

The Australian National University



Centre for
Aboriginal
Economic
Policy
Research

Discussion Paper



**Education and employment for young
indigenous Australians, 1986 to 1991**

A.E. Daly

No.50/1993

ISSN 1036-1774
ISBN 0 7315 1724 5

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, ANUTECH Pty Ltd, 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

The purpose of this paper is to present evidence on the educational and labour market status of young indigenous Australians as reported in the 1991 Census, to build on similar work relating to 1986, and to provide information on the changes which have taken place between the two Census years. The data show that while there have been significant improvements in the educational levels of young indigenous Australians, they remain behind those of other Australian youth. The evidence also shows that indigenous youth were disadvantaged in the labour market; they were less likely to be in employment and more likely to be unemployed than other Australian youth. However, between 1986 and 1991, when conditions deteriorated in the Australian labour market in general, indigenous youth experienced some growth in employment and a reduction in unemployment, the reverse of the patterns for other Australian youth. The important role of programs specific to indigenous people in creating this result is discussed in the conclusion.

Acknowledgments

This paper forms part of a larger project on the position of indigenous people in the labour market. I would like to thank Jon Altman and John Taylor for their comments; Linda Roach, Krystyna Szokalski and Nicky Lumb for expert editing and layout.

Dr Anne Daly is Research Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, Australian National University, Canberra. She currently holds an Australian Bureau of Statistics Fellowship.

Foreword

In April 1992, Dr Anne Daly, Research Fellow at the Centre for Aboriginal Economic Policy Research (CAEPR), ANU took up a concurrent half-time Australian Bureau of Statistics (ABS) Research Fellowship. The ABS objectives in providing Research Fellowships are to allow greater use of ABS data in academic research and to encourage the development of new techniques for the analysis of data. In Dr Daly's case, a principal aim of applying for this competitive Fellowship was to allow unimpeded access to the Aboriginal population sub-file so that statistical analysis from the conceptual framework of human capital theory could be undertaken for the first time. Dr Daly's Fellowship runs to 31 March 1994 and in this time she plans to complete a monograph with the working title 'Aboriginal and Torres Strait Islander People in the Australian Labour Market'.

This discussion paper, based on 1986 and 1991 Census data, provides an analysis of the education and employment status of indigenous Australian youth compared with non-indigenous youth. It also provides an analysis of intercensal change. This paper is very timely given that the Aboriginal Employment Development Policy (AEDP) and the Aboriginal and Torres Strait Islander Education Policy (AEP) are currently being reviewed. It will be provided as input to both reviews.

Dr Daly is publishing this work-in-progress which will later form a chapter in the above-mentioned monograph for two reasons. First, it is important that the results of her research at CAEPR and ABS are made widely available as soon as completed, especially given their topicality. Second, Dr Daly is seeking feedback, especially from academics, that might assist her overall project. The active collaboration between CAEPR and ABS in this research project is very welcome and the assistance of ABS staff is greatly appreciated. I would like to thank Dr Daly for her willingness to disseminate her research findings prior to finalisation in recognition that such statistical analysis will better inform policy formulation in a very complex economic policy area.

Jon Altman
Series Editor
December 1993

The position of young Australians in the labour market has been of concern to policy makers over the past two decades as unemployment rates among young people have remained high and well above the average for the total labour force. The indigenous population is, on average, younger than the total Australian population.¹ In 1991, 35.3 per cent of the indigenous population aged 15 years and over, was in the age category 15-24 years, compared with 20 per cent of the Australian population in general. The position of this group is therefore of particular concern as they may be doubly disadvantaged; once in so far as Aboriginality is a disadvantage in the labour market and secondly, for being young.

A related issue of concern is the involvement of indigenous youth in the criminal justice system. The Royal Commission into Aboriginal Deaths in Custody (RCIADIC) and other studies (for example, Gale, Bailey-Harris and Wundersitz 1990) show that young indigenous people have been over-represented in the juvenile justice system throughout Australia. The RCIADIC noted:

Not only do they come into the system to a disproportionate extent, the penalties which they receive are demonstrably more severe than those of equivalent non-Aboriginal juveniles and they have an accelerated progression through the various stages of the juvenile justice system until the point of detention in a juvenile institution (Commonwealth of Australia 1991a: 254-5).

The importance of the restricted educational and employment opportunities available to indigenous youth in producing these results is strongly argued in the Royal Commission's Reports (see especially, chapters 14, 16, 17, 30 and 33) (Commonwealth of Australia 1991a; Commonwealth of Australia 1991b). Low educational attainment and poor labour market outcomes may have major implications for the course of an individual's life.

Specific government policies such as Priority One and the Social Strategy for Young Australians have aimed to reduce the high levels of unemployment among youth in general by easing the transition from school to work. Schemes such as AUSTUDY and ABSTUDY have the explicit aim of encouraging young people to stay in education for longer periods based on the assumption, for which there is some empirical support, that the more educated are more likely to find work (Miller and Volker 1987; Daly 1993b).² This paper documents the labour market status and educational attainment of young indigenous people as recorded in the 1991 Census, and compares them with other Australian youth. The paper also includes census evidence on the changes that have taken place between 1986 and 1991.

The period 1986-91 saw important policy changes with potential implications for indigenous youth; the Aboriginal Employment Development Policy (AEDP), launched in 1987, which aims to promote

indigenous employment and the Aboriginal Education Policy (AEP), launched in 1989, which focuses on indigenous education. The AEDP has the goal of increasing indigenous employment rates to the level of the rest of the Australian population and of reducing indigenous welfare dependence (Australian Government 1987; Altman 1991).

The AEP, established in response to the Report of the Aboriginal Education Policy Task Force (Department of Employment, Education and Training 1988), is an agreement between the Commonwealth and State and Territory Governments with the following four main goals:

- i to increase the involvement of indigenous people in educational decision making;
- ii to ensure equality of access to educational services;
- iii to achieve equity of educational participation; and
- iv to enable equitable and appropriate educational outcomes (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 58).

Along with the AEP, the Aboriginal Languages Initiative Program (ALIP) was established in 1992 to encourage the use of traditional Aboriginal languages.

In order to fully assess the effects of these policies on the status of young indigenous people, it would be necessary to establish a counterfactual hypothesis of the likely outcomes over the 1986-91 period without the particular policies in place. It is not proposed to undertake this detailed exercise here but rather to indicate the changes which have taken place between the two census years. A full analysis of the role of policy in inducing these changes remains the subject of further research.

This paper begins by presenting data on educational attainment and then considers the position of young people in the labour market. Two broad age categories of youth have been identified for discussion; those aged 15-19 years and those aged 20-24 years. These age categories cover periods of important life cycle changes. The first age category includes, for most people, the completion of secondary schooling and the transition to higher education or into the labour market. The second category covers the beginnings of adult employment for those who left school at an earlier age and the transition from education into the labour market for those undertaking higher education. Where relevant, more detailed age breakdowns will be presented for indigenous people.

The educational levels of young indigenous Australians

Table 1 compares the age at which indigenous and other Australian youth had left school in 1991. The lower levels of educational attainment of indigenous people documented elsewhere (Teshfaghiorghis and Altman 1991) are also in evidence here for young indigenous Australians. Among 15-19 year olds (columns 1 and 2), a smaller proportion of indigenous males and females were still at school than among the rest of the Australian population; about 33 per cent compared with about 50 per cent. This difference was partially offset by the higher proportion of indigenous males and females who had left school aged 14 years or younger, prior to the compulsory school leaving age; about 10 per cent of indigenous people aged 15-19 years had done so compared with 1.4 per cent of non-indigenous people in this age category.

Table 1. Age on leaving school for indigenous and non-indigenous youth by sex and age category, 1991.

Age on leaving school	15-19 years		20-24 years	
	Indigenous Per cent (1)	Non-indigenous Per cent (2)	Indigenous Per cent (3)	Non-indigenous Per cent (4)
Males				
14 or younger	11.2	1.6	11.8	2.2
15	22.3	10.0	27.6	15.5
16	18.8	15.2	29.5	25.6
17	10.0	14.5	17.4	29.3
18	3.5	7.4	8.8	18.5
19 and older	0.6	1.3	3.7	8.6
Still at school	32.6	49.7	0.0	0.1
No schooling	1.0	0.2	1.2	0.3
Females				
14 or younger	8.5	1.1	9.0	1.9
15	20.5	8.9	25.4	14.3
16	19.7	12.7	30.9	23.6
17	12.4	17.6	21.3	33.0
18	4.0	8.4	9.0	18.4
19 and older	0.7	1.1	3.5	8.6
Still at school	33.5	50.0	0.0	0.0
No schooling	0.8	0.2	1.0	0.3
Persons				
14 or younger	9.9	1.4	10.4	2.0
15	21.4	9.5	26.4	14.9
16	19.2	14.0	30.2	24.6
17	11.2	16.0	19.4	31.1
18	3.7	7.9	8.9	18.4
19 and older	0.6	1.2	3.6	8.6
Still at school	33.0	49.9	0.0	0.0
No schooling	0.9	0.2	1.1	0.3

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

Columns 3 and 4 of Table 1 relate to 20-24 year olds, almost all of whom had completed their secondary schooling. Most indigenous males and females of this age had left school when they were aged 15 or 16 years, although about 10 per cent had left school at a younger age. A much smaller proportion (2 per cent) of non-indigenous people in this age category left school before they were 15 years and a larger proportion, continued to attend school until they were 17 or 18 years of age. Among the wider Australian population, 47.8 per cent of males and 51.4 per cent of females left school when they were 17 or 18 years old, compared with 26.2 per cent of indigenous males and 30.3 per cent of indigenous females who left school at these ages.

There is some evidence that these figures may underestimate the difference in educational attainment between the two groups. Age on leaving school is only a rough indicator of the time actually spent in school and the available evidence suggests that indigenous children have relatively high truancy rates (Commonwealth of Australia 1991: 364-8; House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992: 67). Literacy and numeracy skills may therefore fall substantially behind those of a school leaver of similar age who had attended more regularly. Further evidence of lower levels of educational attainment, as measured by qualifications amongst young Aborigines, is presented below in Table 4.

Table 2 presents in more detail the proportion of indigenous youth, at each age, who were still attending school. Between the ages of 15 and 17 years, a higher percentage of indigenous females were at school than indigenous males. There was a rapid decline in the proportion of each age group who were attending school. School attendance fell from 75 per cent of 15 year olds to 9.6 per cent of 18 year olds.

There is evidence to suggest that coming from a home where an Aboriginal language is spoken creates difficulties in being accommodated by the mainstream education system. However, this group was a minority of young Aboriginal and Torres Strait Islander people; 17 per cent of indigenous people aged 15-24 years stated that the language spoken at home was an Aboriginal language rather than English. However, the percentage of Aboriginal language speakers who remained at school at almost every age was lower than among the indigenous population in general. Even amongst Aboriginal language speakers, the proportion who had not attended school at all was small, but it was higher than the indigenous population in general. Whether these lower levels of education represent differences in access to education or perceptions about the relevance and benefits of education is a topic for further research.³

Table 2. The percentage of indigenous Australians still at school or who had never attended school by sex and age, 1991.

	Current age (years)									
	15	16	17	18	19	20	21	22	23	24
Males										
Still at school	73.2	50.5	28.1	10.0	2.9	0.0	0.0	0.0	0.0	0.0
Had not attended school	0.9	0.9	1.1	0.8	1.2	1.4	0.7	1.4	1.3	1.4
Percentage indigenous language speakers ^a										
Still at school	62.6	40.5	16.5	4.3	4.1	0.0	0.0	0.0	0.0	0.0
Had not attended school	2.3	2.1	3.3	1.6	3.0	3.2	2.0	2.3	3.0	2.8
Females										
Still at school	76.8	52.6	30.9	9.2	2.3	0.0	0.0	0.0	0.0	0.0
Had not attended school	0.8	0.8	0.8	0.5	0.9	1.0	0.9	0.8	0.8	1.3
Percentage indigenous language speakers ^a										
Still at school	66.5	43.1	23.4	9.7	3.2	0.0	0.0	0.0	0.0	0.0
Had not attended school	2.3	1.5	2.2	1.6	2.9	2.7	2.2	2.7	2.3	3.3
Persons										
Still at school	75.0	51.6	29.5	9.6	2.6	0.0	0.0	0.0	0.0	0.0
Had not attended school	0.9	0.8	1.0	0.7	1.1	1.2	0.8	1.0	1.0	1.4
Percentage indigenous language speakers ^a										
Still at school	64.5	41.9	19.6	6.9	3.6	0.0	0.0	0.0	0.0	0.0
Had not attended school	2.3	1.8	2.6	1.6	3.1	2.9	2.1	2.5	2.7	3.1

a. The percentage of indigenous Australian people who stated that they spoke an Aboriginal language rather than English at home. This group accounted for 17 per cent of 15-24 year old indigenous people.

Source: 1991 Census, full Aboriginal sub-file.

Tables 1 and 2 relate to attendance in secondary schools, but Table 3 presents data on attendance by young people at any educational institution. The table shows that among indigenous youth, a much smaller percentage of each age group was in education than non-indigenous Australians; 43 per cent of indigenous people aged 15-19 years were attending some form of educational institution compared with 70 per cent of non-indigenous people. The proportion of indigenous males and females aged 20-24 years who were still studying was about a third of that of their counterparts in the rest of the Australian population.

Indigenous youth aged 15-19 years who were attending an educational institution were more likely to be in secondary schools than at a post-secondary institution. The percentage of the age group attending an educational institution did not vary greatly by sex, but it is interesting to note the slightly larger proportion of females than males attending Colleges of Advanced Education (CAE)/university (CAEs are now universities). This result was also in evidence for non-indigenous Australians aged 15-19 years.

Technical and Further Education (TAFE) attendance accounted for the largest proportion of indigenous people aged 20-24 years who were still studying. Over half the indigenous males and females attending an educational institution were at TAFE colleges. These colleges were less important among other Australians in this age group and university was a more important category. Fifteen per cent of non-indigenous Australians aged 20-24 years were attending university in 1991 compared with only 3.4 per cent of indigenous people in this age group.

There is some evidence to suggest that combining education with employment has a positive effect on the duration of the first post-school job (McRae 1992). Indigenous youth were, however, less likely to combine education and employment than were non-indigenous youth according to the 1991 Census. Fourteen per cent of indigenous males and females aged 15-24 years combined education with some form of employment. This compared with 33 per cent of non-indigenous males and 35 per cent of non-indigenous females who combined the two activities. Among those at secondary school, 4 per cent of indigenous males and 7 per cent of indigenous females worked while 13 per cent of non-indigenous males and 22 per cent of non-indigenous females combined secondary school attendance with a job. Only 24 per cent of indigenous Australians attending TAFE were employed, compared with 66 per cent of non-indigenous Australians. University education was less likely to be combined with a job than TAFE courses, although 23 per cent of indigenous and 43 per cent of non-indigenous university students worked.

Table 3. The share of each age group attending educational institutions by age and sex, 1991.

Age	Indigenous Per cent (1)	15-19 years Non- indigenous Per cent (2)	Indigenous Per cent (3)	20-24 years Non- indigenous Per cent (4)
Males				
Type of educational institution				
Secondary (government)	27.1	33.3	0.0	0.0
Secondary (non-government)	4.8	15.4	0.0	0.0
TAFE	6.7	11.0	4.8	8.6
University	1.9	8.7	2.8	14.1
Other	1.5	1.4	0.8	1.8
Percentage age group attending an educational institution ^a	42.0	69.8	8.4	24.5
Females				
Type of educational institution				
Secondary (government)	28.4	33.4	0.0	0.0
Secondary (non-government)	4.8	15.5	0.0	0.0
TAFE	6.0	7.2	4.0	6.1
University	3.1	12.3	4.0	15.3
Other	1.2	1.8	0.8	2.0
Percentage age group attending an educational institution ^a	43.5	70.2	8.8	23.4
Persons				
Type of educational institution				
Secondary (government)	27.7	33.3	0.0	0.0
Secondary (non-government)	4.8	15.4	0.0	0.0
TAFE	6.4	9.1	4.4	7.4
University	2.5	10.5	3.4	14.7
Other	1.3	1.6	0.8	1.9
Percentage age group attending an educational institution ^a	42.7	69.9	8.6	24.0

a. Excludes those who did not state their institution of attendance.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

The importance of TAFE as an educational institution is reflected in the types of qualifications held by 20-24 year olds reported in Table 4. This group has been selected for this comparison as a larger proportion of the 15-19 year olds who were yet to complete their education. The most frequently reported qualifications for males were at the certificate level. Indigenous males were, however, less likely to hold these qualifications than were males in general. Twenty-three per cent of non-indigenous males aged 20-24 years held certificates compared with 11 per cent of

indigenous males. There was also a substantial difference between the two groups of males in the proportion holding university degrees. While 6.3 per cent of non-indigenous males in this age group held university degrees, only 0.4 per cent of indigenous males did. The proportion of indigenous males without any educational qualification was correspondingly larger, 88.5 per cent compared with 69.1 per cent.⁴

Table 4. Level of qualification for those aged 20-24 years by sex, 1991.

Qualification	Males		Females		Persons	
	Ind. Per cent (1)	Non- ind. Per cent (2)	Ind. Per cent (3)	Non- ind. Per cent (4)	Ind. Per cent (5)	Non- ind. Per cent (6)
University degree	0.4	6.3	0.8	8.9	0.6	7.6
Undergraduate diploma	0.4	1.3	1.2	4.8	0.8	3.0
Certificate ^a	10.7	23.2	6.2	12.8	8.4	18.2
No qualification	88.5	69.1	91.7	73.4	90.2	71.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

a. Includes associate diploma, skilled vocational, basic vocational and level of attainment inadequately described.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

There were gender differences in the types of qualifications held, but in common with indigenous males, indigenous females were less likely to hold a qualification than non-indigenous females. Ninety-two per cent of indigenous females held no recognised qualification compared with 73 per cent of the non-indigenous female population. Certificates accounted for a smaller proportion of qualifications held by females than by males. Although indigenous females fell well behind their non-indigenous counterparts in terms of university qualifications, twice the proportion of young indigenous females held these qualifications than indigenous males.

In summary, this section has presented some evidence on the educational attainment of young indigenous Australians as reported in the 1991 Census. It shows, using the indicators of school leaving age and attainment of qualifications, that growth for indigenous youth fell behind non-indigenous youth. Young indigenous people were less likely to combine education and employment than were other young Australians. It is possible that this lack of early working experience and the chance to

establish links with the labour market are contributing factors in reducing the probability of full-time employment for indigenous people.

Labour force status

The transition of young people from education to participation in the labour force is apparent in the data presented in Table 5. The proportion of the 20-24 year olds who were outside the labour force was smaller for each sex and racial group than among 15-19 year olds. The broad picture is one of lower rates of employment amongst indigenous people, higher rates of unemployment and a larger group of people outside the labour market than amongst non-indigenous people. Among the wider Australian population aged 15-24 years, most people who were not in the labour force were studying; 91.7 per cent of males and 75.9 per cent of females. There was, however, a much larger group of indigenous people for whom the census provides little information as they were neither in the labour force nor attending an educational institution. Forty per cent of indigenous males and 60 per cent of indigenous females aged 15-24 years who were classified as 'not in the labour force', were not attending an educational institution. This lack of information creates a substantial gap in our knowledge of the activities of a quarter of young indigenous people.

While 57 per cent of indigenous males and females aged 15-19 years considered themselves to be outside the labour force about 50 per cent of non-indigenous males and females were classified to this group. The 'not in the labour force' category substantially declined in importance among 20-24 year olds with the exception of indigenous females. Only 11.7 per cent of non-indigenous males aged 20-24 years were outside the labour force. The proportion of indigenous males and non-indigenous females in this category was close to 22 per cent, but over half the indigenous females remained outside the labour force.

In each age category for both sexes, the proportion in employment was much higher for non-indigenous Australians than it was for indigenous Australians. There were also important differences in the proportion who were unemployed and looking for either full-time or part-time work. Unemployment among indigenous males was almost twice that of non-indigenous males. A quarter of young indigenous males aged 15-24 years were unemployed, compared with 14.5 per cent of non-indigenous males. The differences, while remaining large, were smaller for females than for males. Seventeen per cent of indigenous females aged 15-24 years were unemployed compared with 11 per cent of non-indigenous females. It is interesting to note the larger proportion of both indigenous males and females who were looking for part-time work.

Table 5. Labour force status of young indigenous and non-indigenous Australians by sex, 1991.

Age	Labour force status ^d						Total labour force (6 = 3+4+5)	Not in labour force (7)	Total (8 = 6+7)
	Full-time employment ^a (1)	Part-time employment ^b (2)	Total employment ^c (3)	Full-time unemployment ^e (4)	Part-time unemployment ^f (5)				
Males—Indigenous									
15-19	14.1	10.2	26.9	18.4	3.4	48.7	51.3	100.0	
20-24	28.6	13.9	45.8	27.2	3.6	76.7	23.3	100.0	
Total	21.0	12.0	35.8	22.6	3.5	61.9	38.1	100.0	
Males—Non-indigenous									
15-19	22.0	13.8	38.7	8.8	2.5	50.0	50.0	100.0	
20-24	54.4	12.5	70.5	15.8	2.0	88.3	11.7	100.0	
Total	38.1	13.1	54.6	12.3	2.2	69.1	30.9	100.0	
Females—Indigenous									
15-19	8.7	9.5	20.2	13.7	4.1	38.1	61.9	100.0	
20-24	17.3	11.7	31.5	12.0	4.9	48.4	51.6	100.0	
Total	13.0	10.6	25.8	12.8	4.5	43.2	56.8	100.0	
Females—Non-indigenous									
15-19	16.2	20.9	39.7	7.3	3.7	50.7	49.3	100.0	
20-24	44.4	18.5	65.8	9.2	2.7	77.7	22.3	100.0	
Total	30.2	19.7	52.7	8.2	3.2	64.2	35.8	100.0	
Persons—Indigenous									
15-19	11.4	9.9	23.6	16.1	3.8	43.5	56.5	100.0	
20-24	22.8	12.8	38.4	19.4	4.3	62.1	37.9	100.0	
Total	16.9	11.3	30.8	17.7	4.0	52.5	47.5	100.0	
Persons—Non-indigenous									
15-19	19.2	17.3	39.2	8.1	3.1	50.4	49.6	100.0	
20-24	49.5	15.4	68.2	12.5	2.4	83.1	16.9	100.0	
Total	34.2	16.4	53.7	10.3	2.7	66.7	33.3	100.0	

a. 35+ hours worked per week.

b. Less than 35 hours worked per week.

c. Includes those who stated that they were employed but did not state their hours of work.

d. Excludes those who did not state their labour force status.

e. Includes those who were actively looking for full-time employment.

f. Includes those who were actively looking for part-time employment.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

The causes of the higher rate of indigenous youth unemployment have been subjected to sophisticated analysis based on data taken from both the census and the Australian Longitudinal Survey (ALS). Miller (1989a, 1989b, 1991) investigated the influence of Aboriginality on the probability of a young individual being unemployed. In the context of a formal model of the determinants of unemployment, he controlled for factors such as education levels, marital status and number of children, location of residence, age, and where relevant, the employment status of a spouse, to see if there was an independent influence of Aboriginality on the probability of an individual being unemployed. He concluded that, holding all these other factors constant,

the unemployment rate of Aboriginal youth is predicted to be about two-and-one-half times greater than that of other groups. This standardised unemployment rate differential is one of the most pronounced in the youth labour market (Miller 1989a: 12).

The difference in unemployment rate could be explained only partially by differences in measured characteristics such as education levels and age. The major part of the differences in unemployment probabilities remained unexplained and could be attributed to either cultural differences in labour supply behaviour or differences in the demand for indigenous labour arising, perhaps, from discrimination. Miller's results therefore support the hypothesis that there are important differences in the determinants of employment status which go beyond differences in the measured attributes when comparing young indigenous Australians with non-indigenous Australians.

Other studies of indigenous labour market participation (Ross 1991; Daly 1991) have emphasised place of residence as an important factor in determining labour market outcomes. These studies show that the size of the settlement in which the individual resided appears to be a more important determinant of labour force status for indigenous people than for non-indigenous people. This result applied to young people (see Table 6). There was little difference in the proportion of non-indigenous males in employment in the three settlement categories identified; major urban centres, other urban and rural.⁵ However, among young indigenous males, the employment/population ratio was highest in the rural category and lowest in other urban areas. The census recorded the highest unemployment rates for indigenous males in the 'other urban' category. Twenty-six per cent of 15-19 year old males and 40 per cent of 20-24 year old males living in these towns were unemployed, compared with 25 and 34 per cent of each age category in the major urban areas and 14 and 17 per cent in rural areas.

Table 6. Labour force status of indigenous and non-indigenous youth by section-of-State, 1991.

Section-of-State	Indigenous			Non-indigenous		
	Major urban	Other urban	Rural	Major urban	Other urban	Rural
Males						
15-19 years age group in each section-of-State (per cent)	27.8	39.3	32.9	63.2	22.8	33.4
Labour force status						
Employed	26.4	21.6	33.5	37.5	40.0	42.0
Unemployed	24.9	26.0	14.3	10.9	13.4	9.8
NILF ^a	48.8	52.3	52.2	51.6	46.6	48.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
20-24 years age group in each section-of-State (per cent)	28.7	37.9	33.4	68.9	19.6	11.5
Labour force status						
Employed	47.1	39.2	52.1	70.5	68.7	73.3
Unemployed	34.1	40.3	17.4	17.1	21.1	17.1
NILF ^a	18.8	20.4	30.4	12.4	10.2	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Females						
15-19 years age group in each section-of-State (per cent)	29.0	41.2	29.8	65.0	22.6	12.4
Labour force status						
Employed	22.9	17.5	21.4	41.2	38.7	33.6
Unemployed	20.1	20.7	11.7	10.4	12.8	11.0
NILF ^a	57.0	61.8	66.8	48.4	48.5	55.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
20-24 years age group in each section-of-State (per cent)	29.7	40.3	29.9	69.8	20.7	9.5
Labour force status						
Employed	39.2	25.6	31.9	67.6	63.5	58.1
Unemployed	18.2	20.2	11.1	11.5	12.4	13.3
NILF ^a	42.7	54.2	57.1	20.9	24.2	28.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Persons						
15-19 years age group in each section-of-State (per cent)	28.4	40.2	31.4	64.1	22.7	13.2

Continued over page.

Table 6. Continued.

Section-of-State	Indigenous			Non-indigenous		
	Major urban	Other urban	Rural	Major urban	Other urban	Rural
Persons (cont'd)						
Labour force status						
Employed	24.6	19.5	27.9	39.4	39.4	38.1
Unemployed	22.5	23.3	13.1	10.6	13.1	10.4
NILF ^a	52.9	57.1	59.0	50.0	47.6	51.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
20-24 years age group in each section-of-State (per cent)						
Employed	29.2	39.1	31.6	69.3	20.1	10.5
Unemployed	42.9	32.0	42.2	69.1	66.1	66.5
NILF ^a	25.7	29.6	14.3	14.3	16.7	15.4
Total	31.3	38.4	43.4	16.6	17.2	18.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

a. NILF - not in the labour force.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

Non-indigenous females were less likely to be in employment, and more likely to be outside the labour force, if they lived in a rural rather than an urban area. Among indigenous females this tendency was more pronounced. As for males, the measured rate of unemployment was lowest in the 'rural' category. About 11 per cent of young indigenous women were classified as unemployed in the rural areas, which is well below the unemployment/population rate in urban areas. This was similar to the proportion of non-indigenous women in these age groups who were unemployed.

The figures presented in Table 6, however, show not only differences in the extent of unemployment between indigenous and non-indigenous youth but also important differences within the indigenous population. It has been argued with respect to similar differences identified for the indigenous population in general, that the Community Development Employment Projects (CDEP) scheme played an important role in reducing indigenous unemployment, particularly in rural areas (Taylor 1993). This point will be discussed in greater detail below in reporting the changes in labour force status for young Australians between 1986 and 1991.

Table 7. Occupation of employed indigenous and non-indigenous youth, 1991.

Age	15-19 years		20-24 years	
	Indigenous Per cent (1)	Non-indigenous Per cent (2)	Indigenous Per cent (3)	Non-indigenous Per cent (4)
Males				
Managers and administrators	2.7	3.3	2.9	5.9
Professionals	1.6	1.5	4.4	8.3
Para-professionals	5.6	2.3	7.0	6.4
Tradespersons	29.5	36.5	25.4	31.4
Clerks	3.6	5.5	7.2	8.4
Salespersons, etc.	6.3	18.4	5.6	12.7
Plant and machinery operators and drivers	4.7	4.1	10.1	9.0
Labourers	46.0	28.5	37.4	18.0
Total	100.0	100.0	100.0	100.0
Females				
Managers and administrators	0.9	1.1	2.1	3.2
Professionals	3.5	1.4	8.4	11.9
Para-professionals	3.1	1.5	6.8	7.1
Tradespersons	8.1	6.1	5.4	4.9
Clerks	27.0	22.4	36.9	33.6
Salespersons, etc.	35.5	55.1	22.8	29.5
Plant and machinery operators and drivers	1.7	0.9	2.0	2.0
Labourers	20.2	11.5	15.7	7.7
Total	100.0	100.0	100.0	100.0
Persons				
Managers and administrators	1.9	2.2	2.5	4.6
Professionals	2.4	1.4	6.1	10.0
Para-professionals	4.6	1.9	6.9	6.7
Tradespersons	20.4	21.3	16.9	18.8
Clerks	13.5	13.9	19.9	20.4
Salespersons, etc.	18.7	36.7	12.9	20.7
Plant and machinery operators and drivers	3.4	2.5	6.7	5.7
Labourers	35.1	20.0	28.1	13.1
Total	100.0	100.0	100.0	100.0

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

Tables 7 to 9 describe the activities of employed youth in more detail. Table 7 focuses on occupational distribution. Among both indigenous and non-indigenous 15-19 year old males, employment was heavily concentrated in two broad occupational categories, tradespersons and labourers. These two categories accounted for 75.5 per cent of indigenous

employment and 65 per cent of the employment of non-indigenous males in this age group. An interesting difference between the two groups relates to the proportion employed as salespersons; 6 per cent of indigenous 15-19 year old males were employed as salespersons compared with 18.4 per cent of other Australian males in this age category.⁶

The 20-24 year age group of males was spread more widely across the broad occupational categories, but labouring remained the most frequent occupation for indigenous males. Indigenous males aged 20-24 years were concentrated among the lower skilled occupations. Once again, indigenous males were under-represented as salespersons compared with other Australian males.

Trade occupations were far less important for females than they were for males. Among those females aged 15-19 years, 62.5 per cent of indigenous and 77.5 per cent of non-indigenous Australians were in the two occupational categories of clerks and salespersons. Sales occupations were once again less important for indigenous females than for non-indigenous females. The proportion of indigenous females occupied as labourers was about twice as large as among non-indigenous females of this age. This may reflect the classification of CDEP scheme workers to this category.

The proportion of females who were classified as clerks actually increased among the 20-24 year olds and salespersons declined in significance. There was a larger share working in professional and para-professional occupations. The proportion of indigenous females employed as labourers remained at about twice that of other Australian females.

Table 8 presents data on the distribution of youth employment by broad industry group. There were substantial differences between the industry distribution of employment when comparing 15-19 year old indigenous and non-indigenous Australian males. More than 50 per cent of the latter were employed in two industries: manufacturing, and the wholesale and retail trade. In contrast, indigenous males were spread over a wider range of industries. Wholesale and retail trade, community services, public administration and manufacturing were the major industries of indigenous male employment. The relatively small proportion of indigenous males occupied as salespersons (see Table 7) was reflected in the smaller proportion of indigenous males working in the wholesale and retail trade. This difference is significant as the wholesale and retail sector is typically the major employer of young males.⁷ In common with findings for the whole of the indigenous population, a much larger proportion of 15-19 year old indigenous males were employed in community services and public administration than were males in the rest of the population.

Table 8. Industry of employment for indigenous and non-indigenous youth, 1991.

Age	Indigenous	15-19 years	Indigenous	20-24 years
	Per cent (1)	Non-indigenous Per cent (2)	Per cent (3)	Non-indigenous Per cent (4)
Males				
Agriculture	9.2	4.4	7.1	4.4
Mining	1.2	1.0	2.6	1.7
Manufacturing	11.6	16.9	11.3	17.9
Electricity, gas, water	0.5	1.3	0.9	1.5
Construction	7.6	11.2	8.4	9.9
Wholesale, retail trade	20.0	38.9	13.3	24.6
Transport and storage	2.3	3.3	4.1	4.2
Communications	0.8	0.8	1.4	1.7
Financial services	2.4	5.2	2.8	10.8
Public administration	12.4	4.1	15.1	7.0
Community services	26.7	3.3	27.5	7.6
Recreation, personal services	5.2	9.5	5.6	8.6
Total	100.0	100.0	100.0	100.0
Females				
Agriculture	1.6	1.3	1.6	1.1
Mining	0.4	0.1	0.6	0.5
Manufacturing	5.0	5.1	5.1	8.4
Electricity, gas, water	0.1	0.0	0.2	0.5
Construction	0.8	0.8	1.1	1.3
Wholesale, retail trade	29.7	53.2	14.0	23.5
Transport and storage	0.8	1.8	1.3	2.9
Communications	0.6	0.1	1.4	0.8
Financial services	6.6	12.8	8.2	20.9
Public administration	11.6	2.3	16.2	5.6
Community services	31.1	8.5	41.3	21.1
Recreation, personal services	11.6	14.0	9.2	13.5
Total	100.0	100.0	100.0	100.0
Persons				
Agriculture	6.0	2.8	4.8	2.8
Mining	0.8	0.6	1.7	1.1
Manufacturing	8.8	11.0	8.6	13.3
Electricity, gas, water	0.4	0.7	0.6	1.0
Construction	4.8	6.0	5.3	5.8
Wholesale, retail trade	24.1	46.0	13.6	24.1
Transport and storage	1.7	2.5	2.9	3.6
Communications	0.7	0.5	1.4	1.3
Financial services	4.2	9.0	5.1	15.6
Public administration	12.1	3.2	15.5	6.3
Community services	28.6	5.9	33.3	14.1
Recreation, personal services	7.9	11.7	7.1	10.9
Total	100.0	100.0	100.0	100.0

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

These differences were also apparent in the industry distribution of 20-24 year old males although retail and wholesale trade had ceased to dominate their employment so dramatically. The three largest industry employers of non-indigenous males aged 20-24 years were wholesale and retail trade, manufacturing and finance, property and related services. The major employers of indigenous males were community services, public administration and the wholesale and retail trade.

Indigenous females also showed a different employment pattern to their counterparts in the wider population. Community services and public administration were much more important as employers of indigenous females than of other females. This was especially the case among 15-19 year old females. While over half of non-indigenous females of the same age were employed in the wholesale and retail trade, a smaller 30 per cent of indigenous females worked in this industry. Another industry where indigenous females were relatively under-represented was in the area of finance, property and business services.

Table 9. Government and private sector employment of indigenous and non-indigenous youth, 1991.

Age	Indigenous	15-19 years	Indigenous	20-24 years
	Per cent (1)	Non-indigenous Per cent (2)	Per cent (3)	Non-indigenous Per cent (4)
Males				
Government				
Commonwealth	6.2	5.1	8.5	7.8
State	6.2	4.7	12.1	8.0
Local	12.1	1.2	12.8	2.0
Private	75.5	89.0	66.7	82.2
Total	100.0	100.0	100.0	100.0
Females				
Government				
Commonwealth	7.6	2.9	13.2	6.5
State	10.4	3.1	19.0	14.4
Local	8.0	1.0	9.5	1.4
Private	74.0	93.0	58.3	77.7
Total	100.0	100.0	100.0	100.0
Persons				
Government				
Commonwealth	6.8	4.0	10.2	7.2
State	8.0	3.9	15.0	11.0
Local	10.4	1.1	11.4	1.7
Private	74.9	91.0	63.1	80.1
Total	100.0	100.0	100.0	100.0

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

Table 9 presents industry data on the basis of sector of employment. Indigenous males and females in each of the age categories were more likely to be employed in the public sector than were other Australians. These figures present a minimum estimate of the difference, as many Aboriginal organisations funded by the government to undertake functions usually carried out by local governments, are classified as private, although the intent in 1991 was to classify them as local government (Altman and Daly 1992). A quarter of indigenous males aged 15-19 years worked in the public sector as defined here, compared with 11 per cent of non-indigenous males of this age. The public sector was even more important among 20-24 year old males. A third of indigenous males aged 20-24 years worked for the government compared with 18 per cent of other males. State and local governments were more important as employers of young indigenous males than they were for non-indigenous males.

Public sector employment was particularly important for indigenous females, especially those aged 20-24 years. Forty-two per cent of indigenous females aged 20-24 years in employment were working for government. The Commonwealth Government and the State Governments were the two major employers.

In summary, many of the differences that are apparent in a comparison of the labour market characteristics of the total indigenous population with the rest of the Australian population, are in evidence among the young indigenous population. The data presented here do not suggest that there has been a dramatic change in the types of economic activities being undertaken by the new indigenous entrants to the labour market. Indigenous youth tended to be employed in the lower-skilled occupations and concentrated in public sector employment to a greater extent than non-indigenous youth. The next section will present data on the implications of these differences for the income status of indigenous youth compared with non-indigenous youth.

The income of young indigenous Australians

Table 10 presents data on the median income of young people according to their labour market status. Among 15-19 year olds, indigenous people fared relatively well. Indigenous males had a median income equal to that of non-indigenous males, while indigenous females had an average income 1.4 times that of non-indigenous females. In each labour force group, apart from employed males, indigenous people of this age actually had a higher average income than other young Australians.

These are surprising results and perhaps can be explained by a number of factors. Firstly, part-time employment was greater for non-indigenous than

for indigenous 15-19 year olds and the category 'employment' covers both full and part-time workers. Furthermore, relatively more indigenous youth were receiving educational benefits such as ABSTUDY which would boost their individual incomes because payments under ABSTUDY are more generous than under AUSTUDY.

Table 10. Median incomes of indigenous and non-indigenous youth by labour force status, 1991.

Age	15-19 years		20-24 years	
	Indigenous (1)	Non-indigenous (2)	Indigenous (3)	Non-indigenous (4)
Males				
Employed	\$8,923	\$9,806	\$15,733	\$20,128
Ratio (1)/(2), (3)/(4)	0.91		0.78	
Unemployed	\$4,504	\$3,721	\$6,796	\$6,572
Ratio (1)/(2), (3)/(4)	1.21		1.03	
Not in the labour force	\$2,889	\$1,974	\$6,249	\$4,959
Ratio (1)/(2), (3)/(4)	1.46		1.26	
Total	\$3,733	\$3,713	\$7,958	\$16,816
Ratio (1)/(2), (3)/(4)	1.00		0.47	
Females				
Employed	\$8,200	\$7,337	\$15,415	\$18,419
Ratio (1)/(2), (3)/(4)	1.12		0.84	
Unemployed	\$4,976	\$3,739	\$6,990	\$6,241
Ratio (1)/(2), (3)/(4)	1.33		1.12	
Not in the labour force	\$3,817	\$2,084	\$8,351	\$4,456
Ratio(1)/(2), (3)/(4)	1.83		1.87	
Total	\$4,836	\$3,413	\$9,042	\$14,532
Ratio (1)/(2), (3)/(4)	1.42		0.62	
Persons				
Employed	\$8,605	\$8,772	\$15,600	\$19,268
Ratio (1)/(2), (3)/(4)	0.98		0.81	
Unemployed	\$4,695	\$3,730	\$6,855	\$6,457
Ratio (1)/(2), (3)/(4)	1.26		1.06	
Not in the labour force	\$3,340	\$2,026	\$7,415	\$4,686
Ratio(1)/(2), (3)/(4)	1.65		1.58	
Total	\$4,657	\$3,554	\$8,912	\$15,796
Ratio (1)/(2), (3)/(4)	1.31		0.56	

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample.

The income differences were much more pronounced for 20-24 year olds. Indigenous males and females of this age group had a median income 56 per cent of their counterparts in the rest of the population. The figures presented here emphasise the importance of employment in raising income. It is the large differences in the proportion of 20-24 year olds in employment which accounts for the substantial difference in median income.

Changes in education and employment for young indigenous Australians, 1986-91

In the period 1986-1991, conditions in the Australian labour market deteriorated. The unemployment rate rose from 8.1 per cent to 9.8 per cent and continued to rise into 1993. The current recession has produced the highest unemployment rates in Australia's post-war history. New entrants to the labour market, concentrated amongst young people, typically bear a disproportionate share of the burden of such increases in unemployment and it could be expected that indigenous youth would have been even more adversely affected given the additional disadvantages that many of these young people face in gaining employment. During this same period of deteriorating labour market conditions for young people, a range of government policies have focused on raising the educational and skill levels of the Australian workforce with the aim of increasing productivity and improving international competitiveness. These broader changes in the environment of young people making the transition from education to the workforce provide the background for the following discussion of changes in the educational and labour market status of young indigenous Australians. In addition to this wider context, there were factors, such as government policies directed exclusively toward indigenous people, which specifically affected indigenous youth. The discussion below will highlight these where appropriate.

There is always a problem in how best to present changes over time. As the focus of this discussion is on changes in the relative position of indigenous youth, the tables present the absolute percentage point change between 1986 and 1991 in the percentage of indigenous and non-indigenous youth appearing in each of the relevant categories; that is they do not report the percentage change in the number appearing in each category. A fuller discussion of the 1986 data is presented in Daly (1993a). The tables therefore do not provide information on the changes in the size of the total youth population, but rather on the changes in the mix of, for example, occupation, industry and school leaving age, within the total. Between 1986 and 1991 the number of Aborigines aged 15-24 years grew by 12 per cent, a growth of 6,273. This compared with a growth rate of 2.6 per cent and 65,466 amongst other Australian youth.

Table 11. Percentage point change at each age on leaving school for indigenous and non-indigenous youth by sex and age category, 1986-91.

Age on leaving school	15-19 years		20-24 years	
	Indigenous Per cent (1)	Non-indigenous Per cent (2)	Indigenous Per cent (3)	Non-indigenous Per cent (4)
Males				
14 or younger	0.1	-0.3	-0.5	-1.3
15	-6.2	-6.0	-4.9	-5.5
16	-1.9	-6.8	-1.3	-4.7
17	3.0	-0.5	3.8	3.7
18	1.6	0.6	3.0	3.4
19 and older	0.5	1.1	1.7	4.7
Still at school	3.7	10.8	-0.3	0.1
No schooling	-0.7	0.0	-1.4	-0.1
Females				
14 or younger	-0.7	-0.5	-0.1	-0.7
15	-5.2	-6.7	-5.0	-5.8
16	-2.6	-6.1	-2.8	-5.3
17	3.9	-2.5	4.9	4.3
18	2.0	1.3	3.0	2.4
19 and older	0.5	1.0	1.5	5.1
Still at school	3.0	8.3	-0.3	-0.1
No schooling	-0.8	0.2	-1.3	0.1
Persons				
14 or younger	-0.3	-0.4	0.2	-1.1
15	-5.7	-6.3	-5.0	-5.6
16	-2.3	-6.3	-2.1	-5.0
17	3.4	1.5	4.4	3.9
18	1.8	0.9	3.0	2.9
19 and older	0.5	1.0	2.2	4.9
Still at school	3.3	9.6	-0.3	-0.1
No schooling	-0.7	0.1	-1.4	0.0

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

Table 11 presents data on changes in the age of leaving school for young Australians (the corresponding data for 1991 are presented in Table 1). Between 1986 and 1991, amongst 15-19 year olds, there was a substantial increase in the age at which these young people left school and in the proportion who were still at school. These results held for both males and females. However, the growth in educational attendance as measured by age on leaving school, was not as strong for indigenous youth as for non-indigenous youth. Among the 15-19 year old indigenous people, there was

a 3.3 percentage point increase in the proportion who were still at school, compared with a 9.6 percentage point increase among non-indigenous Australians. The proportion of 20-24 year olds who had left school before the age of 16 fell by 7.3 percentage points among indigenous people, compared with 11.7 percentage points among non-indigenous people in this age group. The proportion of young indigenous people who had received no schooling continued to fall, but there was little change for non-indigenous Australians as those who had received no schooling continued to account for less than 1 per cent of the 15-24 age group.

Table 12 presents more detailed data on changing school attendance for indigenous people (the corresponding data for 1991 are presented in Table 2). It shows a substantial growth in the proportion of 16 and 17 year olds who were still attending school; 10.2 and 9.6 percentage points respectively. Both male and female attendance increased to a similar extent. There was also evidence of a continuing decline in the share of each age who had not been to school at all. Results for the group of indigenous people who spoke an Aboriginal language at home are also reported and there is an interesting comparison with changes for the whole indigenous population. This group, who were more likely to live in the remote areas of Australia, experienced much smaller increases in the share of those at each age who remained at school. However, it is important to note the considerable reduction in the share of each age group who had received no schooling at all. These changes provide some evidence that educational services are now reaching more remote communities, but the problems of offering educational opportunities beyond the age of fifteen for such communities remain.

The increasing attendance of young people at educational institutions is further in evidence across the whole range of these institutions (see Table 13; the corresponding data for 1991 are presented in Table 3). Amongst indigenous youth, the share of the 15-19 year age group attending an educational institution rose by 6.1 percentage points and for 20-24 year olds, by 2.4 percentage points. These increases however, remained below the growth in educational attendance for the rest of Australian youth. There was a 14.6 percentage point increase in the proportion of 15-19 year olds attending an educational institution and a 8.7 percentage point increase among 20-24 year olds.

Among 15-19 year old indigenous people, the growth in attendance was fairly evenly spread across educational institutions, but for non-indigenous Australians in this age group, there was particularly strong growth in attendance at secondary government schools and at universities. These differences were apparent for both males and females.

Table 12. The percentage point change in the percentage of indigenous Australians still at school or who had never attended school by sex and age, 1986-91.

	Current age (years)									
	15	16	17	18	19	20	21	22	23	24
Males										
Still at school	4.4	10.9	8.7	5.5	1.8	-0.5	-0.5	-0.1	-0.3	0.0
Had not attended school	-0.1	-0.3	-0.8	-1.2	-1.7	-1.1	-2.1	-0.6	-1.5	-0.7
Percentage indigenous language speakers^a										
Still at school	0.7	2.7	-1.7	2.1	1.9	-0.1	-1.4	-0.1	0.0	0.0
Had not attended school	-3.6	-4.5	-7.0	-5.9	-8.3	-10.5	-8.0	-6.7	-9.2	-5.6
Females										
Still at school	1.8	9.3	10.5	4.3	1.4	-0.2	-0.4	-0.3	-0.3	-0.3
Had not attended school	-0.2	-0.7	-0.9	-1.1	-0.8	-1.5	-1.1	-1.5	-0.9	-1.8
Percentage indigenous language speakers^a										
Still at school	-0.5	4.3	6.2	1.8	0.9	0.0	-0.1	0.0	-0.1	0.0
Had not attended school	-2.9	-3.8	-7.7	-6.8	-3.6	-7.5	-7.7	-7.4	-6.8	-8.1
Persons										
Still at school	3.1	10.2	9.6	4.7	1.6	-0.4	-0.4	-0.2	-0.3	0.0
Had not attended school	-0.1	-0.5	-0.8	-1.3	-1.2	-1.7	-1.6	-1.2	-1.2	-1.2
Percentage indigenous language speakers^a										
Still at school	-0.1	3.6	1.8	1.8	1.3	-0.3	-1.2	-0.3	-0.3	-0.6
Had not attended school	-3.2	-4.1	-7.5	-6.4	-5.8	-8.5	-7.8	-7.1	-8.0	-6.9

a. The percentage of indigenous Australian people who stated that they spoke an indigenous language rather than English at home. This group accounted for 17 per cent of indigenous people aged 15-24 years.

Source: 1986 and 1991 Censuses, full Aboriginal sub-file.

Table 13. Change in educational attendance by age and sex, 1986 to 1991.

Age	15-19 years		20-24 years	
	Indigenous Per cent (1)	Non-indigenous Per cent (2)	Indigenous Per cent (3)	Non-indigenous Per cent (4)
Males				
Type of educational institution				
Secondary (government)	1.8	7.5	-2.7	0.0
Secondary (non-government)	1.4	3.5	0.0	0.0
TAFE	1.7	-1.1	1.4	1.6
University	1.0	3.6	0.9	5.9
Other	0.4	-0.4	0.1	0.0
Change in percentage age group attending an educational institution ^a	6.3	12.9	2.3	7.3
Females				
Type of educational institution				
Secondary (government)	1.7	6.3	-0.2	-0.1
Secondary (non-government)	0.9	2.0	0.0	0.0
TAFE	1.8	1.8	0.4	1.4
University	1.5	6.3	2.1	8.7
Other	0.3	0.1	0.1	0.0
Change in percentage age group attending an educational institution ^a	5.9	16.5	2.4	10.0
Persons				
Type of educational institution				
Secondary (government)	6.0	6.8	-3.0	0.0
Secondary (non-government)	1.2	2.6	0.0	0.0
TAFE	2.3	0.3	-5.2	1.5
University	2.3	4.9	9.7	7.3
Other	0.3	-0.3	-1.4	0.0
Change in percentage age group attending an educational institution ^a	6.1	14.6	2.4	8.7

a. Excludes those who did not state their institution of attendance.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

Some interesting gender differences are apparent among the indigenous 20-24 year age group. While males experienced greater growth in attendance at TAFE colleges, the number of indigenous women attending university was greater than for males. Growth in attendance at universities accounted for most of the increase in educational attendance for non-indigenous Australians in this age group.⁸

Table 14 presents data on changes in the labour force status of young people between 1986 and 1991. The declining opportunities for full-time

employment and the increasing importance of part-time employment for this age group are very much in evidence. There were however, some important differences between indigenous and non-indigenous youth. While the proportion of indigenous youth in employment remained below that of non-indigenous youth (see Table 5), the indigenous share increased between 1986 and 1991 by 1.6 percentage points at a time when it declined by 7.9 percentage points for other young Australians. While it is not possible to attribute this directly to the AEDP, it seems likely that associated employment programs, such as the CDEP scheme, have played an important part in creating work for indigenous youth at a time when there were limited opportunities for young people in the labour market (Taylor 1993).

As already described, there has been substantial growth in the retention of young Australians at educational institutions and the fall in the share in employment may be attributable in part to the increasing numbers still studying. The evidence presented here shows that the fall in employment for non-indigenous 15-19 year olds of 8.5 per cent was almost wholly offset by the increase in the proportion not in the labour force. Between 1986 and 1991, the census recorded little change in the proportion of this group unemployed and looking for full-time work. Among indigenous people in the 15-19 year age group, the increase in employment was associated with an increase in the proportion outside the labour force and a decline in unemployment. In other words comparing 1986 and 1991, in an accounting sense, there was a movement of 15-19 year old indigenous people out of unemployment into the employment and not in the labour force categories, while for non-indigenous Australians in this age group the movement has been from employment to outside the labour force. This was true for both males and females. The growth of the not in the labour force category can be partially explained by the increase in educational retention rates but may also reflect any growth in the number of young discouraged workers who have ceased to look for employment.

The pattern for 20-24 year olds was somewhat different. There was a decline in the share of indigenous and non-indigenous Australians in this age group in full-time employment. However, there was an increase of 1.2 percentage points in the number of indigenous Australians in employment compared with a 5.8 percentage point decline among non-indigenous Australians. The decrease in unemployment of indigenous people in this age category was associated with an increase in part-time employment and little change in the share of people remaining outside the labour force. In contrast, among non-indigenous Australians in this age group, the decline in employment was associated with a 3.5 percentage point increase in the share who were unemployed and looking for full-time work. The pattern of decreasing employment and rising unemployment was particularly pronounced among non-indigenous males.

Table 14. The change in the labour force status of young indigenous and non-indigenous Australians by sex, 1986-91.

Age	Labour force status ^d						
	Full-time employment ^a (1)	Part-time employment ^b (2)	Total employment ^c (3)	Full-time unemployment ^e (4)	Part-time unemployment ^f (5)	Total labour force (6 = 3+4+5)	Not in labour force (7)
Males—Indigenous							
15-19	-3.9	4.7	1.3	-4.3	-0.9	-3.8	3.8
20-24	-6.5	6.2	0.1	-0.9	-0.7	-1.4	1.4
Total	-4.7	5.5	1.1	2.6	-0.8	-2.2	2.2
Males—Non-indigenous							
15-19	-14.8	2.9	-10.3	-0.6	1.0	-9.9	9.8
20-24	-14.2	2.3	-8.8	4.8	0.8	-3.2	3.2
Total	-15.4	2.6	-10.5	2.1	0.9	-7.5	7.6
Females—Indigenous							
15-19	-3.4	3.4	0.8	-2.3	-0.7	-2.1	2.1
20-24	-1.6	3.7	2.6	-1.1	-0.1	1.7	-1.5
Total	-2.2	3.6	2.1	-1.9	-0.4	-0.1	0.1
Females—Non-indigenous							
15-19	-13.3	4.8	-6.6	-1.3	1.4	-6.5	6.5
20-24	-7.7	2.8	-2.7	2.2	0.6	0.1	-0.2
Total	-11.0	3.9	-5.3	0.4	1.0	-3.8	3.8
Persons—Indigenous							
15-19	-3.6	4.1	1.1	-3.2	-0.7	-2.8	2.8
20-24	-4.1	4.9	1.2	-1.1	-0.4	-0.3	0.3
Total	-3.5	4.6	1.6	-2.2	-0.6	-1.1	1.1
Persons—Non-indigenous							
15-19	-14.5	3.4	-8.5	-0.9	1.2	-8.2	8.2
20-24	-11.6	2.5	-5.8	3.5	0.8	-1.5	1.5
Total	-13.2	3.2	-7.9	1.3	1.0	-5.6	5.6

a. 35+ hours worked per week.

b. Less than 35 hours worked per week.

c. Includes those who stated that they were employed but did not state their hours of work.

d. Excludes those who did not state their labour force status.

e. Includes those who were actively looking for full-time employment.

f. Includes those who were actively looking for part-time employment.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

Table 15. Percentage point change in the share in each labour force category of indigenous and non-indigenous youth by section-of-State, 1986-91.

Section-of-State	Indigenous			Non-indigenous		
	Major urban	Other urban	Rural	Major urban	Other urban	Rural
Males - 15-19 years						
Labour force status						
Employed	-2.5	-1.0	6.7	-11.2	-9.6	-7.5
Unemployed	-3.4	-3.8	-7.7	0.7	1.1	-1.7
NILF ^a	6.1	4.7	1.0	10.5	8.4	9.2
Males - 20-24 years						
Labour force status						
Employed	-6.3	-3.8	9.8	-8.2	-11.5	-7.4
Unemployed	2.6	3.7	-10.4	5.5	8.1	3.2
NILF ^a	3.7	0.0	0.6	2.7	3.4	4.2
Females - 15-19 years						
Labour force status						
Employed	-3.9	0.0	5.9	-6.2	-7.7	-7.0
Unemployed	-0.8	-1.7	-6.6	0.3	2.0	-4.5
NILF ^a	4.7	1.7	0.5	5.9	5.7	11.5
Females - 20-24 years						
Labour force status						
Employed	-6.8	-1.6	9.8	-5.0	2.9	-1.7
Unemployed	1.0	0.4	-5.4	3.5	1.1	2.7
NILF ^a	-1.7	1.2	-4.3	1.5	-3.9	-1.1
Persons - 15-19 years						
Labour force status						
Employed	-3.2	-0.5	6.5	-8.7	-8.6	-7.9
Unemployed	-2.0	-2.7	-7.1	0.4	1.6	-3.0
NILF ^a	5.2	3.1	0.6	8.2	7.1	10.2
Persons - 20-24 years						
Labour force status						
Employed	-2.7	-2.9	9.7	-6.6	-4.1	-5.2
Unemployed	1.5	1.6	-8.0	4.5	4.6	2.9
NILF ^a	1.2	1.3	-1.8	2.1	-0.5	2.1

a. NILF - not in the labour force.

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

The results presented in Table 15 show that the changing patterns in labour force status reported at the aggregate level in Table 14 were apparent for

non-indigenous people in each section-of-State, but not for young indigenous people. Among non-indigenous 15-19 year olds there was declining employment and an increasing share of people who were not in the labour force in each section-of-State. The falling share of employed non-indigenous 20-24 year olds was offset by higher levels of unemployment, particularly in the urban areas, and an increase of those not in the labour force.

The pattern of change in indigenous labour force status, however, varied by section-of State. The increase in the share of 15-24 year old indigenous people in employment reported in Table 14 was concentrated in the rural areas and the employment share actually fell in the urban areas. This strong growth in employment in the rural areas was also apparent in the indigenous population as a whole (Taylor 1993). The evidence shows 15-19 year olds moving out of the employment into the not in the labour force category in urban areas, and from unemployment into employment in rural areas. While unemployment declined by 8 percentage points for 20-24 year olds in rural areas, it increased for those young indigenous Australians living in urban areas.

Tables 16-18 focus on the changes in the types of work that indigenous youth were engaged in. Although the five year gap between censuses is a relatively short period of time and therefore might not be expected to record major changes, there is some evidence of quite large shifts in the relative importance of particular industries and occupations as employers of young indigenous people.

Table 16 reports the changes in the proportion of young indigenous and non-indigenous Australians in each of the eight broad occupational categories. Among indigenous and non-indigenous Australians aged 15-19 years, the largest changes were the relative decline in the employment of clerks and the increase in the employment of salespersons, especially among non-indigenous people. The share of clerical employment in the total employment of 20-24 year olds also fell for both indigenous and non-indigenous Australians, while salespersons accounted for a larger share of this age group's employment. The share of employment of indigenous 20-24 year olds in labouring occupations fell by 4.1 percentage points, a larger decline than that recorded among non-indigenous youth.

While these broad trends were apparent for both males and females, there were some interesting gender differences. The evidence shows greater change in the occupational distribution of females in employment than for males. Among 15-19 year olds, the decline in the share of employment in clerical occupations and the increase in the share of salespersons was particularly pronounced among indigenous females compared with indigenous males. Labouring jobs became relatively less important for

males in this age group, but increased in relative importance for females. Among 20-24 year olds, salespersons and professionals were the fastest growing occupations for females but did not grow as much among males. The largest change for indigenous males was the 4.5 percentage point decline in the share of employment of 20-24 year olds in labouring occupations.

Table 16. Percentage point change in the share of employment in each occupation for indigenous and non-indigenous youth, 1986-91.

Age	15-19 years		20-24 years	
	Indigenous Per cent (1)	Non-indigenous Per cent (2)	Indigenous Per cent (3)	Non-indigenous Per cent (4)
Males				
Managers and administrators	0.9	0.1	1.0	0.3
Professionals	0.3	-0.1	1.3	1.0
Para-professionals	2.2	-0.1	2.5	0.7
Tradespersons	-0.9	-0.1	-0.4	0.6
Clerks	-1.7	-1.4	0.1	-1.8
Salespersons, etc.	1.2	5.0	1.7	2.2
Plant and machinery operators and drivers	0.6	-1.4	-1.6	-1.3
Labourers	-2.7	-1.9	-4.5	-1.7
Females				
Managers and administrators	0.1	-0.4	1.1	0.8
Professionals	1.2	-0.3	2.5	1.9
Para-professionals	-0.4	-0.4	0.3	-0.7
Tradespersons	1.9	-0.5	0.5	0.9
Clerks	-12.2	-11.9	-8.2	-6.5
Salespersons, etc.	6.8	11.0	5.8	5.8
Plant and machinery operators and drivers	-0.6	-0.7	-0.6	-1.1
Labourers	3.2	2.5	-1.4	-1.3
Persons				
Managers and administrators	0.5	0.2	1.0	0.5
Professionals	0.7	-0.2	1.9	1.5
Para-professionals	1.2	-0.3	1.6	0.0
Tradespersons	0.7	-0.5	-1.7	0.2
Clerks	-6.8	-6.5	-4.0	-3.5
Salespersons, etc.	3.2	8.1	3.9	4.2
Plant and machinery operators and drivers	0.1	-1.1	-0.3	-1.3
Labourers	0.4	0.2	-4.1	-1.7

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

Table 17. Percentage point change in the share of employment by industry for indigenous and non-indigenous youth, 1991.

Age	15-19 years		20-24 years	
	Indigenous Per cent (1)	Non-indigenous Per cent (2)	Indigenous Per cent (3)	Non-indigenous Per cent (4)
Males				
Agriculture	-4.6	-1.3	-1.9	-0.8
Mining	-1.3	-0.3	-0.3	-0.3
Manufacturing	-1.4	-3.3	-0.8	-2.8
Electricity, gas, water	-0.6	-0.1	-1.1	-1.5
Construction	-1.5	1.1	-2.5	-0.7
Wholesale, retail trade	2.0	1.6	2.0	4.0
Transport and storage	-1.5	-0.4	-3.7	-2.0
Communications	-0.6	-0.5	-0.1	-0.7
Financial services	0.1	-1.0	0.0	1.4
Public administration	-0.1	-0.3	0.5	0.0
Community services	8.7	0.7	7.0	0.6
Recreation, personal services	0.7	-3.5	0.9	2.8
Females				
Agriculture	-1.4	0.4	-1.4	-0.2
Mining	0.1	-0.3	-0.1	0.0
Manufacturing	-0.7	-2.1	-1.3	-2.4
Electricity, gas, water	-0.5	-0.7	-0.6	-0.4
Construction	-0.2	-0.1	-0.1	-0.3
Wholesale, retail trade	2.9	7.7	1.5	0.6
Transport and storage	-1.2	0.2	-0.6	0.5
Communications	-0.6	-0.5	-0.1	-0.4
Financial services	0.0	-5.2	0.6	3.0
Public administration	-1.7	-0.8	1.0	-1.6
Community services	0.6	-1.4	-0.1	-2.1
Recreation, personal services	2.6	2.8	1.2	3.3
Persons				
Agriculture	-3.0	-0.5	-1.8	-0.6
Mining	-0.8	-0.3	-0.3	-0.2
Manufacturing	-1.0	-2.8	-1.2	-2.9
Electricity, gas, water	-0.5	-0.3	-0.9	-1.0
Construction	-0.7	0.5	-1.7	-0.7
Wholesale, retail trade	2.3	4.6	1.8	2.4
Transport and storage	-1.3	-0.2	-2.5	-0.8
Communications	-0.6	-0.4	-0.1	-0.6
Financial services	0.0	3.0	0.4	2.3
Public administration	-0.7	-0.6	0.6	-0.8
Community services	5.1	-0.3	4.5	-0.3
Recreation, personal services	1.4	3.2	1.1	3.1

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

These occupational shifts are also apparent in the changes which have taken place in the industry of employment (see Table 17. Table 8 reports the industry employment distribution for 1991). Wholesale and retail trade increased its share of employment for both indigenous and other young Australians while agriculture recorded a declining share. Community services had the fastest growing share of indigenous employment in each age group in contrast to the small decline in the share of employment in this industry among other young Australians. For these people, the wholesale and retail trade was the fastest growing industry for 15-19 year old employment, with recreational and personal services for 20-24 year olds.

There were, once again, some interesting differences in the changes in the shares of industry employment by gender. The largest changes in the shares of industry employment were for indigenous males rather than for females. Most of the growth in indigenous employment in community services came from increased male employment in this industry while the share of female employment did not change greatly. Another substantial change was the decline of 4.6 per cent in the share of 15-19 year old indigenous male employment in agriculture.

Table 17 shows that there was a very small change in the share of employment in public administration and Table 18 presents more detail of the changing importance of employment in government. The figures presented here relate to all government services, not just public administration. The share of employment accounted for by the Commonwealth Government and the State Governments fell for all Australian youth. There were, however, some differences at the local government level. The share of indigenous employment, among both 15-19 and 20-24 year olds increased at the local government level, but there was a slight decrease in the share of employment at this level among non-indigenous Australians. The share of private sector employment grew for all young Australians. This pattern was in evidence for both males and females. This may in part reflect the classification of many indigenous community organisations to the private sector (Altman and Daly 1992).

In summary, these tables describing changes in indigenous employment patterns between 1986 and 1991 show that young indigenous people have not experienced the same decrease in full-time employment as non-indigenous youth. While all groups increased their share in part-time employment, there was particularly strong growth for young indigenous Australians. Indigenous youth has not experienced the same increase in unemployment as other young Australians, but the proportion of indigenous youth not in the labour force did not increase as much as for non-indigenous youth. The smaller increase in educational retention rates for indigenous youth compared with non-indigenous Australians in this

age group probably accounts for the smaller change in the proportion who were outside the labour force. Among those young indigenous people in employment, publicly-funded organisations in the government and community sectors remained important sources of employment. The role of the AEDP and its employment programs in creating these jobs seems to be central (Taylor 1993).

Table 18. Percentage point change in the share of employment in the Government and private sectors for indigenous and non-indigenous youth, 1991.

Age	Indigenous	15-19 years	Indigenous	20-24 years
	Per cent (1)	Non-indigenous Per cent (2)	Per cent (3)	Non-indigenous Per cent (4)
Males				
Government				
Commonwealth	-0.9	-0.7	-1.2	-2.0
State	-9.1	-1.3	-8.3	-4.0
Local	4.1	-0.3	3.2	-1.2
Private	5.9	2.3	6.4	6.3
Females				
Government				
Commonwealth	-3.8	-1.5	-1.9	-2.4
State	-7.7	-5.1	-8.2	-2.9
Local	2.8	-0.4	5.6	-0.4
Private	8.7	7.0	4.4	5.7
Persons				
Government				
Commonwealth	-2.1	-1.1	-1.3	-2.2
State	-8.5	-3.2	-8.0	-3.5
Local	3.6	-0.3	4.0	-0.4
Private	7.2	4.6	5.3	6.0

Source: 1991 Census, full Aboriginal sub-file and the 1 per cent ABS sample; 1986 Census, full Aboriginal sub-file and the 1 per cent section-of-State public use sample.

A final comparison to be made between 1986 and 1991 Census data relates to income and is presented in Figures 1 and 2. The figures show the ratio of median income, comparing indigenous and non-indigenous Australians for three labour force status groups: the employed, unemployed, and not in the labour force, and for the total. The two age groups 15-19 years and 20-24 years are also distinguished.

Figure 1. The ratio of indigenous/non-indigenous median incomes for males aged 15-19 years and 20-24 years, 1986-91.

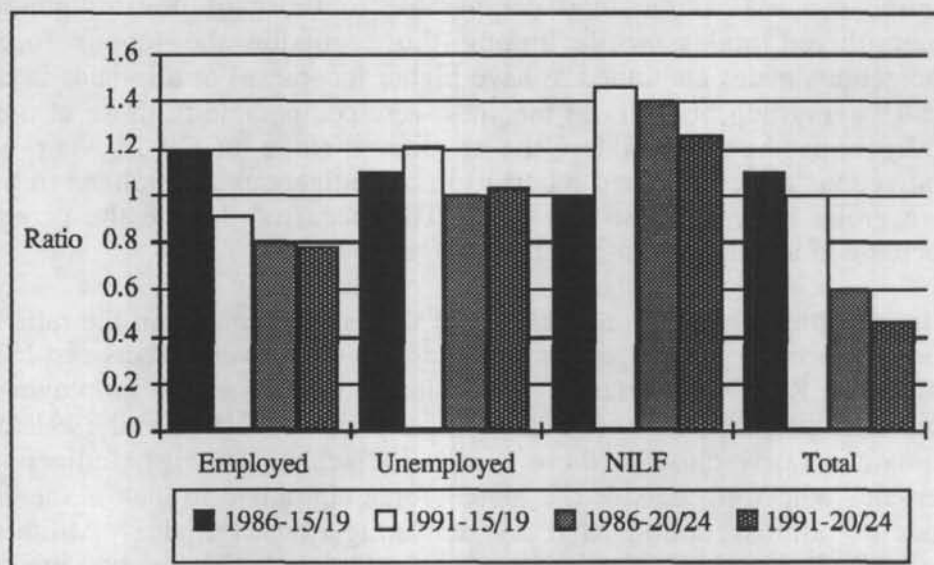
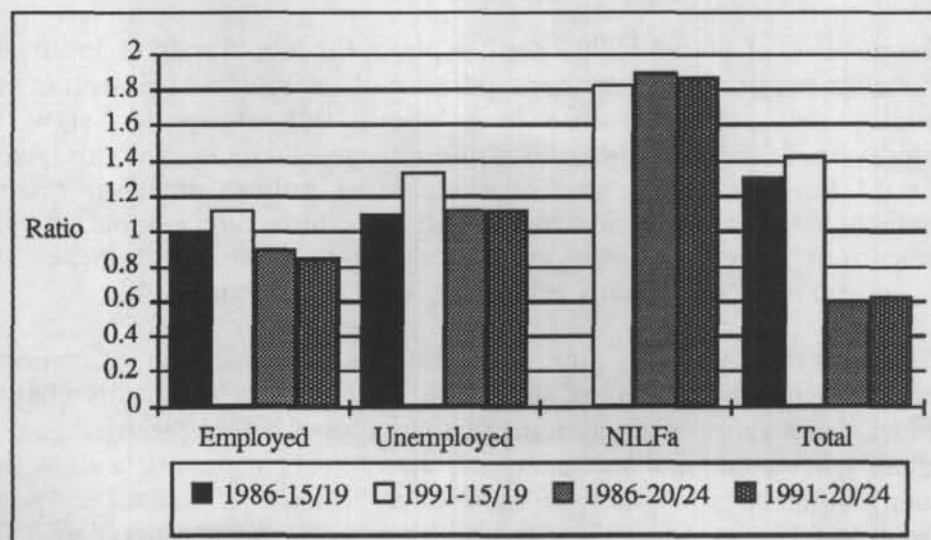


Figure 2. The ratio of indigenous/non-indigenous income for females aged 15-19 years and 20-24 years, 1986-91.



NILFa. Ratio not calculated for 15-19 year-old females in the NILF category because the median income was \$0 for non-indigenous females in this age group.

Figure 1 relates to males. Among the employed, there was a decline in the ratio of indigenous to non-indigenous income of 15-19 year olds but there was little change for 20-24 year olds. The incomes of unemployed indigenous males remained comparable to those of non-indigenous unemployed males, while among those outside the labour force, indigenous males continued to have higher incomes. For all males in the 15-19 age group, indigenous incomes were comparable to those of non-indigenous Australians but the median income of 20-24 year old indigenous males declined relative to non-indigenous Australians in this age group between 1986 and 1991. This occurred despite the general increase in unemployment among this age group.

Figure 2 presents data for females and shows little change in the ratio of median incomes for indigenous and non-indigenous women between 1986 and 1991. Relative incomes for young indigenous females in employment and unemployment did not change greatly between 1986 and 1991 and remained fairly close to those of non-indigenous females. Indigenous females who were outside the labour force continued to have a median income almost double that of non-indigenous females. Although indigenous females in the 15-19 age group had a higher median income than non-indigenous females of this age, the ratio fell to 60 per cent among 20-24 year olds. This decline reflects the lower employment rates amongst indigenous females when compared with non-indigenous females.

Conclusion

The position of young indigenous people in the labour market and in the education system is an important indicator of the effects of education and employment policy because it is among this group that signs of improvement in indicators measuring changes in socioeconomic status should be most apparent. For example, a policy aimed at raising indigenous educational attainment will have little direct impact on the educational levels of fifty year olds, but rather, should influence the attainment of those currently completing their education.

While there have been significant improvements in the educational attainment of indigenous people in the last twenty years, this chapter shows that a substantial gap remains to be closed before the AEP goal of equality in educational attainment is achieved. The census data show that young indigenous people were more likely to have left school early and had lower levels of qualifications than non-indigenous Australians. The estimated differences in educational attainment presented here are probably conservative. Evidence suggests that indigenous truancy rates are particularly high. The 'effective' education that they have received for a

given number of years at school is likely to be lower than for more regular attenders.

The evidence on labour market activity also suggests that indigenous youth remain at a disadvantage compared with non-indigenous youth. They were less likely to be in employment and more likely to be unemployed. A large group of young indigenous people, especially females, remained outside the labour force and as they were not recorded as attending an educational institution, the census provides no information on their activities.

The current recession appears, however, to have had different effects on the labour market status of young indigenous and non-indigenous Australians. While the share of full-time employment declined for all young Australians between 1986 and 1991, the increase in the share of young indigenous people in part-time employment was sufficient to offset this. As a consequence, the proportion of Aborigines in this age group in employment actually rose between 1986 and 1991. This contrasted with a decline for other young Australians. The proportion of young Aborigines who were unemployed also fell, once again in contrast to the increase among other young Australians. The increase in educational retention rates, especially among 15-19 year old non-indigenous youth, is reflected in the increased proportion who were not in the labour force.

The data presented here show that those indigenous people in employment were in lower skilled jobs compared to their non-indigenous counterparts and were more likely to be in public sector employment. The differences in the employment rate and the types of work of indigenous and non-indigenous youth have important implications for their income status. Among 15-19 year olds, there was little difference in median incomes for the two groups but among 20-24 year olds, where a larger proportion of non-indigenous people were in employment, indigenous median income fell to 56 per cent of that of non-indigenous people. This ratio had changed little since 1986.

While the evidence reported here would support the hypothesis that government policies to create employment for young indigenous people and to encourage them to stay in education have had some effect, the long-term effects of these policies remain in question. One of the major components of the AEDP, the CDEP scheme, creates part-time employment for individuals working for their welfare benefit entitlement. The scheme has been able to create employment for indigenous people at a time when other young Australians have been losing their jobs. However, because of the limited number of hours of work for each individual under the scheme, it does not provide a vehicle for raising indigenous incomes to the levels of non-indigenous Australians. The means of achieving this remains an important long-term policy issue.

The rising level of educational attainment provides one mechanism by which indigenous incomes may be raised in the longer term. Existing evidence based on cross-sectional data shows that those with higher levels of educational attainment, on average, have a higher probability of being in employment and on a higher income (Miller 1989b, Daly 1992; Daly et al. 1993). If these relationships are sustained in the future, the rising indigenous retention rates at educational institutions should have positive implications for both indigenous employment status and income levels.

A final issue to be raised here relates to the relationship between the AEDP and the AEP. There is some danger of a conflict between the incentives offered under AEDP employment programs (eg the CDEP scheme) and the AEP programs to promote school retention. The offer of part-time employment within the community under the CDEP scheme may discourage individuals from leaving home in pursuit of further education. While not wishing to under-estimate the wider social benefits which may arise from this choice, it may have important implications for an individual's future income potential. This example raises fundamental issues about the inter-relationship between the two policies that should be addressed during their forthcoming reviews.

Notes

1. The terms indigenous, Aborigine and Aboriginal will be used to refer to the Aboriginal and Torres Strait Islander populations of Australia.
2. AUSTUDY was introduced in 1987 to provide income support for people over the age of 16 years wishing to continue full-time secondary and tertiary studies. The benefit depends on parental income and assets except where the student is classed as independent and their own income and assets are tested. ABSTUDY was introduced with similar aims to AUSTUDY, 'To encourage and assist Aborigines and Torres Strait Islanders to take full advantage of the educational opportunities available to all Australians' (Department of Employment, Education and Training 1991: 88). It has a secondary and tertiary component and provides additional assistance to cover educational expenses beyond direct income support. Some ABSTUDY benefits are available earlier than AUSTUDY benefits; full-time secondary students and those still at primary school and aged 14 years are entitled to ABSTUDY (Schooling).
3. See Keefe (1992) for a discussion of the relevance of standard educational curricula to Aboriginal people.
4. A revised ABS Classification of Qualifications (ABSCQ) was used in the 1991 Census. The basis of the classification is somewhat different from that used in 1986, making comparisons by field of qualification and level of qualification difficult at some levels, particularly the certificate level. The ABS information paper on the subject cautions 'The ABSQC has maintained some degree of comparability with the 1986 Census classification. However, differences in the classification structure and coding process used in the 1986 Census may pose some practical difficulties when attempting any detailed comparison' (ABS 1992: 4). Broad categories have therefore been used here in the hope of reducing the

effects of this reclassification. There was also a substantial reduction between 1986 and 1991, in the proportion of Aboriginal 20-24 year olds who did not state their qualifications, from 15 to 10 per cent of the age group.

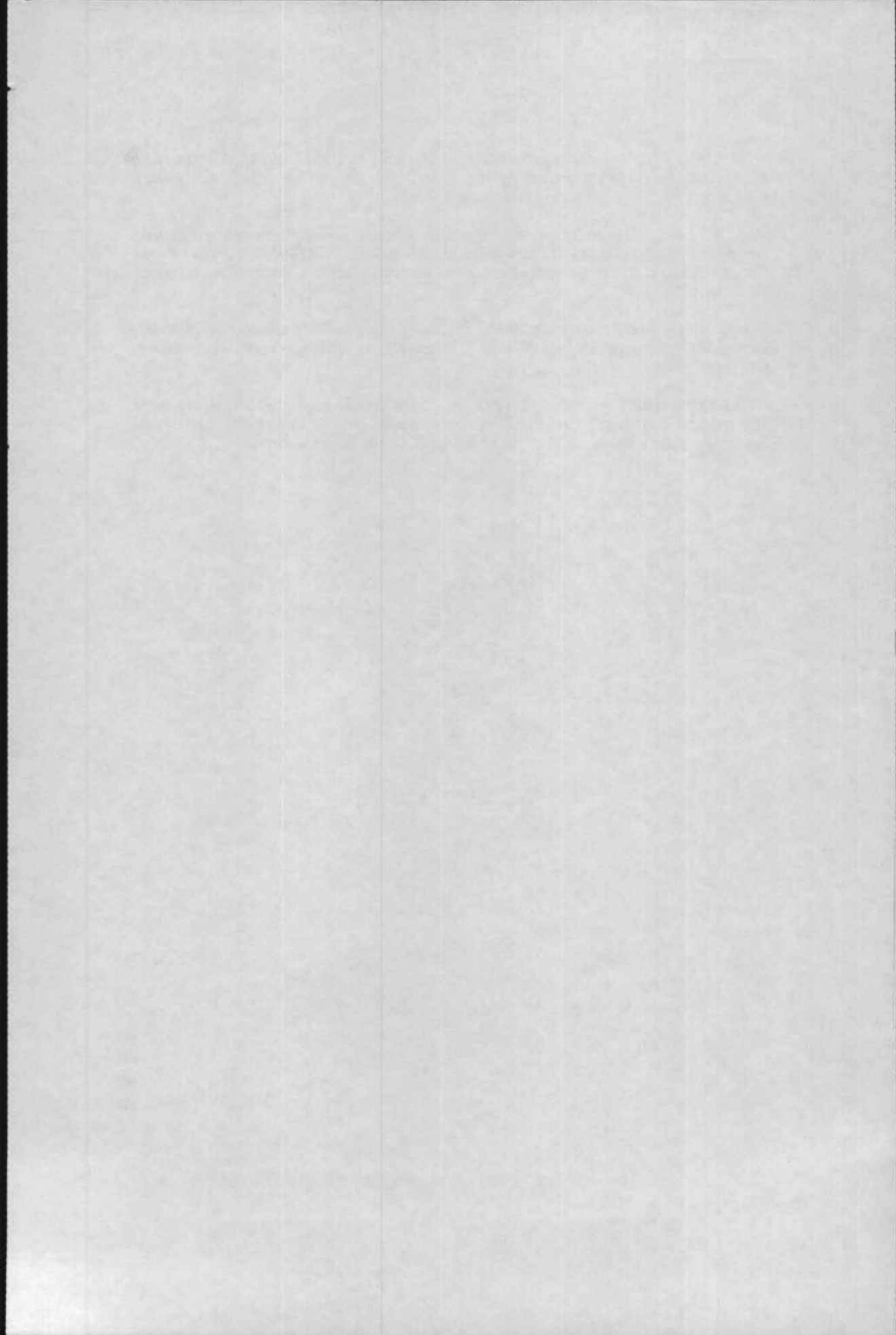
5. These categories are derived from the section-of State variable in the census. The three settlement size categories used here are defined as follows: an urban centre is 'one or more adjoining collection districts with urban characteristics and representing a population cluster of 1,000 or more people' (ABS 1986: 150). Major urban centres had over 100,000 inhabitants and other urban areas between 1,000 and 99,999 inhabitants. The rural category used here includes both ABS categories 'rural locality' and 'rural balance'. Localities include population clusters which can 'be expected to contain at least 200 people (but not more than 999) by the next census; have at least 40 occupied non-farm dwellings with a discernible urban street pattern; have a discernible nucleus of population' (ABS 1986: 97). The rural balance includes all the collection districts not included elsewhere (ABS 1986: 132).
6. This result could be interpreted as providing some superficial evidence of consumer discrimination against Aboriginal people. Becker (1957: 57) hypothesised that 'a consumer's evaluation of a retail store may be based not only on the prices, speed of service, and reliability but also on the sex, race, religion, and personality of the sales personnel'. Where consumers discriminated against a particular racial group, that group would be less likely to be found in direct contact with customers.
7. See for example, Daly (1990) who compares the distribution of the employment of 16-19 year old males by industry in Australia, Great Britain and the United States of America. In each of these countries in 1981, wholesale and retail trade was the largest industry employer of young male labour, accounting for at least one-quarter of total employment.
8. A table comparing the qualifications of the 20-24 year age group in 1986 and 1991 has not been presented because of the changes in the classification of qualifications between 1986 and 1991 and the difficulty of making meaningful comparisons between the two.

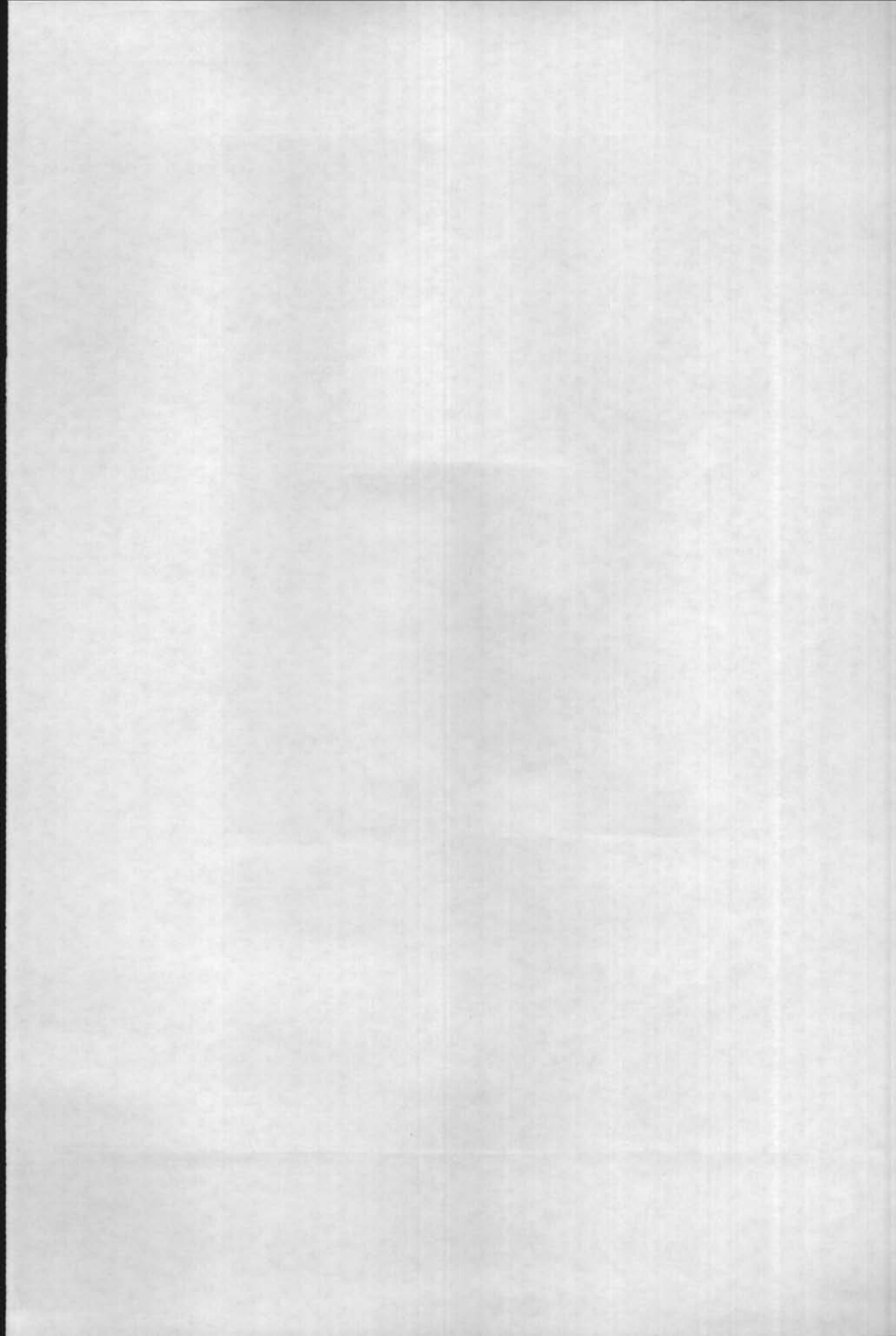
References

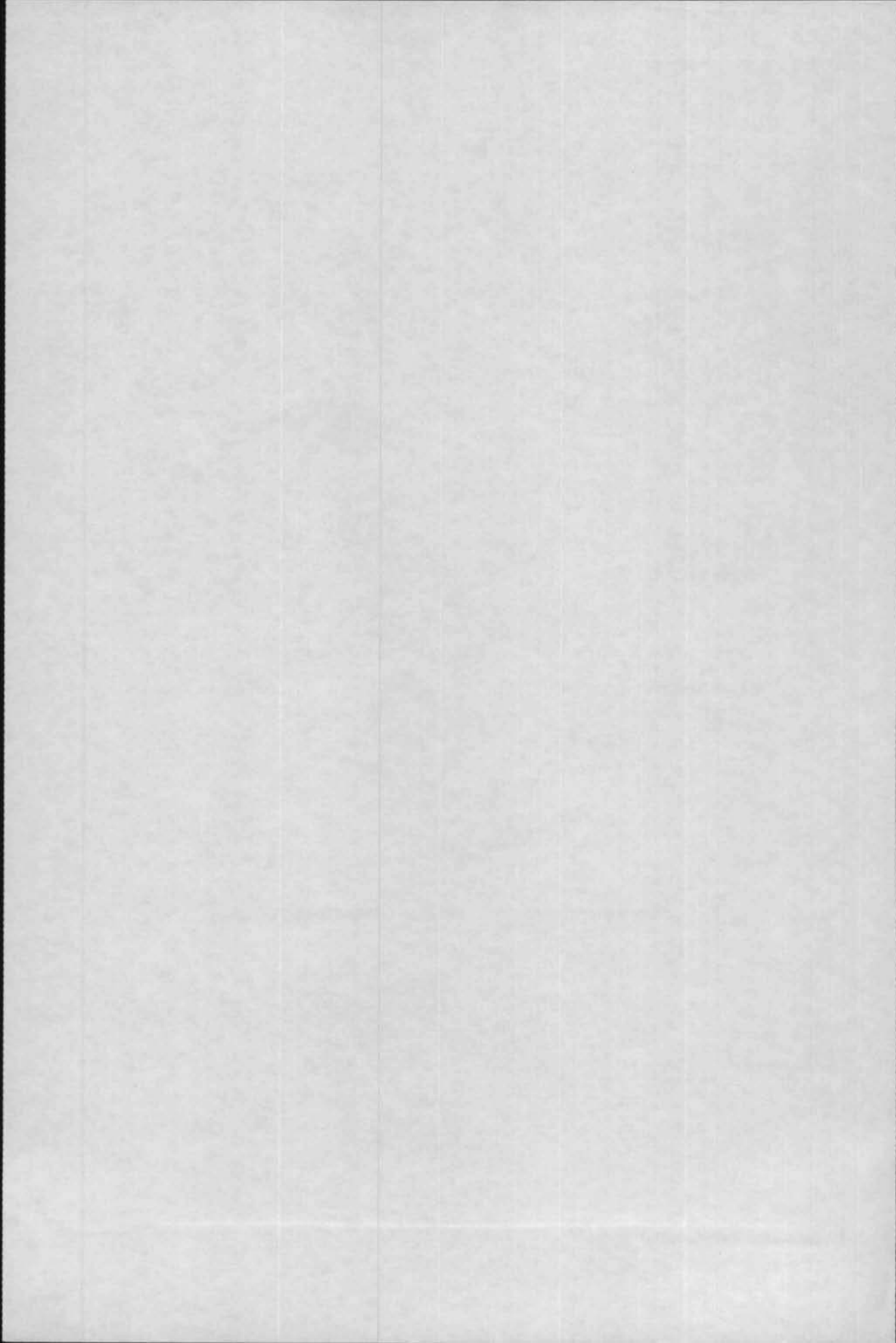
- Altman, J.C. (ed.) 1991. *Aboriginal Employment Equity by the Year 2000*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Altman, J.C. and Daly, A.E. 1992. 'Do fluctuations in the Australian macroeconomy influence Aboriginal employment status?', *Economic Papers*, 11 (4): 32-48.
- Australian Bureau of Statistics (ABS) 1986. *The 1986 Census Dictionary*, cat. no. 2174.0. ABS, Canberra.
- Australian Government 1987. *Aboriginal Employment Development Policy Statement: Policy Paper No. 1*, Australian Government Publishing Service, Canberra.
- Becker, G. 1957. *The Economics of Discrimination*, The University of Chicago Press, Chicago.
- Commonwealth of Australia 1991a. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vol. 2, (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

- Commonwealth of Australia 1991b. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vol. 4, (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.
- Daly, A.E. 1990. An International Comparison of Relative Earnings in Australia, Great Britain and the United States, PhD thesis, Australian National University, Canberra.
- Daly, A.E. 1991. 'The participation of Aboriginal people in the Australian labour market', *CAEPR Discussion Paper No. 6*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Daly, A.E. 1992. 'The determinants of Aboriginal employment income', *CAEPR Discussion Paper No. 32*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Daly, A.E. 1993a. 'Education and employment for young Aborigines', *CAEPR Discussion Paper No. 38*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Daly, A.E. 1993b. 'The determinants of employment for Aboriginal people', *Australian Economic Papers*, 32 (60): 134-52.
- Daly, A.E., Allen, B., Aufflick, L., Bosworth, E. and Caruso, M. 1993. 'Determining the labour force status of Aboriginal people using a multinomial logit model', *CAEPR Discussion Paper No. 44*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Department of Employment, Education and Training 1988. *Report of the Aboriginal Education Policy Task Force*, Australian Government Publishing Service, Canberra.
- Gale, F., Bailey-Harris, R. and Wundersitz, J. 1990. *Aboriginal Youth and the Criminal Justice System*, Cambridge University Press, Cambridge.
- House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1992. *Mainly Urban*, Australian Government Publishing Service, Canberra.
- Keefe, K. 1992. *From the Centre to the City*, Aboriginal Studies Press, Canberra.
- McRae, I. 1992. 'Part-time employment: where does it lead?' in R.G. Gregory and T. Karmel (eds) *Youth in the Eighties*, Department of Employment, Education and Training and Centre for Economic Policy Research, Australian National University, Canberra.
- Miller, P.W. 1989a. *The Structure and Dynamics of Aboriginal and Non-Aboriginal Youth Unemployment*, Australian Government Publishing Service, Canberra.
- Miller, P.W. 1989b. 'The structure of Aboriginal and non-Aboriginal youth unemployment', *Australian Economic Papers*, 28 (5): 39-56.
- Miller, P.W. 1991. 'Aboriginal youth unemployment', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*, Centre for Aboriginal Policy Research, Australian National University, Canberra.
- Miller, P.W. and Volker, P. 1987. 'The youth labour market in Australia', *Economic Record*, 63 (182): 203-19.

- Ross, R. 1991. 'Employment prospects for Aborigines in NSW', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*, Centre for Aboriginal Policy Research, Australian National University, Canberra.
- Taylor, J. 1992. 'Occupational segregation: a comparison between employed Aborigines, Torres Strait Islanders and other Australians', *CAEPR Discussion Paper No. 33*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Taylor, J. 1993. *The Relative Economic Status of Indigenous Australians, 1986-91*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Tesfaghiorghis, H. and Altman, J.C. 1991. 'Aboriginal socio-economic status: are there any evident changes?', *CAEPR Discussion Paper No. 3*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.







**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 ATSI 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.

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.

