Self-employment amongst Aboriginal people*, A.E. Daly.



- 40/1993 *Aboriginal socioeconomic change in the Northern Territory, 1986-91*, J. Taylor.
- 41/1993 *ATSIC's mechanisms for resource allocation: current policy and practice*, D.E. Smith.
- 42/1993 *The fiscal equalisation model: options for ATSIC's future funding policy and practice*, D.E. Smith.
- 43/1993 *The position of older Aboriginal people in the labour market*, A.E. Daly.
- 44/1993 *Determining the labour force status of Aboriginal people using a multinomial logit model*, A.E. Daly, B. Allen, L. Aufflick, E. Bosworth, and M. Caruso.
- 45/1993 *Indigenous Australians and the labour market: issues for the union movement in the 1990s*, J.C. Altman and A.E. Hawke.
- 46/1993 *Rethinking the fundamentals of social policy towards indigenous Australians: block grants, mainstreaming and the multiplicity of agencies and programs*, W. Sanders.
- 47/1993 *Compensating indigenous Australian 'losers': a community-oriented approach from the Aboriginal social policy arena*, J.C. Altman and D.E. Smith.
- 48/1993 *Work and welfare for indigenous Australians*, A.E. Daly and A.E. Hawke.
- 49/1993 *Change in Aboriginal and Torres Strait Islander population distribution, 1986-91*, K.H.W. Gaminiratne.
- 50/1993 *Education and employment for young indigenous Australians, 1986 to 1991*, A.E. Daly.
- 51/1993 *Reconciling public accountability and Aboriginal self-determination/self-management: is ATSIC succeeding?*, W. Sanders.
- 52/1993 *Indicative projections of the Aboriginal and Torres Strait Islander population to 2011*, A. Gray and K.H.W. Gaminiratne.
- 53/1993 *Employment implications of the growth of the indigenous Australian working-age population to 2001*, J.C. Altman and K.H.W. Gaminiratne.
- 54/1993 *The rise and rise of the CDEP scheme: an Aboriginal 'workfare' program in times of persistent unemployment*, W. Sanders.
- 55/1994 *The relative economic status of indigenous people in New South Wales, 1986-91*, J. Taylor and L. Roach.
- 56/1994 *The relative economic status of indigenous people in Tasmania, 1896-91*, J. Taylor and L. Roach.
- 57/1994 *The relative economic status of indigenous people in Victoria, 1986-91*, J. Taylor and L. Roach.
- 58/1994 *The relative economic status of indigenous people in South Australia, 1986-91*, J. Taylor and L. Roach.
- 59/1994 *The relative economic status of indigenous people in Western Australia, 1986-91*, J. Taylor and L. Roach.

For information on earlier CAEPR Discussion Papers contact Nicky Lumb, Centre for Aboriginal Economic Policy Research, Faculty of Arts, Australian National University, Canberra ACT 0200. Ph (06) 249 0587 Fax (06) 249 2789.



