



The Relative Economic Status of Indigenous Australians, 1986-91

J. Taylor



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The Australian National University



Research Monograph No. 5



**The Relative Economic
Status of Indigenous Australians,
1986-91**

by J. Taylor

**Centre for Aboriginal Economic Policy Research
Australian National University, Canberra**

**Research Monograph No. 5
1993**

First published in Australia 1993.

Printed in Australia by Goanna Print, Fyshwick, ACT.

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National Library of Australia
Cataloguing-in-publication entry

Taylor, John, 1953- .
The relative economic status of indigenous Australians, 1986-91.

Bibliography.
ISBN 0 7315 1841 1.

[1] Aborigines, Australian - Economic conditions. [2] Aborigines, Australian - Economic conditions - Statistics. [3] Torres Strait Islanders - Economic conditions. [4] Torres Strait Islanders - Economic conditions - Statistics. I. Australian National University. Centre for Aboriginal Economic Policy Research. (Series: Research monograph (Australian National University. Centre for Aboriginal Economic Policy Research); no. 5).

331.699915

Foreword

A mid-term review of the Aboriginal Employment Development Policy (AEDP) is currently under way. The AEDP was originally developed as an immediate Commonwealth response to the *Report of the Committee of Review of Aboriginal Employment and Training Programs* (Australian Government Publishing Service, Canberra, 1985) and launched in association with the 1986-87 Commonwealth Budget. Subsequently, the AEDP was expanded massively and officially launched in November 1987. In late 1992, the Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University (ANU) negotiated with the Aboriginal and Torres Strait Islander Commission (ATSIC) and the Commonwealth Department of Employment, Education and Training to provide an analysis of official census statistics to assist the review process.

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

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

A fourth AEDP goal was to ensure equitable participation in primary, secondary and tertiary education, but in 1989 this was subsumed under the umbrella of the Aboriginal and Torres Strait Islander Education Policy that is currently being separately reviewed.

It has already been highlighted in earlier publications like *Aboriginal Employment Equity by the Year 2000* (J.C. Altman (ed.), CAEPR, ANU, Canberra, 1991) and *A National Survey of Indigenous Australians: Options and Implications* (J.C. Altman (ed.), CAEPR, ANU, Canberra, 1992) that an assessment of AEDP outcomes, in broad policy and statistical terms,

will be almost entirely dependent on labour force statistics collected in the five yearly Census of Population and Housing. Indeed, it is fortunate that there is a degree of correlation between the 1986 Census and the official launch of the AEDP (1987) and the availability of 1991 Census data in 1993 and its current mid-term review.

The terms of reference for Phase 2 of the evaluation of the AEDP agreed upon between the inter-agency AEDP Review Co-ordinating Committee and CAEPR state specifically:

In order to assist in assessing the impact of the AEDP, conduct a detailed analysis of 1986 and 1991 Census data to ascertain the degree to which the AEDP objectives have been achieved and in particular examine:

- the extent to which the income status of Aboriginal and Torres Strait Islander people has improved since 1986;
- the extent to which the employment status of Aboriginal and Torres Strait Islander people has improved since 1986;
- the extent to which the dependency of Aboriginal and Torres Strait Islander people on welfare (non employment income) has declined since 1986.

As far as possible from available census data, the consultancy should provide a quantitative analysis of the impact of the AEDP particularly in relation to the extent to which AEDP targets to the year 2000 are being achieved.

The analysis should identify relevant changes at national, State, section-of-State and ATSIC regional levels. The regional analysis will be dependent on provision of appropriate data to current (1993) regional boundaries by ATSIC.

Where possible, the analysis should also seek to identify:

- comparative changes in income status, employment and welfare dependence over the period since 1986 for the general Australian population;
- changes in overall macroeconomic conditions and employment opportunities in the mainstream labour market;
- other relevant factors like demographic, gender and locational issues impacting on the achievement of AEDP targets;
- changes for Torres Strait Islanders as a distinct group, where census data allow.

These wide-ranging terms of reference are being addressed by CAEPR in a series of reports, statistical tabulations and discussion papers. It is anticipated that eventually all material prepared for the AEDP review process will be published. An interim draft report was provided to ATSIC in August 1993; it focuses on Aboriginal, Torres Strait Islander and other Australian socioeconomic changes at the national level of aggregation by section-of-State (urban, other urban and rural) residence. This research has been undertaken by Dr John Taylor and is based entirely on publicly available data from the 1986 and 1991 Censuses, produced to specifications stipulated by CAEPR for the AEDP review exercise.

The AEDP Evaluation Committee is meeting for the first time in October 1993 and is then undertaking consultations in all States and Territories. As the Committee is working to a tight schedule, ATSIC requested that copies of Dr Taylor's first report be available to facilitate and inform the consultation process. I suggested that the report should be published in the CAEPR Monograph Series to make Dr Taylor's analysis widely available to assist in the AEDP review process, but also to allow dissemination of statistical information on the contemporary economic status of indigenous Australians to a wider audience. ATSIC endorsed this approach in September. I would like to commend Dr Taylor especially for his dogged commitment to this research consultancy and the quality of his analysis; and CAEPR research production staff Linda Roach and Krystyna Szokalski and CAEPR support staff Nicky Lumb and Belinda Lim for preparing the interim draft report for publication in one week.

It is anticipated that a further monograph that analyses interstate differences in indigenous and non-indigenous economic status will be available later in 1993, with further publications providing detailed statistical information on each State and Territory to follow, early in 1994.

Jon Altman
Director, CAEPR

October 1993

Acknowledgements

Versions of this monograph were originally presented for academic and bureaucratic scrutiny at separate Centre for Aboriginal Economic Policy Research (CAEPR) seminars in August and September 1993 and again to staff at the Aboriginal and Torres Strait Islander Commission (ATSIC) in Canberra. Specific comments forthcoming from Jon Altman, Anne Daly, Giff Jones, Will Sanders and Diane Smith, as well as general comments from seminar participants, are gratefully acknowledged.

Data used in this monograph were purchased from the Australian Bureau of Statistics (ABS) to undertake Phase 2 of the mid-term review of the Aboriginal Employment Development Policy (AEDP). A large part of the exercise was devoted to the design, acquisition and tabulation of these data. Raw table figures were provided on floppy disk by the National Aboriginal and Torres Strait Islander Statistics Unit of the ABS in Darwin. Statistical manipulation was conducted by INTSTAT Australia Pty Ltd, while final formatting was accomplished by Belinda Lim. Subeditorial assistance was provided by Linda Roach, Krystyna Szokalski and Nicky Lumb. I would like to thank all these parties for working cheerfully under pressure to meet the tight deadlines imposed by the AEDP review process.

John Taylor
CAEPR

October 1993

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Abbreviations and acronyms

ABS	Australian Bureau of Statistics
AEDP	Aboriginal Employment Development Policy
ANU	Australian National University
ATSIC	Aboriginal and Torres Strait Islander Commission
CAEPR	Centre for Aboriginal Economic Policy Research
CDEP	Community Development Employment Projects (scheme)
CTP	Community Training Program
DEET	Department of Employment, Education and Training
TAP	Training for Aboriginals Program

1. Introduction

Given the continued lack of ethnic identification in recurrent economic indicators, the five-yearly Australian Census of Population and Housing remains the most comprehensive and reliable (though less than ideal) means of assessing change in the relative economic status of indigenous people at national, regional, and local levels. Conclusions from the last round of census analyses, based on 1986 data, were unequivocally of the view that while some improvements were discernible over time, the economic status of indigenous Australians, as measured by standard indicators such as labour force status, occupation of employment and income, remained comprehensively low when compared with the rest of the population (Tesfaghiorghis and Altman 1991; Jones 1991).

In response to this persistent and unfavourable situation, policies designed to enhance the economic status of indigenous Australians were significantly strengthened during the latter half of the 1980s, most notably with the adoption of the Aboriginal Employment Development Policy (AEDP). This substantially boosted funds directed towards the goal of achieving equality in employment and income status between Aborigines, Torres Strait Islanders and the general population and created a focused economic stimulus within the labour market whose effects have been, potentially at least, countercyclical in a macroeconomic sense. Between the financial years 1986/87 and 1990/91, for example, at a time of general budgetary restraint, national expenditure under the AEDP totalled \$1,071 million (Commonwealth of Australia 1991: 21; Altman and Sanders 1991a: 12), an amount allocated for a population of working age at the end of this period, of 146,626. As for the numbers participating in labour market programs, a total of 23,738 Aboriginal and Torres Strait Islander people were approved for all such programs in the single financial year 1990/91 (Department of Employment, Education and Training 1992: 5). In the same year, expenditure on the entire range of Aboriginal and Torres Strait Islander programs fell just short of \$1,000 million (Commonwealth of Australia 1991: 21).

The disbursement of such large targeted program expenditures is unlikely to have been achieved without discernible socioeconomic impacts, not least in the area of employment spin-offs. Indeed, so pervasive has the program dollar been in recent years and so favourably disposed are program expenditures to the generation of employment opportunities which are amenable to Aboriginal and Torres Strait Islander people, that the notion of an 'indigenous labour market' with its own internal dynamic operating separately from that of the mainstream has been canvassed (Altman and Daly 1992a; Taylor 1992a, 1993a).

Apart from the strengthening of policy initiatives, there have been significant developments since 1986 in a number of other factors that impinge on the socioeconomic standing of indigenous Australians. For example, overall macroeconomic circumstances are now less favourable with the result that not only are there relatively fewer jobs available, but the number of individual aspirants for each job is greater. While much of this increased demand for employment derives from the downsizing of certain national industries and affects some regional economies more than others, it is also true to say that overall depressed economic conditions significantly reduced the employment prospects of those, such as indigenous Australians, who have limited human capital resources to mobilise in mainstream labour markets. At the same time, long-term and youth unemployment has emerged as an issue of general policy concern (Chapman, Junankar and Kapuscinski 1993) whilst overall female employment and employment in part-time work have increased markedly.

Against this background, this analysis seeks to identify signs of socioeconomic impacts that may be due to the application of comprehensive employment and training programs progressively introduced under the umbrella of the AEDP since 1986. This is done by using 1991 Census data to describe the current socioeconomic status of the Aboriginal and Torres Strait Islander population and analysing the intercensal change in critical indicators since 1986.

AEDP targets and census analysis

Altman and Sanders (1991) highlight two aspects of the AEDP's goals and rationale that are important in determining the appropriate use of census data to examine progress towards the achievement of policy objectives. The first of these is the AEDP statement's frequent use of the term 'equity' in relation to Aboriginal employment and income, as a way of identifying the goal towards which all AEDP programs are directed and as the rationale for their existence (Australian Government 1987a). The second, related, aspect of the AEDP statement is its setting of statistical targets. On the basis of preliminary data from the 1986 Census, the statement presented summary statistics of the current employment and income status of Aborigines in comparison with other Australians. It then went on to identify targets on the basis of these statistics which would need to be met if Aborigines and Torres Strait Islanders were to achieve equality with other Australians in relation to employment and income by the year 2000. The number of jobs that would need to be created, the amounts by which income or participation in education would need to be increased and the required reduction in welfare dependency were all quantified.

For example, the median income of Aborigines would need to be doubled, the number of Aborigines of workforce age who were employed increased from 37 per cent to 60 per cent, or from 43,000 to 89,000, and dependence on unemployment benefit reduced from 30 per cent of the Aboriginal working-age population to 5 per cent. In regional terms, an

increase of 1,600 jobs per year would need to be achieved for Aborigines living in 'cities, large towns and small country towns' and 2,000 per year for those in 'remote areas, small multi-racial townships and town camps' (Australian Government 1987a). Using these original estimates it can be calculated that the number of jobs expected to be created by AEDP interventions amounted to 14,400 for the period between the 1986 and 1991 Censuses, using November 1987 as the starting date. A total of 8,000 of these new jobs were expected to derive from community sector program efforts and 6,400 from initiatives in the public and private sectors.

Leaving aside the fact that these targets grossly underestimated the scale of new job creation required to achieve statistical equity, due to a lack of regard for the dynamics of growth in the indigenous working-age population (Altman 1991: 158-9), it would appear that the levels of participation by Aboriginal and Torres Strait Islander people in AEDP and other labour market programs administered by the Department of Employment, Education and Training (DEET) have been of a sufficient scale to at least match policy expectations. In the single financial year prior to the 1991 Census, for example, a total of 14,208 Aborigines and Torres Strait Islanders participated in public, private and community sector components of the Training for Aborigines Program (TAP) (Johnston 1991: 97). Added to this were a further 9,000 who were assisted by other mainstream labour market programs administered by DEET. Furthermore, the number of participants in the Community Development Employment Projects (CDEP) scheme, administered by the Aboriginal and Torres Strait Islander Commission (ATSIC), is known to have increased by 13,455 between June 1986 and August 1991.

Obviously, participation in a labour market program is not the same as an employment outcome. Likewise, the number of participants in the CDEP scheme is higher than the actual number of workers as this figure includes non-working spouses. Using original AEDP estimates (Australian Government 1987b: 3) of the number of program placements required to secure one job (5:1) and a rule of thumb regarding the ratio of CDEP workers to participants (60:40),¹ then the expected increase in employment due to TAP and other DEET programs amounts to 4,641 (for the year preceding the 1991 Census) while an estimate of 8,073 new jobs due to the CDEP scheme can be derived for the intercensal period 1986-91. This results in an overall minimum estimate of 12,714 new jobs that may have been created as a result of AEDP program interventions, which is not far short of targeted growth.

Identifying from census data whether such AEDP outcomes eventuated is no easy task. For one thing, a job generated at some stage by the AEDP may have been relinquished by the time of the census or may have occurred after enumeration. This is a common problem in any cross-sectional analysis of longitudinal phenomena. Aside from this, any link between census-derived employment change and AEDP program intervention can only be established by fairly tenuous inference. Indeed,

separating the effects of the AEDP from other potential influences on employment change and related socioeconomic status is an almost impossible task. Thus, in regard to employment outcomes, the sorts of measures that can be applied to assess AEDP impacts are inevitably crude and limited to comparisons between intercensal change in the level and composition of employment among indigenous people and estimates of likely program effects.

Similar limitations arise in attributing change in census-derived income levels and welfare dependence to the influence of AEDP. Apart from the fact that increases in income may result from more than just gains due to employment, the logical link required to tie AEDP initiatives to new jobs reported by the census and then to changes in income levels is doubly tenuous. Equally, changes in the level of welfare dependence (measured, using census data as non-employment income) may be brought about as much by variations in the nature and delivery of social security entitlements as by inroads due to employment growth. At the very best, therefore, all that can be said is that any intended impacts of AEDP are likely to be reflected in relatively more favourable changes to standard economic indicators for indigenous people compared to the rest of the population. To use a legal analogy, the case is based more on circumstantial evidence than any body of incontestable proof. Any links drawn between change in census indicators and the AEDP are thus by inference alone, although even here care needs to be exercised as improvements in indigenous economic status may derive from relatively worsening conditions for the rest of the population as much as any real material gain.

Defining indigenous Australians

Despite official recognition of two indigenous peoples in Australia, Aborigines and Torres Strait Islanders, little is known about the extent to which they differ in socioeconomic status. From a public policy perspective this is somewhat surprising, given the special provisions in sections 79-88 of the *Aboriginal and Torres Strait Islander Commission Act 1989* which established the Torres Strait Islander Advisory Board and the Office of Torres Strait Islander Affairs. These are charged with monitoring the development of Federal and State policies and programs affecting Torres Strait Islanders and evaluating the extent to which these programs meet Torres Strait Islander needs.²

Notwithstanding these statutory arrangements, social and economic indicators are rarely available separately for the Torres Strait Islander population. Instead, the tendency in social and economic policy analysis has been to consider Aborigines and Torres Strait Islanders as a single client group. This situation has recently been reviewed by Arthur (1992) who concludes that the lack of separate statistics on Torres Strait Islanders makes it difficult to determine their relative socioeconomic status and confounds attempts to analyse any intended or unintended differential

impact of government policies. While there is no doubt that Aborigines and Torres Strait Islanders share relatively low socioeconomic status when compared to most Australians, there are, at the same time, significant differences between them in terms of culture, geographic distribution and the manner of their incorporation into wider institutional structures. These were sufficient in 1986 to reveal a gap in economic status between Aborigines and Torres Strait Islanders, with the latter occupying an intermediate position between Aborigines and the rest of the population across a range of relevant indicators (Taylor and Gaminiratne 1993). Whether this gap has been maintained is open to examination here and comparisons of change in key social and economic indicators are thus made throughout between Aborigines, Torres Strait Islanders and other Australians.

Location

Previous analyses of 1986 Census data for all States and Territories have stressed the role of geographic location as an explanatory variable in the determination of Aboriginal socioeconomic status (Teschfaghiorghis 1991; Taylor 1992b). More specifically, an urban/rural gradient has been noted with economic status, as measured by standard indicators, generally lowest in rural localities. It was partly in response to such realities that the AEDP outlined different strategies for people living in or around remote towns, provincial and capital cities (places with 1,000 or more population where a labour market is deemed to exist) and those living on Aboriginal land, Aboriginal-owned pastoral properties, outstations and settlements of up to 1,000 population (where mainstream labour markets are regarded as either undeveloped or non-existent) (Australian Government 1987b: 5-7).

While the overall aims of achieving employment and income equality remain the same in both cases, the focus in urban areas has been primarily on boosting employment in both public and private sectors of the mainstream labour market via the TAP public and private sector programs. In remoter rural areas, the emphasis was directed more towards employment generation in community enterprises and development projects via the TAP community sector programs, as well as via an expansion of the CDEP scheme.³

Precisely what links exist between these institutional structures and the strength of participation in different labour market programs in various parts of Australia remains to be established, although indications are that location continues to play an important role. Commenting on the pre-AEDP period, for example, the Miller Report identified a significant imbalance between the distribution of Aboriginal and Torres Strait Islander people and the spatial pattern of placements in private sector labour market programs, with the bias in such placements heavily in favour of more urbanised areas (Miller 1985: 143-7). Given the locational underpinning of AEDP programs, it is likely, on a per client basis, that this practice has continued and that public and private sector employment and training

programs have been applied more in settled parts of Australia and in the larger centres of population. This prospect is also suggested by the geography of the Commonwealth Employment Service network as demonstrated by Taylor (1992c). By contrast, much of the AEDP program effort in remoter, rural areas of Australia has been subsumed under the CDEP scheme which, as a much expanded labour market program based on receipt of approximate unemployment benefit equivalents (replaced by Jobsearch/Newstart Allowances from 1 July 1991), suggests that significant differences in employment and income outcomes may be expected to emerge according to urban/rural location. With this possibility in mind, the analysis of intercensal shifts in economic status is disaggregated according to the Australian Bureau of Statistics (ABS) section-of-State classification.

Gender

As with employment policies in general, the AEDP gives special recognition to the disadvantaged position of females in the labour market and is committed to a policy of equal opportunity for Aboriginal and Torres Strait Islander women (Australian Government 1987b: 4). Like all Australian women, Aboriginal and Torres Strait Islander women have increased their labour market participation and employment levels over the past two decades (Tesfaghiorgis and Altman 1991), although in terms of economic status they continue to lag behind their male counterparts (Daly 1993a). A number of labour market differentials find their roots in gender relations and several of these are relevant in the estimation of AEDP impacts. For example, non-indigenous women have experienced relatively high job growth and upward occupational mobility between 1986 and 1991 and it is pertinent to consider whether Aboriginal and Torres Strait Islander women have made similar gains. Related to this is the question of whether equal employment opportunities have accelerated the trend observed by Treadgold (1988) towards an increase in the ratio of female to male incomes. Given the aim of the AEDP to reduce welfare dependence, has the overly dependant position of Aboriginal and Torres Strait Islander women on welfare income (Daly 1991a) been reduced? To address these and related issues, intercensal changes in social indicators are disaggregated by gender.

Youth

The position of young Australians in the labour market has been of concern to policy-makers for the past two decades as unemployment rates of young people have remained high over this period and well above the average for the total labour force (Daly 1993b). Two broad age categories of youth are recognised: those aged 15-19 years which, for most people, encompasses the completion of secondary schooling and the transition to higher education or into the labour market; and those aged 20-24 years which generally covers the beginning of adult employment careers.

Concerns expressed in the AEDP regarding the employment status of Aboriginal and Torres Strait Islander youth (Australian Government 1987b: 4) are heightened for two reasons. First, the proportion of indigenous Australians in the youth age bracket is substantially higher than among other Australians. In 1991, for example, this group accounted for 36.7 per cent of indigenous Australians of working age compared to only 23.6 per cent among all other Australians of working age. Second, the unemployment rate of Aboriginal and Torres Strait Islander youth has been estimated to be over twice that of other youth (Miller 1989: 12, 1991). In recognition of these differentials, attention is drawn to comparative changes in youth labour force status.

Notes

1. This is no more than an educated guess based on the middle of the range from 30 per cent to 90 per cent the proportion of workers to participants reported from a sample of 21 communities participating in the CDEP scheme by Deloitte Touche Tohmatsu (1993: 51).
2. Unless otherwise indicated, the term 'States' includes States and Territories.
3. From 1st July 1992, TAP (community sector) was transferred from DEET to ATSIC and renamed the Community Training Program (CTP).

2. Population size and distribution, 1986-91

In recent years there has been growing recognition among policy makers of the diversity which exists in the social and economic circumstances of Aboriginal and Torres Strait Islander people. Such diversity derives, in part, from the differential impact of European settlement in the various regions of Australia. To some extent, variable lifestyles have also been facilitated by government intervention as, for example, in the case of financial grants to indigenous people wishing to settle in remote localities. Since the 1980s, several categories of indigenous communities which reflect this varied pattern of settlement have been recognised. These categories divide into a broad urban/rural classification with rural areas comprising:

- i discrete townships mostly located in remote areas likely to be responsible for their own municipal-type services;
- ii outstations and other small groups in remote areas linked to a resource organisation in a nearby township or other regional centre;

and urban areas including:

- iii indigenous people in State or Territory capital cities and major urban areas;
- iv indigenous people who are residents of country towns mixed in with a predominantly non-indigenous population;
- v groups of indigenous people living in an identified location or camp site near or within an urban area and having different arrangements from the town for municipal services, or no such facilities at all.

Although these categories do not readily translate into census geography, they do broadly align with the ABS section-of-State classification with category (iii) corresponding to major urban areas (over 100,000 persons), categories (iv) and (v) found in other urban areas (1,000-99,999 persons), category (i) in rural localities (200-999 persons) and category (ii) in other rural areas and migratory (less than 200 persons).

For analytical convenience, and in order to minimise confidentiality problems in detailed disaggregations of data (particularly for Torres Strait Islanders), the standard four-way section-of-State classification has been reduced in the subsequent analysis to three components by amalgamating data for 'rural localities' and 'other rural' areas to create a single 'rural' category (0-999 persons).

The Aboriginal population

In contrast with earlier intercensal periods, the change in Aboriginal population counts between 1986 and 1991 is broadly in accord with expectations giving cause for confidence, for the first time, in their interpretation (Gray and Tesfaghiorghis 1993). One of the features of Aboriginal population distribution over the past two decades has been a gradual increase in the proportion resident in urban areas, and in particular in large metropolitan centres. For example, between 1971 and 1986 the proportion of the Aboriginal and Torres Strait Islander population living in rural areas declined from 56 per cent to 34 per cent while the proportion resident in major urban areas increased from 15 per cent to 24 per cent. Those residing in other urban areas also rose from 29 per cent to 42 per cent (Tefaghiorghis and Altman 1991: 2). This shift occurred partly as a result of migration (Gray 1989; Taylor 1992c) and partly owing to a growing tendency for urban-based Aboriginal people to identify in the census (Altman 1992: 8).

Continuation of this trend towards growing 'metropolitanisation' is apparent from a comparison of national population change figures by section-of-State between 1986 and 1991 (Table 2.1). While the Aboriginal population increased at all broad levels of the settlement hierarchy, the rate of increase was positively related to settlement size. Thus, while major urban areas experienced the highest rates of growth, the lowest rates were found in rural areas.¹ In other, intermediate-sized, urban areas the population growth rate was close to the national average. As a consequence, in 1991, the Aboriginal population of Australia was slightly more concentrated in major urban areas and slightly less likely to be found in rural settlements, while the proportion resident across the wide range of 'other urban' localities remained more or less unaltered.

Table 2.1. Aboriginal population change by section-of-State, 1986-91.

	1986		1991		1986-91	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Major urban	50,227	24.4	62,230	26.1	12,003	23.9
Other urban	85,329	41.4	98,021	41.1	12,692	14.9
Rural	70,424	34.2	78,325	32.8	7,901	11.2
Total	205,980	100.0	238,576	100.0	32,596	15.8

The Torres Strait Islander population

Important caveats need to be attached to the analysis of census data regarding Torres Strait Islanders. First of all, difficulties exist in determining precisely what constitutes the census-derived Torres Strait

Islander population given indications that this may contain unknown numbers from other population groups, such as Pacific Islanders and Bass Strait Islanders, identifying incorrectly (Arthur 1992). Related to this are problems of adequate census coverage and intercensal variations in self-identification that have characterised the enumeration of indigenous Australians generally since they first self-identified in the 1971 Census (Choi and Gray 1985). Although there appears to be improvement over time in the consistency of the Aboriginal count, it seems that problems with the Torres Strait Islander count persist. For example, Gray and Tesfaghiorghis (1993) found that inter-censal discrepancies in the age structure of the Torres Strait Islander population between 1986 and 1991 were of such an order as to contemplate leaving them out altogether from their calculations of indigenous population change. Notwithstanding these difficulties, the census provides the only basis for drawing any comparisons of economic status.

Both the rate and extent of urbanisation among the Torres Strait Islander population has been more pronounced over the post-war period compared to that of Aborigines. Until the end of world war two, Torres Strait Islanders were restricted by law and administrative arrangements to a predominantly rural residence in the Torres Strait. There is little evidence of any permanent movement out of the Torres Strait prior to 1945, although during world war two a number of Torres Strait Islanders were evacuated to urban centres on the mainland. Due to subsequent out-migration for employment, however, as well as the natural increase of Torres Strait Islanders in mainland urban centres, this pattern of distribution is now almost completely reversed. In 1986, almost 81 per cent of all Torres Strait Islanders were resident on the mainland, although this fell slightly to 79 per cent in 1991 suggesting that the mainland proportion may now have peaked (Taylor and Arthur 1993). Furthermore, the pattern of settlement which has emerged from this redistribution is quite distinctive, being focused primarily on the State of Queensland, and the larger urban centres of North Queensland in particular, or otherwise biased towards metropolitan areas, especially in the eastern States.

Table 2.2. Torres Strait Islander population change by section-of-State, 1986-91.

	1986		1991		1986-91	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Major urban	5,310	24.7	8,642	32.1	3,332	62.7
Other urban	10,550	49.0	10,568	39.3	18	0.2
Rural	5,651	26.2	7,677	39.3	2,026	35.8
Total	21,511	100.0	26,887	100.0	5,376	25.0

Changes in the distribution of Torres Strait Islanders by section-of-State between 1986 and 1991 reveal a strengthening of their presence at opposite ends of the settlement hierarchy in major urban and rural areas, with virtually no growth in other urban areas (Table 2.2). This latter observation is significant because it points to the possibility that Torres Strait Islanders resident in places such as Cairns, Townsville, Rockhampton and Mackay may have migrated in significant numbers either back to the Torres Strait or to metropolitan centres such as Brisbane and Sydney (Taylor and Arthur 1993). It is important to note, however, that the shift in section-of-State designation of Townsville from 'other urban' in 1986 to 'major urban' in 1991 is also contributory.

The non-indigenous population

The majority balance of the Australian population displayed less tendency to vary its distribution between 1986 and 1991 (Table 2.3). To the extent that any change is evident according to section-of-State, the trends in distribution are contrary to those apparent among Aborigines and Torres Strait Islanders. Unlike the indigenous population, the majority of Australians are now slightly less prevalent in major urban areas and slightly more likely to be in rural areas. A major factor underlying this trend is a continuing process of 'counterurbanisation' involving net migration flows in favour of rural places within commuting zones and places of high amenity value away from large urban centres (Hugo and Smailes 1985).

Table 2.3. Population change by section-of-State, non-indigenous Australians, 1986-91.

	1986		1991		1986-91	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Major urban	9,762,396	63.6	10,492,424	63.3	730,028	7.5
Other urban	3,403,133	22.1	3,667,893	22.1	264,760	7.8
Rural	2,190,634	14.3	2,424,521	14.6	233,887	10.7
Total	15,356,163	100.0	16,584,838	100.0	1,228,675	8.0

Change in the working-age population, 1986-91

As foreshadowed by Gray and Tesfaghiorghis (1991), the rate of growth in the indigenous population of working age continued to outstrip that of the rest of the working-age population during the 1986-91 intercensal period. This was the inevitable outcome of demographic processes set in train during the early 1970s resulting in distinct shifts in Aboriginal and Torres

Strait Islander age structures (Table 2.4). Overall, the rate of increase of the indigenous working-age population was 2.4 times higher than that of other Australians. Although Torres Strait Islanders displayed a higher rate of increase than Aborigines, this was from a much lower base and in absolute terms most new indigenous entrants to the working age group were Aboriginal.

Table 2.4. Change in population aged 15-64 years: Aborigines, Torres Strait Islanders and other Australians, 1986-91.

	1986	1991	Net change	Per cent change
Aborigines	112,081	131,652	19,571	17.5
Torres Strait Islanders	12,192	14,974	2,782	22.8
Total indigenous	124,273	146,626	22,353	18.0
Others	9,963,397	10,724,143	760,746	7.6

Table 2.5. Percentage change in youth and older working age distribution: Aborigines, Torres Strait Islanders and other Australians, 1986-91.

	15-19	Per cent in each age group			15-64
		20-24	25-54	55-64	
1986					
Aborigines	22.4	18.5	53.1	5.9	100.0
Torres Strait Islanders	20.0	16.7	55.3	7.9	100.0
Others	12.6	12.3	61.0	14.0	100.0
1991					
Aborigines	19.0	18.9	56.7	6.1	100.0
Torres Strait Islanders	17.4	14.9	60.3	7.4	100.0
Others	11.7	11.9	63.6	12.8	100.0

If changes in broad age distribution within the overall population of working age are analysed then effects of the current demographic transition among Aborigines and Torres Strait Islanders are more meaningfully revealed (Table 2.5). While the proportion of working age Aborigines and Torres Strait Islanders in both of the youth age groups remains higher than among other working-age Australians, growth in the

intercensal period has been more focussed on adults of middle age and the number of Aborigines and Torres Strait Islanders in more youthful age groups has declined as a proportion. Thus, as time has unfolded, the targets of AEDP initiatives have become increasingly older.

Conclusion

In considering changes in the economic status of indigenous Australians relative to that of other Australians, an appreciation of their respective population growth rates and spatial distributions is crucial. This is because the economy varies in its capacity to create employment in line with expansion of the working age population as well as in different places. Overall, growth in the population of working age has been higher among indigenous Australians than other Australians, while their far greater relative concentration in rural and other urban areas has been sustained. This has two effects. First, it means that the increased pressure to find employment for indigenous Australians has, potentially at least, been proportionally greater than for other Australians. Second, this task has been made more difficult by the spatial bias of indigenous Australians towards rural areas and country towns where mainstream labour markets are often non-existent or poorly developed.

Note

1. The relatively high growth of the Aboriginal and Torres Strait Islander population in major urban areas is partly illusory owing to the reclassification of Townsville-Thuringowa urban centre from 'other urban' to 'major urban' due to an increase in population from 96,230 in 1986 to 101,398 in 1991. In 1991, the population of Townsville-Thuringowa included 4,716 Aborigines and 1,219 Torres Strait Islanders. If these numbers are re-cast for 1991 according to their 1986 section-of-State classification, this results in a slight decline in the proportion resident in major urban areas and an increase in those in other urban areas.

3. Labour force status, 1986-91

Three standard indicators are employed to indicate the extent and direction of relative change in Aboriginal and Torres Strait Islander labour force status: the employment rate, representing the percentage of those aged 15-64 years who indicated in the census that they were in employment during the week prior to enumeration; the unemployment rate, expressing those who indicated that they were not in employment but had actively looked for work during the four weeks prior to enumeration as a percentage of those in the labour force (employed plus unemployed); and the labour force participation rate, representing those in the labour force as a percentage of those of working age.

Between 1986 and 1991, the overall employment rate of Aboriginal and Torres Strait Islander people in Australia showed distinct signs of improvement rising from 33.1 to 37.3 (Table 3.1). Among Torres Strait Islanders the equivalent rates were significantly higher, rising from 46.2 to 49.9. It is instructive to consider these positive trends in a wider labour market context as corresponding figures for the rest of the Australian working-age population showed only a very slight improvement from 64.1 to 64.7. Thus, a marginal degree of convergence in overall employment levels has been achieved in recent years, although it is important to note that Aboriginal rates, in particular, remain considerably below the rate for Australians. It is worth bearing in mind, however, that this has been achieved despite the continued higher growth of the indigenous population of working age due to demographic processes underway (Teschfaghiorghis and Gray 1991). At the same time, the meaning of the term 'employment', as defined in the census, may be drawn into question, especially in relation to Aboriginal participation in special labour market programs.

A similar closure of the gap in labour force status between Aborigines, Torres Strait Islanders and the rest of the Australian population is apparent from intercensal shifts in unemployment rates (Table 3.1). The results point to a significant decline in indigenous unemployment rates at a time when non-indigenous rates have risen noticeably. Using the data in Table 3.1, it can be calculated that the Aboriginal unemployment rate as a ratio of the non-indigenous unemployment rate fell from being 4.0 times higher in 1986 to only 2.8 times higher in 1991, while that of Torres Strait Islanders fell from 2.6 in 1986 to 1.8 in 1991. Both rates still remain much higher than sought by policy initiatives, but are clearly far lower than in the past.

Table 3.1. Labour force status of Aborigines, Torres Strait Islanders and other Australians, 1986-91.

	(1) Aborigines		(2) Torres Strait Islanders		(3) Others	
	1986	1991	1986	1991	1986	1991
Employment rate ^a	33.1	37.3	46.2	49.9	64.1	64.7
Unemployment rate ^b	36.8	32.0	23.8	21.5	9.1	11.5
Participation rate ^c	52.3	54.8	60.7	63.6	70.4	73.1
Ratios	(1/3)		(2/3)			
Employment rate	0.51	0.57	0.72	0.77		
Unemployment rate	4.04	2.78	2.61	1.86		
Participation rate	0.74	0.74	0.86	0.87		

a. Those employed as a percentage of the population aged 15-64 years.

b. Those unemployed as a percentage of those in the labour force (those employed plus those unemployed).

c. Those in the labour force as a percentage of the population aged 15-64 years.

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

It is important to qualify discussions of relative employment and unemployment rates with data on relative rates of labour force participation since the proportion of Aboriginal and Torres Strait Islander people aged 15-64 years who are formally attached to the labour market has always been comparatively low. Evidence from the 1991 Census indicates that this is still the case (Table 3.1). Despite the fact that the Aboriginal labour force participation rate increased slightly from 52.3 in 1986 to 54.8 in 1991, and that of Torres Strait Islanders did likewise from 60.7 to 63.6, non-Aboriginal participation rates also rose from 70.4 to 73.1, thus maintaining substantially higher levels.

A number of points are relevant in interpreting these data. First, the much higher intercensal growth rate of the indigenous working-age population (3.6 per cent per annum compared to 1.5 per cent for other Australians) means that increases in participation rates equivalent to the rest of the population have required a proportionally greater increase in numbers joining the labour force. Likewise, with regard to employment rates, greater success in gaining employment has been required simply to maintain rates at constant levels, to say nothing of actually improving them. Another factor, which may have served to restrict the rate of growth in labour force participation, is the move to encourage higher levels of Aboriginal attendance and retention in educational institutions under the federal Aboriginal and Torres Strait Islander Education Policy. In this context, it is worth noting that the proportion of Aboriginal and Torres

Strait Islander people aged 15 years and over who were attending an educational institution in Australia, either full-time or part-time, rose by 14.5 per cent representing an increase from 25,719 in 1986 to 29,454 in 1991. While this growth in attendance at educational institutions may result in employment dividends at some later stage, its most likely immediate impact has been to dampen growth in the labour force participation rate. At the same time, standard explanations advanced by labour economists of apparently intractable low participation, due to a variety of factors operating to discourage indigenous people from seeking employment, may have some validity (Daly 1992).

Section-of-State and gender variations

A quite different picture of intercensal change in labour force status emerges from a disaggregation of the data by section-of-State and gender. The magnitude and net direction of such shifts are shown in Tables 3.2a,b,c while the actual rates from which these are calculated are shown in Appendix Table A1. In major urban areas, contrary to what might be expected, employment and unemployment rates among Aboriginal and Torres Strait Islander males run counter to their overall positive trends with employment levels and labour force participation rates falling and unemployment rising. A similar, though less pronounced trend is also apparent among males in other urban areas. This contrasts with the situation among Aboriginal females in urban areas whose labour force status has notably improved, although the same cannot be said of Torres Strait Islander females. One point worth noting is that the variation in changing labour force status between males and females in urban areas follows the pattern found in the workforce generally. This may indicate that in areas where mainstream labour markets predominate, Aborigines and Torres Strait Islanders are more prone to the forces shaping work patterns in the population generally.

Table 3.2a. Net change in Aboriginal labour force status by section-of-State and gender, 1986-91.

	Major urban net change	Other urban net change	Rural net change	Total net change
Males				
Employment rate	-1.6	-0.1	+8.4	+2.7
Unemployment rate	+1.8	-0.3	-13.0	-3.9
Participation rate	-0.4	-0.3	+0.3	0.0
Females				
Employment rate	+4.9	+3.6	+8.9	+5.8
Unemployment rate	-2.0	-2.3	-14.8	-5.8
Participation rate	+5.5	+4.3	+5.2	+5.0

The greatest shifts in labour force status are apparent in rural areas where, regardless of gender, increases in employment rates have been substantial and unemployment rates have shown a remarkable decline. The Aboriginal employment rate in rural areas, for example, increased by more than 8 percentage points for both males and females, while the unemployment rate correspondingly fell by 13.0 percentage points for males and 14.8 percentage points for females. Similar positive trends in rural areas are apparent among Torres Strait Islanders.

Table 3.2b. Net change in Torres Strait Islander labour force status by section-of-State and gender, 1986-91.

	Major urban net change	Other urban net change	Rural net change	Total net change
Males				
Employment rate	-5.1	-1.5	+11.6	+1.9
Unemployment rate	+2.6	+2.4	-8.0	-1.3
Participation rate	-4.0	+0.5	+6.5	+1.2
Females				
Employment rate	-2.7	+7.7	+7.6	+5.1
Unemployment rate	+3.4	-6.4	-9.6	-4.0
Participation rate	-1.1	+6.7	+4.5	+4.2

Table 3.2c. Net change in labour force status by section-of-State and gender of non-indigenous Australians, 1986-91.

	Major urban net change	Other urban net change	Rural net change	Total net change
Males				
Employment rate	-3.5	-2.9	-2.1	-3.2
Unemployment rate	+3.9	+3.0	+1.9	+3.4
Participation rate	-0.2	-0.4	-0.5	-0.3
Females				
Employment rate	+4.4	+5.7	+4.3	+4.7
Unemployment rate	+1.5	-0.2	-0.2	+1.0
Participation rate	+5.9	+6.3	+4.6	+5.7

Such relatively favourable impacts in rural areas are unlikely to have derived from market forces alone and point more realistically to the effect of widespread program intervention, particularly in the form of the CDEP scheme. Conversely, the improvements in labour force status that may have been expected to occur in urban areas due to the application of private and public sector employment programs do not emerge from the data, most notably as far as males are concerned. This is surprising given that in the financial year 1990/91, a total of 23,209 Aboriginal and Torres Strait Islander people were placed in labour market programs (Johnston 1991: 97).

Even applying a fairly crude assumption that program placements are distributed proportionally according to section-of-State, the lack of any positive impact on urban labour force status is striking. One explanation may be that many TAP placements do not represent 'new' entrants to 'new' jobs, but simply reflect the recycling of individuals several times through a constant, or even declining, pool of positions (Johnston 1991: 73). Another may be found in the short duration of subsidies and program support combined with the failure of some participants to remain in programs. Finally, any positive employment outcomes from program placements may simply have been relinquished by census time (Daly 1993c).

Whatever the case, it is apparent that in urban areas the AEDP has fallen behind in its task of achieving employment equality or even improving employment status for Aboriginal and Torres Strait Islander males. To be fair, it should be pointed out that non-indigenous males performed no better in the intercensal period regardless of their location. Thus, in the deteriorating labour market conditions of the late 1980s/early 1990s one important impact of the AEDP may have been to ameliorate potentially worse employment outcomes for many indigenous males seeking opportunities in the mainstream labour market.

Youth labour force status

Compared to non-indigenous youth, the labour force status of Aboriginal youth, in particular, has improved markedly (Table 3.3). At a time when employment rates among non-indigenous 15-24 year olds have declined and unemployment rates have increased, Aboriginal youth have experienced a slight increase in employment rates and a substantial drop in unemployment rates, particularly in the 20-24 years age group. Equivalent rates for Torres Strait Islanders show little variation, although unemployment among 15-19 year olds has fallen somewhat while there are clearer signs that it increased among 20-24 year olds. Overall, the greatest improvements in employment status have not occurred among youth but among older members of the labour force in prime working ages between 25 and 54 years. General trends towards greater participation in post-secondary education are also probably reflected in overall declines in labour force participation rates for 15 to 19 year olds.

Table 3.3. Change in labour force status by broad age group: Aborigines, Torres Strait Islanders and other Australians, 1986-91.

Age group	Employment rate		Unemployment rate		Participation rate	
	1986	1991	1986	1991	1986	1991
Aborigines						
15-19	21.4	23.0	52.7	47.0	45.3	43.5
20-24	35.4	36.9	58.0	39.3	61.0	60.8
25-54	38.4	44.3	29.6	26.6	54.6	60.4
55-64	18.4	21.7	26.4	22.4	25.0	28.0
Total	33.1	37.3	36.8	32.0	52.3	54.8
Torres Strait Islanders						
15-19	29.3	29.4	39.5	34.3	48.4	44.7
20-24	53.2	53.0	27.2	28.2	73.2	73.8
25-54	52.1	58.1	19.3	17.2	64.5	70.1
55-64	31.8	30.6	14.0	16.5	37.0	36.6
Total	46.2	49.9	23.8	21.5	60.7	63.6
Others						
15-19	42.8	38.5	19.7	22.7	53.3	49.8
20-24	72.3	68.7	13.2	17.1	83.2	82.9
25-54	72.3	73.5	6.9	9.2	77.6	80.9
55-64	40.3	41.0	7.0	10.6	43.3	45.8
Total	64.1	64.7	9.1	11.5	70.4	73.1

Employment status

An additional perspective on labour force shifts is provided by changes in employment status. Individuals in employment may be disaggregated according to whether they are wage and salary earners or self-employed. The latter are seen as engaging in entrepreneurial activity and constitute a relatively small proportion of employed Aborigines and Torres Strait Islanders. Two census categories have been included in the definition of self-employed used here: those who said that in the main job held last week they were 'conducting own business but not employing others' and those who were 'conducting own business and employing others'.

Issues surrounding the role of self-employment in determining the economic status of indigenous people have been reviewed in some detail by Daly (1993d). Small business and self-employment are regarded as important parts of the economy and specific government policies (including the AEDP) were aimed at promoting these activities during the intercensal period. Commonwealth programs designed to promote small business were available through the Department of Industry, Technology and Commerce, DEET and the Department of Primary Industries and Energy. The Aboriginal Enterprise Incentive Scheme, whose aim is to assist unemployed Aboriginal and Torres Strait Islander people to establish

small businesses, was also run by DEET until its transfer to ATSIC in July 1992. Other ATSIC (formerly Department of Aboriginal Affairs) initiatives, such as the Small Business Funding scheme and Community Employment and Enterprise Development scheme appear to have met with limited success and their role under the AEDP diminished (Jarvie 1990; Office of Evaluation and Audit 1990, 1991). More recently, the Community Economic Initiatives Scheme has been established for the promotion of Aboriginal and Torres Strait Islander community enterprises. This involves a \$23 million budget to be administered by ATSIC over a five-year period.

In terms of the impact of such initiatives in furthering AEDP goals, the message from census data is mixed (Table 3.4). On the one hand, the absolute increase of 1,583 indigenous people who are self-employed seems to have fallen short of targeted growth as 1,600 new jobs were expected in community enterprises, many of which may have generated self-employment (Australian Government 1987c: 2), while 1,400 enterprise jobs were planned to emerge in the private sector (Australian Government 1987b: 6). On the other hand, the rate of increase in self-employment among both Aborigines and Torres Strait Islanders was very high and certainly far above that achieved by other Australians. At the same time, these growth rates are calculated from a very low base and the proportion of Aborigines in self-employment remains far behind that of non-indigenous Australians (5.2 per cent compared to 17.1 per cent) while that of Torres Strait Islanders is somewhat higher (8.9 per cent).

Table 3.4. Change in employment status of Aborigines, Torres Strait Islanders and other Australians, 1986-91.

	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
Wage & salary earners	82.7	85.0	10,628	29.8
Self employed/employer	2.8	4.7	1,330	110.2
Not stated	14.4	10.3	-651	-10.4
Total	100.0	100.0	11,307	26.2
Torres Strait Islanders				
Wage & salary earners	84.3	84.3	1,557	30.0
Self employed/employer	6.7	8.3	253	61.6
Not stated	9.0	7.4	30	5.4
Total	100.0	100.0	1,840	29.8
Others				
Wage & salary earners	81.3	79.4	383,634	7.2
Self employed/employer	15.3	16.4	175,979	17.5
Not stated	3.4	4.2	77,828	34.7
Total	100.0	100.0	637,441	9.7

Employment growth and AEDP targets

The likelihood that AEDP initiatives have served to enhance the relative standing of Aboriginal and Torres Strait Islander people in the labour market is suggested by their much higher rates of intercensal employment growth compared to other Australians (Table 3.5). Between 1986 and 1991, the number of Aboriginal people in employment grew by 12,057 representing an increase of 32.5 per cent, almost four times greater than the rate for other Australians. While the net increase in the number of Torres Strait Islanders in work was much less (1,837) this represented an equivalent rate of increase. Thus, according to census data, the overall number of 13,894 new jobs created for indigenous Australians between 1986 and 1991 fell just short of the 14,400 targeted for creation by the AEDP over the same period. Given that the above data are exclusive of 6,180 Aborigines and Torres Strait Islanders aged 15-64 years who did not state their labour force status in 1991, it seems reasonable to conclude that, in terms of aggregate growth in new employment, AEDP targets have been achieved. However, as estimated earlier, at least 8,073 (or 58.1 per cent) of these new jobs may be attributable to the CDEP scheme. Unfortunately, it is not possible to be precise about this as the CDEP scheme figure is based on assumptions regarding the number of workers to participants and, in any case, is drawn from an administrative data base which is not strictly compatible with census data. Nonetheless, given the important role played by the CDEP scheme in providing much of the intercensal growth in employment, the question of whether the allied AEDP goal of improving overall economic status has also been achieved becomes highly pertinent as this depends largely on the nature of new employment created.

Table 3.5. Employment growth among Aborigines, Torres Strait Islanders and other Australians, 1986-91.

	Number employed		Change	
	1986	1991	Net	Per cent
Aborigines	37,045	49,102	12,057	32.5
Torres Strait Islanders	5,651	7,488	1,837	32.5
Other	6,382,069	6,941,386	559,317	8.8

Employment growth by section-of-State

Substantial variation in the distribution of new jobs is apparent according to section-of-State (Table 3.6). The most notable feature is the relatively low level of job growth in urban areas, particularly in the smaller, other urban areas. Thus, 46.2 per cent of new jobs for Aborigines were created in rural areas, even though only 32.8 per cent of the Aboriginal population

lived in such places in 1991 (Table 2.1). A similar imbalance between population distribution and job growth is apparent among Torres Strait Islanders, with 48.8 per cent of all new jobs created in rural areas where only 39.3 per cent of the population was located. It is interesting to note, however, that rural areas also displayed the highest rate of job growth among non-indigenous Australians, although the reasons for this are likely to be quite different, having more to do with industry restructuring, lifestyle choices and the decentralisation of jobs and people away from large cities. Of more interest, however, is the fact that the rate of employment growth among Aborigines and Torres Strait Islanders was considerably higher than among other Australians regardless of location. Most noteworthy here, is their relatively better performance in major urban areas given that the rate of job growth among other Australians was lowest in such places.

Table 3.6. Employment growth among Aborigines, Torres Strait Islanders and other Australians by section-of-State, 1986-91.

	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
Major urban	30.8	30.3	3,445	30.1
Other urban	38.4	35.2	3,043	21.4
Rural	30.7	34.5	5,569	49.0
Total	100.0	100.0	12,057	32.5
Torres Strait Islanders				
Major urban	32.7	35.0	776	42.0
Other urban	43.4	35.0	165	6.7
Rural	23.8	30.0	896	66.5
Total	100.0	100.0	1,837	32.5
Others				
Major urban	65.4	65.0	337,957	8.1
Other urban	20.3	20.3	115,394	8.9
Rural	14.3	14.7	105,966	11.6
Total	100.0	100.0	559,317	8.8

Employment growth by gender

Just over half of all new jobs among Aborigines went to females (52.1 per cent), while among Torres Strait Islanders the balance was slightly in favour of males (53.7 per cent). However, because of their far fewer numbers in the labour force, the rate of employment growth among Aboriginal and Torres Strait Islander females was much higher than among males (Table 3.7). This is in line with the gender pattern of job growth generally in Australia.

Table 3.7. Employment growth among Aborigines, Torres Strait Islanders and other Australians by gender, Australia 1986-91.

	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
Male	62.4	58.8	5,774	25.0
Female	37.6	41.2	6,283	45.1
Total	100.0	100.0	12,057	32.5
Torres Strait Islanders				
Male	62.9	60.6	986	27.7
Female	37.1	39.4	851	40.6
Total	100.0	100.0	1,837	32.5
Others				
Male	60.5	57.3	110,680	2.9
Female	39.5	42.7	448,637	17.8
Total	100.0	100.0	559,317	8.8

Conclusion

The relative enhancement of the labour force status of indigenous Australians at a time of overall sluggish growth in employment suggests that AEDP initiatives have left their mark. On the face of it, policy targets in terms of anticipated new jobs have been achieved. Even though a significant difference in labour force status remains between indigenous and non-indigenous Australians, the gap in status has been notably reduced. It is clear, however, that this improvement derives primarily from high rates of growth in indigenous employment in rural areas pointing to the pre-eminence, in terms of policy impacts, of participation in the CDEP scheme. In urban areas, hoped for outcomes from policy efforts have not been so readily forthcoming, particularly in respect of indigenous males. These variations in employment growth provide basic clues as to the underlying causes of change in economic status. Further, more precise indications are provided by an examination of changes in selected labour force characteristics.

4. Labour force characteristics, 1986-91

Several census indicators yield information regarding the working-age population which are of use in exploring the underlying causes of change in labour force and income status. Those scrutinised here include industry division of employment, occupation of employment, industry sector of employment, the number of hours worked for those in employment, and levels of tertiary qualification acquired. Relative changes in the distribution of Aborigines, Torres Strait Islanders and other Australians for each of these characteristics are examined in turn and disaggregated according to section-of-State and gender.

Industry of employment

One expectation, following several years of AEDP implementation, was that Aboriginal employment would be more concentrated in particular industry categories when compared with the rest of the workforce. Most notably, this would occur in those industries allied to the task of servicing the indigenous population (Altman and Daly 1992a). Intercensal comparison of broad industry divisions of employment confirms such a trend. In 1986, the index of dissimilarity between Aboriginal and non-Aboriginal male employees across the 12 industry divisions was calculated as 25.9 (Table 4.1). In other words, just over one-quarter of Aboriginal males (or non-Aboriginal males) would have been required to shift their industry division of employment in order to eliminate any difference between their respective distributions. By 1991, the index had risen to 29.3 with the compensatory shift required to achieve a balance in industry distributions now involving almost one-third of all workers in either group. Corresponding indices for female workers (25.7 in 1986 and 27.9 in 1991) show a similar, but less pronounced, trend towards increased industry segregation. Among Torres Strait Islanders, industry segregation remains considerably lower, particularly among females (11.5 in 1986 and 10.8 in 1991) although males show a slight tendency towards increased industry concentration (15.6 in 1986 and 18.1 in 1991).

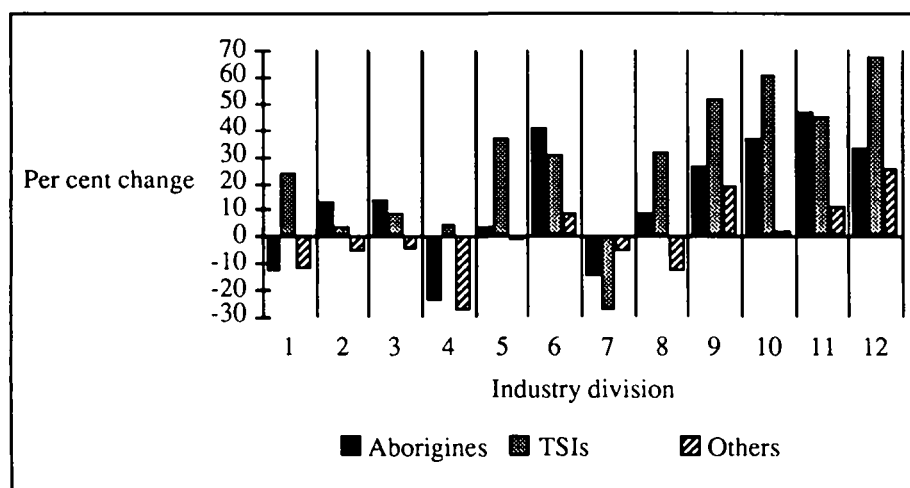
Comparisons of the intercensal pattern of industry change are provided in Figure 4.1 which indicates the percentage change in employment in each industry division separately for Aborigines, Torres Strait Islanders and others. The raw data from which these changes are calculated are shown in Appendix Table A2. The first point to note is that those industries in which Aborigines and Torres Strait Islanders have performed least favourably are also the ones which have tended to shed labour generally. Some of these, such as the communications, and

electricity, water and gas industries, reflect downsizing in public sector employment. Others, such as agriculture, manufacturing and construction industries are more indicative of a decline in private sector activity due to deteriorating macroeconomic conditions and industry restructuring. The second point to note is that Aborigines and Torres Strait Islanders have more than shared in the general labour market shift towards greater employment in service industries. Furthermore, they have increased their representation in public administration and community service jobs at a time when growth in the general workforce has been held back.

Table 4.1. Index of industry segregation by gender: Aborigines and Torres Strait Islanders, 1986-91.

	Aborigines		Torres Strait Islanders	
	1986	1991	1986	1991
Males	25.9	29.3	15.6	18.1
Females	25.7	27.9	11.5	10.8
Total	24.9	27.9	13.1	13.9

Figure 4.1. Percentage change in industry of employment: Aborigines, Torres Strait Islanders and other Australians, 1986-91.



1-Agriculture, forestry etc.; 2-Mining; 3-Manufacturing; 4-Electricity, water & gas; 5-Construction; 6-Wholesale & retail trade; 7-Transport & storage; 8-Communication; 9-Financial services; 10-Public administration; 11-Community services; 12-Recreational and Personal services.

Industry change by section-of-State

The range of new employment opportunities by industry decreases with settlement size, although three industries in particular, community services, public administration and wholesale and retail, provided the bulk of new jobs irrespective of location (Appendix Table A3). Two features stand out in the context of the AEDP. The first is the concentration of growth in indigenous employment in community service industries in rural areas. Such employment now accounts for almost half of all rural employment for Aborigines (47.9 per cent) and almost one-third for Torres Strait Islanders (31.0 per cent). This compares to only 14.2 per cent among non-indigenous rural workers. Secondly, efforts to increase mainstream employment in government-related industries appear to have been less successful in major urban and other urban areas, where a large share of such jobs are to be found, compared to rural areas.

While this was partly an artefact of enumeration procedures in remote areas, which recorded much rural employment in community services, the relatively lower growth of urban employment in public administration compared to employment in industries such as wholesale and retail and recreation and personal services, is notable. Also worth noting, however, is the large number of new jobs that could not be classified due to lack of information. In other urban areas for example, they constitute nearly half of the total. This seriously detracts from any complete analysis of the impact of the AEDP on the industry composition of employment.

The factors which lie behind the rapid growth of community service employment are not difficult to identify, particularly in rural areas. It is known, for example, that in June 1986 a total of 38 communities were participating in the CDEP scheme around Australia, with a total of 5,018 participants. Although not all participants in the scheme are actually workers, it can be assumed that the majority were in employment during the week before the 1986 Census and recorded as such in the enumeration. At the same time, it appears that an element of confusion surrounded the correct designation of what some census enumerators in remote areas, and no doubt individual respondents elsewhere, viewed as simply receipt of social security and therefore not employment. To the extent that this occurred, it would have had the effect of lowering the 'real' employment rate. By the time of the 1991 Census, the total number of communities participating in the CDEP scheme in Australia had risen to 165 with a total of 18,473 participants, an increase of 13,455, or 268 per cent, since 1986. The majority of these were in rural areas.

As far as can be ascertained from the ABS, in the remote area enumeration for the 1991 Census, which was conducted in areas where many new participants in the CDEP scheme were located, field instructions to interviewers were more clearly spelt out: CDEP scheme participants were to be recorded as employed irrespective of whether they actually worked during the week prior to census date. Furthermore, where

the designated employer was a community council, an industry coding of public administration was applied in cases where councils were listed in the Business Directory, otherwise they were assigned a coding for community services (Taylor 1993b). Even if only a fraction of CDEP scheme participants were recorded as employed in the 1991 Census, which seems unlikely, their impact in rural areas on labour force status and employment levels in the public administration and community service industries would have been considerable. This is precisely the implication to be drawn from the analysis of intercensal change. Indeed, it would not be unreasonable to conclude that expansion of the CDEP scheme accounted for virtually all net intercensal growth in Aboriginal and Torres Strait Islander employment in rural areas, as well as a fair share of the growth in other urban areas.

Industry change by gender

The gender pattern of employment change by industry division is shown in Appendix Table A4. Little difference is apparent between males and females, whether Aboriginal or Torres Strait Islander. In all cases, by far the greatest expansion in employment has been in community services followed by public administration leading to greater concentration in these industries. Another major growth area, again for both males and females, was the wholesale and retail industry. However, female Aborigines and Torres Strait Islanders fared notably better than their male counterparts in the recreation and personal service industries. Comparison with non-indigenous workers shows that while the shift towards employment in community services has been a general trend, indigenous males appear to have avoided the severe losses in employment encountered by other males across a range of industries, most notably in public administration, mining, manufacturing and communication industries. At the same time, they have shared losses in electricity, gas and water industries as well as in transport and storage industries. Whether these different patterns of growth reflect the relatively favourable impact of public sector and industry-focussed employment initiatives under the AEDP is a moot point.

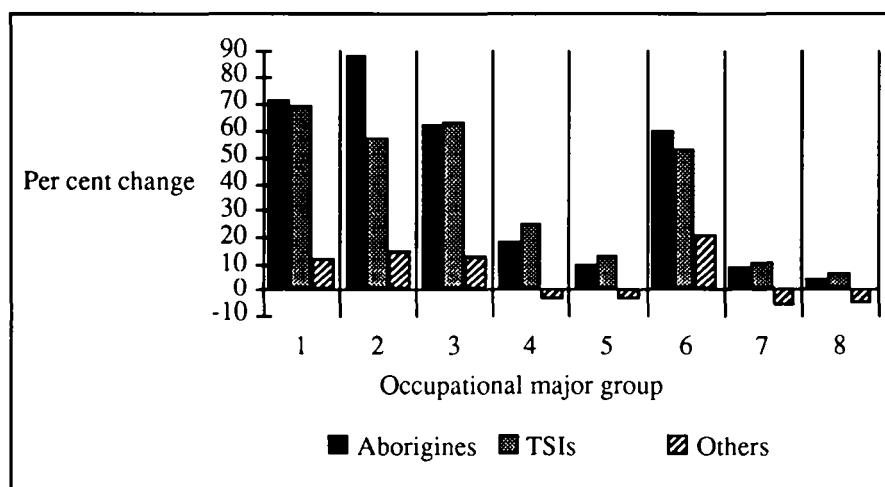
Occupation

It has been argued elsewhere by Taylor (1992a) that given the direct links that exist between occupational and economic status, as well as the intractability of low occupational status among Aborigines and Torres Strait Islanders, the goals of AEDP policy clearly imply a commitment towards raising the occupational status of the Aboriginal and Torres Strait Islander workforce so that it more closely parallels that of the general workforce. Accordingly, this thrust is found in much of the AEDP which lays heavy emphasis on Aboriginal and Torres Strait Islander placements in formal training and skill improvement programs in both public and private sectors, as well as affirmative action to enhance the representation

of Aborigines and Torres Strait Islanders in executive positions. Running counter to this, however, is an expansion of the CDEP scheme which has had the effect of increasing active workforce participation among Aborigines and Torres Strait Islanders, particularly in remote areas, but generally in unskilled occupations (Altman and Daly 1992b).

Despite these opposing tendencies, the greatest proportional increase in Aboriginal and Torres Strait Islander employment has occurred in the more skilled occupational groups of managers and administrators, professionals and para-professionals. Figure 4.2 shows the comparative change based on data in Appendix Table A5. In all occupational groups, but particularly in the most skilled, Aboriginal and Torres Strait Islander employment growth was substantially higher than among other Australians. It is noticeable, however, that their rate of increase was lowest in the four occupational groups that shed non-indigenous labour - trades, clerks, plant and machine operators and labourers. This is perhaps indicative of the all pervasive influence of general labour market tendencies. At the same time, the low rate of growth in unskilled jobs is surprising given the known expansion of CDEP scheme employment.

Figure 4.2. Percentage change in occupation of employment: Aborigines, Torres Strait Islanders and other Australians, 1986-91.



1-Managers & administrators; 2-Professionals; 3-Para-professionals; 4-Tradespersons; 5-Clerks; 6-Personal services & sales workers; 7-Plant & machine operators; 8-Labourers & related workers.

Table 4.2. Index of occupational segregation by gender: Aborigines and Torres Strait Islanders, 1986-91.

	Aborigines		Torres Strait Islanders	
	1986	1991	1986	1991
Males	34.4	26.2	31.7	25.0
Females	14.1	11.7	13.4	12.1
Total	26.3	19.4	23.9	20.3

In this context, attention should be drawn to the large increase of 4,632 in Aborigines and Torres Strait Islanders who did not state their occupation (Appendix Table A5). Why this should have occurred is not known, but clearly the filling out of census forms on this aspect, particularly in remote areas, was less than satisfactory. It seems almost certain that the bulk of 'not stated's' would comprise individuals in labouring jobs participating in the CDEP scheme. If these were to be included as labourers in the data they would have the effect of considerably downskilling the overall occupational profile. As it stands, the data suggest that overall, Aboriginal and Torres Strait Islander workers are now more skilled than in the past, although they still lag behind the general skill level of other workers (Appendix Table A5). In any case, leaving aside these interpretive difficulties, it should be pointed out that more meaningful analysis of skill distribution is best conducted using more detailed occupational data with which it has been revealed that indigenous workers occupy only a limited range of skilled positions and often at lower levels of seniority (Taylor 1992a).

One consequence of an apparent move towards relatively more skilled employment has been a notable reduction in the degree of occupational segregation between indigenous and non-indigenous workers. Among males for example, the index of dissimilarity between Aboriginal and non-indigenous workers across the eight major occupational groups was 34.4 in 1986 and this had fallen to 26.2 in 1991 (Table 4.2). For Torres Strait Islanders, the corresponding figures were 31.7 and 25.0. Female workers, who in 1986 showed little overall segregation in their occupational distribution, now display even less, with the index of dissimilarity between Aboriginal and non-indigenous workers falling from 14.1 to 11.7 and that of Torres Strait Islanders declining from 13.4 to 12.1. However, these figures must be treated with caution as the inclusion in the calculation of the large number of individuals who did not state their occupation would probably raise the level of segregation if, as suspected, most of these unspecified jobs were unskilled.

Occupational change by section-of-State

One feature of the occupational shift in employment is the fact that the growth of more skilled employment among both Aborigines and Torres Strait Islanders has occurred irrespective of settlement size. Thus, managerial and professional jobs have been created as much in rural areas as urban areas (Appendix Table A6). The main variation by section-of-State occurs in lower skilled occupational categories. Labouring jobs, for example, have almost entirely been created in rural areas with net losses of indigenous labouring workers occurring in urban areas.

Once again, however, the numbers in labouring occupations in both rural and other urban areas would no doubt be greatly increased by the inclusion of many of those who did not state their occupation. The decline in unskilled urban employment, on the other hand, appears more realistic and follows the pattern generally in the workforce reflecting the impact of recessionary conditions on traditional employers of unskilled urban workers such as the construction and transport industries. By contrast, the growth of unskilled employment in rural areas almost certainly reflects the expansion of work under the CDEP scheme (Altman and Daly 1992b: 11).

More puzzling is the concomitant growth of skilled employment in rural areas from managerial and administrative positions through to trade occupations. In view of the rural employment impacts already attributed to the CDEP scheme, it seems highly probable that most new skilled jobs in rural areas may also be attributed to its expansion. This would support the idea that the CDEP scheme serves as a substitute funding regime to support the growth of vital community occupations in areas such as health, education, welfare, and office management that are more appropriately the functional responsibilities of various tiers of government (Altman and Daly 1992b: 15). Once again, however, as with the analysis of employment by industry, it is disconcerting to note that the highest values in each column are invariably in the 'not stated' category casting some doubt over the finality of any conclusions.

Occupational change by gender

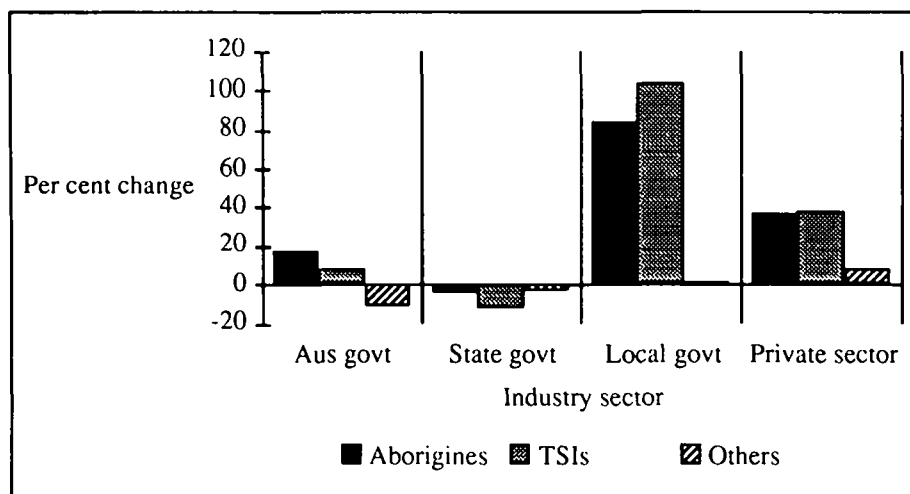
While indications of more skilled employment are apparent for both males and females, the latter have experienced the highest rates of increase in managerial and, particularly, professional employment (Appendix Table A7). In the case of Aboriginal females, professional and para-professional jobs now account for almost one-fifth (17.7 per cent) of total employment, a figure which is not far behind that of non-indigenous females. At the other end of the skill spectrum, the apparent decline in labouring jobs for Aboriginal males and the relatively low growth of semi-skilled and unskilled employment among indigenous workers generally, almost certainly reflects the problems of census enumeration and the large intercensal increase in non-response. It is even difficult to draw comparison with non-indigenous males and females in the workforce as they too reveal substantial increases in the 'not stated' category.

Industry sector

The broad distinction in census data between Aboriginal employment in public (government) and private sectors appears to be increasingly blurred. In the 1986 Census, employment provided via Aboriginal organisations and the CDEP scheme was generally classified as private sector employment on the premise that such employers were not government bodies. They are, however, publicly funded. In recognition of this, coding procedures were changed in the 1991 Census to classify such employment under local government in cases where community councils or organisations were clearly stated as the employer. If such an employer was not specified, then a private sector designation was applied.¹ This change in procedure is reflected in the intercensal shifts in industry sector data shown in Figure 4.3 which is based on figures in Appendix Table A8.

It would appear that the main relative stimulus to job growth has been created by Aboriginal and Torres Strait Islander community organisations as indicated by the relatively large proportional increase in local government employment among Aborigines and Torres Strait Islanders. As in past censuses, it is also likely that a reasonable (though unknown) share of private sector job growth is also more correctly attributed to employment in community organisations.

Figure 4.3. Percentage change in industry sector of employment: Aborigines, Torres Strait Islanders and other Australians, 1986-91.



Elsewhere in the labour market, indigenous Australians shared in the general cuts to State and Territory government employment despite concerted efforts in the AEDP to expand their numbers. It seems that such efforts were more successful in the Commonwealth sphere with growth in Aboriginal and Torres Strait Islander employment here running counter to the substantial loss of 56,726 Commonwealth jobs experienced by other Australians (this includes the category transfer of around 14,000 jobs to State government due to the creation of the Australian Capital Territory public service during the intercensal period). This scale of downsizing in public sector operations suggests that any discernible move towards greater Aboriginal and Torres Strait Islander representation in this area of the labour market would be as much to do with general cutbacks as enhanced entry.

The point to emphasise in all this, of course, is that the AEDP had sought to increase by 2,000 the number of Aborigines and Torres Strait Islanders employed by government through its public sector programs during the intercensal period (Australian Government 1987b: 10) and by 6,400 the number of new employees in the private sector. A superficial reading of results from the 1991 Census shows that the public sector target has been exceeded with the creation of 2,714 such jobs (Appendix Table A8). However, a large proportion of these positions are likely to be attributed to employment in the CDEP scheme and not in other sectors of the labour market targeted by policy. Thus, a more realistic reading of the intercensal change would conclude that targeted growth in the public sector has not been achieved, although such new jobs as have been created have been against great odds in an increasingly unfavourable economic climate. As far as private sector targets are concerned, the same basic point can be made. A total of 8,500 new private sector jobs were created for Aborigines and Torres Strait Islanders, but a considerable share of these are likely to derive from the expansion of the CDEP scheme.

Industry sector change by section-of-State

The substantial increase in local government and private sector employment revealed in rural areas in Appendix Table A9 is difficult to explain in terms other than the growth of the CDEP scheme. While any difference in expansion between these two sectors is probably a mere construct of the census coding methodology described above, it is interesting to note that the greatest net increase in rural employment occurred in the private sector suggesting that a good deal of CDEP scheme employment is still coded as such. Indeed, given that a total of 6,151 private sector jobs were created for Aborigines and Torres Strait Islanders outside of major urban areas, it is difficult to see how many of these could not be attributed to anything other than the expansion of the CDEP scheme given the estimate for growth in such employment during the intercensal period of 8,073 new positions. Further insight into the loss of male jobs in

the State sector is also provided by the data which show that this has been restricted to other urban and rural areas.

Industry sector change by gender

Analysis of gender variation in the industry sector of employment provides some insight into the relatively better intercensal labour market performance of females generally, and Aboriginal and Torres Strait Islander females in particular (Appendix Table A10). Clearly, the loss of State government employment among indigenous workers was a male phenomenon, as it was in the workforce generally. Despite their relatively small net losses, the rate of decline in State government employment was in fact greater for Aboriginal and Torres Strait Islander males than for other males. Whether this poor performance was due to the nature of work available in the State sector, favouring indigenous females in service occupations, is not clear. It is worth noting, however, that Aboriginal males, in particular, also fared worse than their female counterparts in securing Commonwealth employment. Equally noticeable is the relatively higher growth of indigenous female employment in the local government and private sectors. Although in net terms, males gained more new jobs in these sectors, as might be expected given the likelihood that many of these were in CDEP scheme employment, the data suggest that such employment is increasingly less dominated by males.

Hours worked

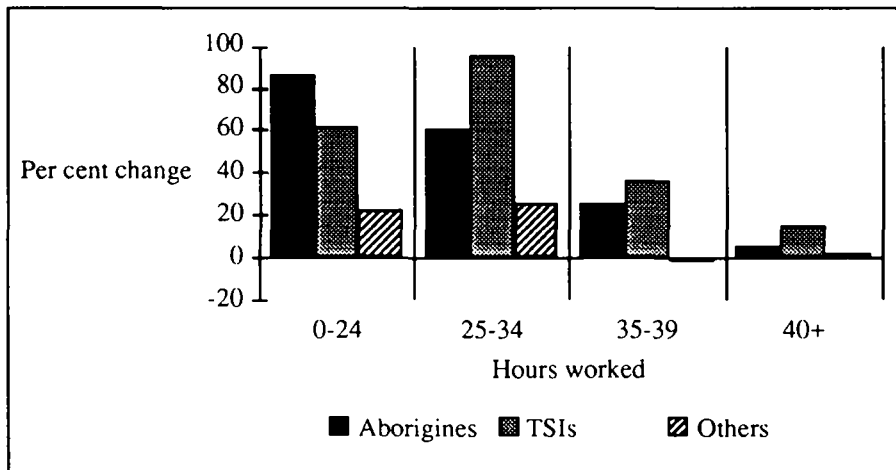
In 1986, 25 per cent of Aboriginal people in employment and 22.4 per cent of Torres Strait Islanders worked less than 35 hours per week. By 1991, these proportions had risen to 33.7 and 28.4 per cent, respectively (Appendix Table A11). This was mostly due to an increase in the number of indigenous workers employed for between 1 and 24 hours per week. As a result, part-time workers employed for less than 24 hours per week now constitute almost one quarter of all Aborigines and Torres Strait Islanders in employment compared to less than one fifth in 1986.

Marked expansion of part-time employment has been a general feature of labour market readjustment in recent years and similar effects are apparent among non-indigenous workers in Australia. In 1986, almost three-quarters (74.7 per cent) of non-indigenous workers were employed in full-time jobs, a figure which fell to 69 per cent in 1991. One consequence of this is that Aborigines and Torres Strait Islanders, achieved higher rates of growth than other Australians in full-time employment (Figure 4.4), notwithstanding the fact that they also experienced higher rates of growth in part-time employment.

Change in hours worked by section-of-State

Further compelling evidence that much of the intercensal employment growth among Aborigines and Torres Strait Islanders is closely allied with the expansion of the CDEP scheme is obtained from an analysis of the composition of new jobs according to hours worked by section-of-State (Appendix Table A12). Of the 7,579 additional jobs created for Aborigines outside of major urban areas since 1986, 80.5 per cent were part-time (less than 35 hours per week), with only 1,476 new jobs having longer working hours. Although the proportion among Torres Strait Islanders was less (54 per cent), this level of part-time job creation in non-metropolitan areas is consistent with one of the essential features of CDEP scheme employment. The other feature to emerge from a section-of-State analysis is the low rate of growth in full-time employment among Aborigines and Torres Strait Islanders in other urban areas, compared to the much higher rates experienced in major urban and rural areas. This may be associated with the relative loss of public sector jobs in other urban areas, as noted earlier.

Figure 4.4. Percentage change in hours worked: Aborigines, Torres Strait Islanders and other Australians, 1986-91.



Change in hours worked by gender

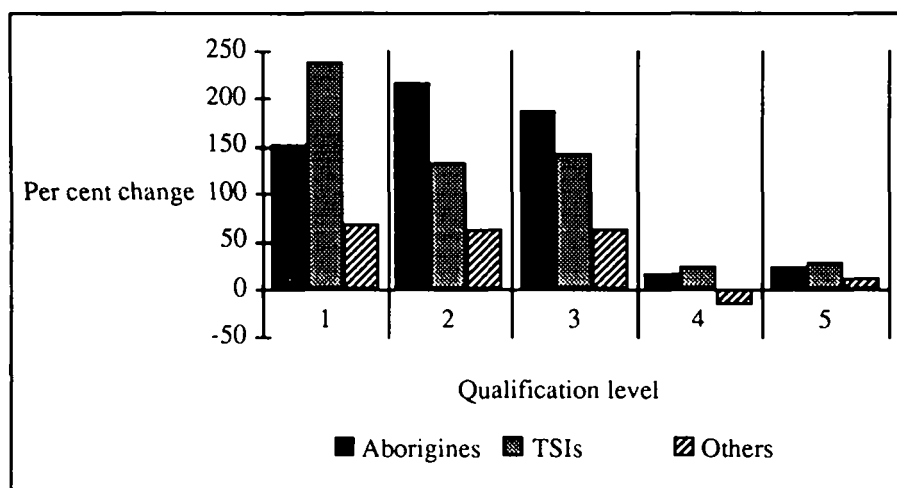
One contrast between indigenous and non-indigenous workers is the much higher proportion of indigenous males who work in part-time employment (Appendix Table A13). Shifts in employment patterns between 1986 and 1991 served to exaggerate this difference despite the fact that indigenous males experienced an increase in full-time employment at a time when their non-indigenous counterparts suffered heavy losses. A higher proportion of new jobs for males, among Aborigines and Torres Strait

Islanders occurred in part-time employment. Likewise, growth in full-time employment was noticeably higher among indigenous females than males. Nonetheless, males overall are still much more likely than females to be in full-time employment.

Level of qualifications

The AEDP policy statement recognised that crucial links exist between employment levels and education levels (Australian Government 1987d), a nexus that has been formally established in terms of human capital theory (Chapman, 1991; Miller 1989, 1991; Daly 1991b, 1993b). The policy response within the AEDP, was further elaborated upon by the launch, in October 1989, of the National Aboriginal and Torres Strait Islander Education Policy. This set as one of its four goals the achievement of equitable and appropriate educational outcomes. In the context of access to mainstream labour markets, such policy success would be measured by increased acquisition of tertiary level certification, and census data on changes in levels of qualification provide some basis for measuring progress towards this aim.

Figure 4.5. Percentage change in level of qualifications: Aborigines, Torres Strait Islanders and other Australians, 1986-91.



1-Higher degree/diploma; 2-Bachelor degree; 3-Other diploma; 4-Vocational; 5-No qualification.

Relative shifts in levels of qualification between Aborigines, Torres Strait Islanders and others are shown in Figure 4.5.² This indicates that indigenous Australians outstripped other Australians in their rate of increase in acquisition of all tertiary qualifications, even displaying an increase in vocational qualifications despite a decline in this category among the rest of the population. However, these favourable growth rates derive from very low bases and the overall levels of qualification for Aborigines and Torres Strait Islanders remain considerably below those of other Australians (Appendix Table A14). One feature to note is an increase in the proportion of those with no qualifications. While this may partly reflect rapid growth in the population aged 15 years and over, it is most likely to be related to the absolute decline in non-responses which is most marked among Aborigines. Whether this fall in non-response is also reflected in increases in other categories (for example, in the proportional rise of bachelor degrees) is not known.

Section-of-State

The distribution of qualification levels according to section-of-State differs quite markedly between indigenous and non-indigenous Australians (Appendix Table A15). Apart from the slightly higher proportion of individuals with university degrees in major urban areas, the prevalence of different levels of qualification among non-indigenous Australians shows little sign of variation between locality sizes. Among Aborigines and Torres Strait Islanders, on the other hand, a distinct urban/rural gap is apparent with qualification levels generally highest in major urban areas and lowest in rural areas. Moreover, this pattern has persisted despite the fact that rural areas experienced the highest rates of acquisition of new qualifications at all levels. Indeed, it appears that rural areas have fallen behind with a notable increase in the proportion of those with no qualifications. This, however, is partly due to their relatively greater reduction in non-response and the real change in levels remains unknown.

Gender

The rate of increase in acquisition of qualifications has been greater for females in all levels of qualification, except vocational (Appendix Table A16). Aboriginal females, in particular, display very high rates of increase in the number of those with qualifications, although the low base from which these rates are calculated needs to be borne in mind. Thus, while some improvement in the distribution of indigenous males and females with qualifications has occurred this is a very minor gain and generally less marked than among other Australians. For example, the proportion of Aboriginal females over 15 years of age with other diplomas rose from 0.7 per cent of the total to 1.8 per cent, while the equivalent shift among non-indigenous females was from 3.8 per cent to 6.6 per cent. This lagged effect for indigenous Australians is generally apparent with males faring worse than females, except in vocational qualifications where Aboriginal

and Torres Strait Islanders males increased their numbers and other males declined. Ironically, one complicating factor, particularly among Aborigines, is the decline in numbers not stating their level of qualification. Just how this alters the changing distribution of qualifications is not known. Leaving this aside, however, it seems that any employment returns from higher levels of educational attainment, particularly in the form of more skilled employment, are more likely to show up in the relative labour force status of indigenous females rather than males.

Conclusion

Precise analysis of intercensal shifts in the nature of employment is hampered by large increases in the number of individuals who did not respond to census questions regarding various labour force characteristics. In some cases, notably in respect of occupation, quite opposite conclusions can be drawn regarding the change in occupational status depending upon assumptions made about the inclusion, or otherwise, in the analysis of those who did not state their occupation. Notwithstanding this problem, certain trends do emerge and indicate that employment change among indigenous people has, in part, followed shifts generally in the workforce. At the same time, unique departures are evident reflecting the relative importance of program-driven job growth and the role of community organisations as primary sources of work.

Note

1. Correspondence from the Director, Population Census Processing and User Services, ABS, Canberra dated 24 February 1993.
2. It should be noted that the data on levels of qualification refer to the population aged 15 years and over and not the working age group of 15-64 years.

5. Income status, 1986-91

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

Table 5.1. Change in income status among Aborigines, Torres Strait Islanders and other Australians, 1986-91.

	Aborigines		Torres Strait Islanders		Others	
	1986 (\$,000)	1991 (\$,000)	1986 (\$,000)	1991 (\$,000)	1986 (\$,000)	1991 (\$,000)
Mean	8.1	11.6	9.4	13.5	13.2	19.3
Median	6.2	8.8	7.8	11.4	11.3	16.3
Ratio of Aborigines/others						
mean	0.61	0.60				
median	0.55	0.54				
Ratio of Torres Strait Islanders/others						
mean			0.71	0.70		
median			0.68	0.70		

Overall, however, the census indicates little change with Aboriginal mean incomes as a ratio of non-indigenous mean incomes falling slightly from 0.61 in 1986 to 0.60 in 1991.¹ While the Torres Strait Islander ratio was higher, this also fell slightly from 0.71 in 1986 to 0.70 in 1991. Median incomes were somewhat lower as a ratio of non-indigenous medians and followed a similar decline among Aborigines (from 0.55 to 0.54), while the median income ratio for Torres Strait Islanders rose slightly from 0.68 to 0.70. This overall lack of improvement in relative incomes is not surprising given that such a large proportion of new jobs for Aborigines and Torres Strait Islanders have been generated by participation in the

CDEP scheme, although this has occurred at a time when income inequalities for the population generally have widened (Saunders 1992). If the CDEP scheme, with its current emphasis on low wage work, continues to provide the bulk of new employment for indigenous people, there seems little prospect that the income gap between Aborigines and Torres Strait Islanders and the rest of the population in Australia will ever narrow. If anything, it is likely to widen further. This is of crucial policy significance as it signals that improvements in labour force status alone are not sufficient to enhance income status, unless the CDEP scheme becomes more oriented to stimulate income generation. Of equal importance to job creation is the nature of the work involved and the income it generates.

Income change by section-of State

The fact that overall income levels are influenced as much by the nature of work as by the rate of employment growth is reflected in data showing change in Aboriginal income status by section-of-State (Table 5.2).

Table 5.2. Change in income status of Aborigines, Torres Strait Islanders and other Australians by section-of-State, 1986-91.

	Major urban		Other urban		Rural		Total	
	1986	1991	1986	1991	1986	1991	1986	1991
	(\$,000)		(\$,000)		(\$,000)		(\$,000)	
Aborigines								
Mean	9.1	13.7	8.2	11.8	7.2	9.6	8.1	11.6
Median	7.2	10.9	6.3	9.4	5.7	7.5	6.2	8.8
Torres Strait Islanders								
Mean	10.7	14.8	9.3	13.3	8.1	12.2	9.4	13.5
Median	9.3	12.5	7.7	11.5	6.1	10.2	7.8	11.4
Others								
Mean	13.8	20.2	12.4	17.9	11.6	17.3	13.2	19.3
Median	12.2	17.3	10.4	15.1	9.0	13.9	11.3	16.3
Ratio of Aborigines/others								
Mean	0.66	0.68	0.66	0.66	0.62	0.56	0.61	0.60
Median	0.59	0.63	0.60	0.62	0.64	0.54	0.55	0.54
Ratio of Torres Strait Islanders/others								
Mean	0.77	0.74	0.75	0.75	0.70	0.71	0.71	0.70
Median	0.76	0.72	0.74	0.76	0.68	0.73	0.68	0.70

Despite the fact that intercensal improvements in Aboriginal and Torres Strait Islander labour force status have been most noticeable in rural areas,

income status remains inversely related with geographic remoteness. Furthermore, the rural/urban gap appears to be widening, at least among Aborigines. The ratio of mean incomes for Aboriginal people in rural areas compared to those in major urban areas, for example, fell from 0.79 in 1986 to 0.70 in 1991. Comparing rural incomes with other urban incomes, the ratio of mean incomes fell from 0.88 in 1986 to 0.81 in 1991. The opposite trend emerges for Torres Strait Islanders, as well as for other Australians. Among Torres Strait Islanders, for example, the rural/major urban ratio of mean incomes rose from 0.75 to 0.82 while the rural/other urban ratio increased from 0.87 to 0.91. This result for Torres Strait Islanders is interesting as a large proportion of those in rural areas are located in the Torres Strait and participate in the CDEP scheme. Notwithstanding this, the widening of the urban/rural income gap among Aborigines is more in line with expectations given the composition of much rural employment as remuneration based on unemployment benefit equivalence. This leaves rural areas structurally disadvantaged compared to urban areas where a much greater proportion of jobs are full-time and based on awards.

Income change by gender

The primary cause of the widening gap between indigenous and non-indigenous incomes was a relative decline in the income levels of Aboriginal and Torres Strait Islander males. Using the figures for nominal mean income in 1986, Aboriginal male incomes were almost three-quarters (71.2 per cent) of the total mean for non-indigenous Australians. By 1991, this proportion had fallen to only two-thirds (66.3 per cent). Although income levels for Torres Strait Islander males were higher, they also fell as a proportion of the total non-indigenous mean (from 89.3 per cent in 1986 to 83.9 per cent in 1991). In contrast, mean incomes for Aboriginal females rose as a proportion of the total non-indigenous mean incomes from 51.5 per cent in 1986 to 53.9 per cent in 1991, while a similar rise occurred among Torres Strait Islander females from 53.7 per cent to 55.9 per cent. If these figures are expressed in terms of 1989/90 prices (using a Consumer Price Index of 73.5 in 1985-86 and 105.3 in 1990-91), the real gender-based shift in incomes is apparent with Aboriginal male incomes falling slightly from a real mean of \$12,789 in 1986 to \$12,155 in 1991 and the female equivalent showing a clear counter trend by rising slightly from \$9,251 to \$9,876. A similar pattern emerges for Torres Strait Islanders. This growing divergence in male and female incomes is consistent with the trend revealed by Treadgold (1988) for the intercensal period 1976-1986 and is linked to the relatively better performance of females in sectors of the labour market less affected by the vagaries of the economy. It also probably reflects the gender differentials noted earlier in terms of the relatively longer hours worked in more skilled employment by females.

Table 5.3. Change in income status of Aborigines, Torres Strait Islanders and other Australians by gender, 1986-91.

	Males		Females		Total	
	1986	1991	1986	1991	1986	1991
	(\$,000)		(\$,000)		(\$,000)	
Aborigines						
Mean	9.4	12.8	6.8	10.4	8.1	11.6
Median	7.5	9.1	5.7	8.7	6.2	8.8
Torres Strait Islanders						
Mean	11.8	16.2	7.1	10.8	9.4	13.5
Median	11.0	14.6	5.6	9.0	7.8	11.4
Others						
Mean	17.5	24.2	8.8	14.1	13.2	19.3
Median	16.1	21.4	6.4	11.1	11.3	16.3
Ratio of Aborigines/others						
Mean	0.54	0.53	0.77	0.74	0.61	0.60
Median	0.47	0.43	0.89	0.78	0.55	0.54
Ratio of Torres Strait Islanders/others						
Mean	0.67	0.67	0.81	0.77	0.71	0.70
Median	0.68	0.68	0.88	0.81	0.68	0.70

Notwithstanding these gains, incomes for Aboriginal and Torres Strait Islander females failed to keep up with the rate of increase in non-indigenous female incomes. Nominal mean income for Aboriginal females, for example, increased by 52.9 per cent and that of Torres Strait Islander females by 52.1 per cent. Non-indigenous females, on the other hand, increased their mean income by 60.2 per cent starting from a higher base (Table 5.3). Thus, ratios of indigenous to non-indigenous incomes reveal that the gap between female incomes has widened while that between males has remained relatively unchanged. At the same time, in monetary terms, indigenous females remain behind their male counterparts with the average income for Aboriginal females rising by only a slightly greater amount than that of Aboriginal males, while the increase among Torres Strait Islander females was much less than that among Torres Strait Islander males.

Welfare dependency

In the AEDP, welfare dependency is equated with dependency on unemployment benefit. In Altman and Smith's view (1993: 21), this definition is somewhat narrow, reflecting as it does, the labour market

focus of the AEDP. They take a broader definition of welfare to include all transfer payments from the Federal Government to indigenous citizens. Such a wider definition is also necessitated by the limited availability of official sources of income data for indigenous Australians. At an aggregate level, the most comprehensive indication of Aboriginal and Torres Strait Islander reliance on welfare income is available from census data using a cross-tabulation of individual incomes by labour force status. From this source, Table 5.4 shows the proportion of total income accruing to each category of the labour force and those not in the labour force for 1986 and 1991.

Table 5.4. Total income by labour force status: Aborigines, Torres Strait Islanders and other Australians, 1986-91.

Labour force status	1986		1991	
	Income (\$m)	Per cent	Income (\$m)	Per cent
Aborigines				
Employed	478.9	58.3	826.4	59.6
Unemployed	110.7	13.5	173.4	12.5
Not in the labour force	232.4	28.2	386.4	27.9
Total	822.0	100.0	1,386.3	100.0
Torres Strait Islanders				
Employed	76.1	74.4	132.6	73.1
Unemployed	8.7	8.5	16.1	8.8
Not in the labour force	17.5	17.1	32.9	18.1
Total	102.2	100.0	181.7	100.0
Other Australians				
Employed	111,233.6	88.5	168,285.4	87.5
Unemployed	3,254.7	2.6	6,955.8	3.7
Not in the labour force	11,135.4	8.9	16,975.1	8.8
Total	125,623.7	100.0	192,216.3	100.0

Overall, there is little change in the contribution of employment income to total income. If anything, a slightly higher proportion of Aboriginal income derives from employment and slightly less for Torres Strait Islanders and others. This seems to suggest that the trend of a decline in employment income relative to total income, noted by Daly and Hawke (1993) for the period 1976-91, has been arrested, no doubt due to the classification of a high proportion of income from the CDEP scheme as employment income. At the same time, Aboriginal employment income as a proportion of total Aboriginal income remains fixed at a level much lower than that of other Australians, while Torres Strait Islanders remain in

an intermediate position. This is despite the relatively greater improvement in Aboriginal labour force status. Thus, the policy objective of a reduction in Aboriginal and Torres Strait Islander welfare dependency to a level commensurate with that of other Australians is no closer to being achieved than before the introduction of the AEDP.

Table 5.5. Change in mean employment/non-employment income: Aborigines, Torres Strait Islanders and other Australians, 1986-91.

Labour force status	Mean income (\$,000)		Change	
	1986	1991	Net	Per cent
Aborigines				
Employed	13.61	17.55	3.93	28.9
Unemployed	5.59	8.22	2.64	47.2
Not in the labour force	5.10	7.65	2.55	49.9
Total	8.18	11.68	3.50	42.9
Torres Strait Islanders				
Employed	14.34	18.56	4.22	29.4
Unemployed	5.51	8.89	3.38	61.3
Not in the labour force	4.50	7.55	3.05	67.8
Total	9.50	13.64	4.14	43.6
Others				
Employed	17.94	25.07	7.14	39.8
Unemployed	5.42	8.55	3.13	57.8
Not in the labour force	4.21	7.09	2.88	68.5
Total	13.30	19.38	6.08	45.7
Ratio of Aborigines/others				
Employed	0.76	0.70	-0.06	-7.8
Unemployed	1.03	0.96	-0.07	-6.7
Not in the labour force	1.21	1.08	-0.13	-11.0
Total	0.61	0.60	-0.1	-2.0
Ratio of Torres Strait Islanders/others				
Employed	0.80	0.74	-0.06	-7.4
Unemployed	1.02	1.04	0.02	2.3
Not in the labour force	1.07	1.07	0.00	-0.5
Total	0.71	0.70	-0.01	-1.5

Actual shifts in mean employment and non-employment incomes are shown in Table 5.5. The most striking feature is that mean employment incomes for Aborigines and Torres Strait Islanders have increased at a considerably slower rate than for other employed Australians. This is further indicated by the decline in ratios of indigenous/non-indigenous employment income. As already noted, this is to be expected given that a

substantial share of new employment income for Aborigines and Torres Strait Islanders is essentially fixed at a rate roughly equivalent to unemployment benefit (now Jobsearch and Newstart Allowances). As for welfare income, the mean individual income of unemployed Aborigines in 1986 was \$5,599, which was less than half (41 per cent) of the mean income for those in employment. By 1991, this gap had closed somewhat, but unemployed Aborigines still had incomes less than half of those in employment (46.8 per cent). Furthermore, compared to non-indigenous Australians, the ratio of mean incomes for unemployed Aborigines, as well as for those not in the labour force, actually fell.

Conclusion

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

6. Policy pointers

The evaluation of policy impacts using census data is at best an exploration of possible associations between intended outcomes and revealed characteristics. Apart from the indeterminacy of any such links established, limitations are also imposed on rigorous analysis by the nature of the data. Leaving aside questions regarding the method of enumerating indigenous Australians, particularly in remote areas (Taylor 1993b), the issue of the cultural appropriateness of standard economic indicators may be raised (Smith 1992), although much depends here on the population sub-group in question and the particular characteristics to be measured. Altman (1992: 9), for example, suggests a continuum in the applicability of economic indicators: in remote areas where Aboriginal and Torres Strait Islander groups may be more tradition-oriented, indicators such as labour force status and income often over-simplify complex realities, whereas in urban contexts such measures may be far more relevant given the greater actuality and likelihood of Aboriginal and Torres Strait Islander integration into mainstream labour markets.

Of greater concern is the difficulty encountered when trying to unravel the underlying causes of economic change. This is exacerbated by inordinately high increases in non-response to census questions between 1986 and 1991. For some indicators, the inclusion of non-responses may radically alter the pattern of change observed, but no rational basis for their inclusion in the analysis exists. To the extent that this may undermine confidence in any policy implications drawn from census indicators, urgent scrutiny of non-responses is required to determine the extent of any systematic bias with consideration given to possible means of adjustment.

Successful implementation of the AEDP which has sought to increase the relative rate of employment growth among indigenous Australians as well as upgrade their occupational status in the hope of raising incomes to higher levels, was always going to be difficult, and more so during a period of national economic recession and rising unemployment. Indeed, some would argue that AEDP goals were inherently destined to fail given that the causes of employment differentials are deep-rooted and structural and unlikely to be easily overcome (Sanders 1991). This is leaving aside the fact that, due to a lack of regard for the dynamics of growth in the indigenous working age population, AEDP targets grossly underestimated the scale of new job creation required to achieve statistical equity (Altman 1991: 158-9). This analysis of change in Aboriginal socioeconomic status in Australia during the intercensal period 1986 to 1991 provides the first comprehensive indication of the impacts of the AEDP since it was implemented after 1986. The results, in terms of stated policy objectives, appear to be mixed.

On the one hand, AEDP targets in terms of net employment growth have been achieved. As a result, Aboriginal employment and unemployment rates show distinct signs of improvement leading to a closing of the gap (albeit slowly) in these indicators with the rest of the population. On the other hand, when these results are disaggregated spatially and the nature of employment growth is dissected, the achievement is revealed to be a predominantly rural phenomenon involving mostly part-time work with an increasing emphasis on labouring and para-professional jobs in community services. At the same time, labour force status for males in urban areas has actually worsened, while there is no evidence pointing towards a closing of the gap in overall income differentials. Indeed, if anything, the signs are regressive. Variation is also evident in the relative economic status of Aborigines and Torres Strait Islanders with the latter maintaining their intermediate position between that of Aboriginal people and the rest of the population to much the same extent as observed using 1986 Census data (Taylor and Gaminiratne 1993).

The most significant policy implication to emerge from this analysis is the indication that recent net employment growth among indigenous Australians has been due in large part to the expansion of the CDEP scheme. While the census provides no direct measure of CDEP scheme employment, nor, indeed, any precise indication of how such employment was coded, the coincidence of substantially increased participation in the scheme together with marked shifts in related census characteristics such as rural labour force status, hours worked, industry sector, industry division of employment and income status, means that no other possible conclusion can be drawn. In estimating the proportion of new employment growth due to participation in the CDEP scheme, much depends on assumptions made regarding the ratio of CDEP scheme workers to participants. The 60 per cent ratio employed here is a best estimate using the scant evidence available from the 1993 review of the CDEP scheme (Deloitte Touche Tohmatsu 1993: 51). Clearly, a higher (or lower) ratio would increase (or decrease) the contribution of CDEP scheme employment to total employment with associated policy significance. With this in mind, and given the continued expansion of the CDEP scheme around Australia since the 1991 Census, it is essential that steps be taken to ensure that scheme participants are adequately identified in official statistics. Apart from improving program monitoring, one possible means of achieving this would be to use a prompt to indicate community organisations participating in the CDEP scheme as employers in answer to the employer question on the 1996 Census schedule and make provision for this as a coding option for industry sector.

Contrasting with the expansion of CDEP scheme employment is the general lack of growth, and in some cases actual decline, in urban-based public and private sector jobs. While this runs counter to expectations, given the strength of program efforts to encourage such employment, it

may be that the impact of AEDP public and private sector programs in the context of a depressed mainstream labour market has been to simply ameliorate what might otherwise have been a far worse outcome. This proposition cannot be validated from census data alone and requires close scrutiny of DEET's program placement and post program monitoring (PPM) data to examine the precise nature and spatial application of labour market programs, as well as their links with employment outcomes. However, it is clear that some Aborigines and Torres Strait Islanders performed notably better than non-indigenous Australians in many areas of the labour market during the intercensal period and this alone suggests that focused labour market programs have left their mark.

An anticipated corollary of such program-driven job growth has been an increased concentration of Aboriginal employment into narrower segments of the labour market. Involvement in public administration and community service industries, for example, is now more concentrated than before, as is employment in the local government sector and in para-professional and labouring occupations. While this may reflect, in part, census procedures for coding data, the pattern is consistent with the expanding role of Aboriginal organisations and special programs as employers of Aboriginal labour. While there is nothing inherently problematic with this, not least as it may reflect Aboriginal preferences, it does raise the issue of a likely growing dependence of Aboriginal employment on sustained public funding. Not only does this run counter to avowed aims of government policy to reduce Aboriginal dependence on the public purse, it also ties an increasing share of Aboriginal employment to the caprices of government policy.

As Altman and Daly (1992a) have noted, this poses a policy dilemma in so far as, on the one hand, striving for employment equality via the mainstream labour market exposes Aboriginal people to the vagaries of market fluctuations, while on the other hand, dependence on government subvention leaves Aboriginal employment vulnerable to changes in government policy. If, as noted, such employment is primarily in the CDEP scheme, it also hampers the longer-term AEDP goal of achieving income equality. Despite obvious growth of Aboriginal employment in Australia between 1986 and 1991, income differentials remain firmly in place not only between Aborigines and the rest of the population, but also between Aborigines resident in rural areas as opposed to those living in urban areas.

A related issue concerns the possible role of the CDEP scheme as a substitution funding regime. Given the excessive concentration of Aboriginal employment in areas of the labour market that are functionally the preserve of Commonwealth, State and Local governments, the likelihood that the CDEP scheme serves to offset responsibilities in this area has frequently been raised (Altman and Sanders 1991b: 520-1). Empirical support for such a notion has been presented by Altman and Daly (1992b) using 1986 Census data. The evidence of labour market

shifts revealed by 1991 Census data for rural and other urban areas, particularly in industry sector of employment, strengthens this hypothesis. What is not clear, however, is the extent to which apparent job losses in Commonwealth, State and private sector employment simply represent hidden transfers caused by reclassification into an expanded local government sector. Indeed, the census can provide no direct measure of employment substitution and the intercensal change data are only indicative of the possibility.

Aggregate data showing socioeconomic change clearly have the capacity to conceal important intra-regional and gender variations. In brief, marginal improvements in labour force status evident at the national level are seen to be reversed in urban areas and exaggerated in rural areas. Notwithstanding this, rural incomes remain firmly behind those in urban areas. Likewise, the economic status of indigenous women shows distinct improvement compared to that of men which, in income terms at least, has regressed. This clearly underlines the importance of assessing policy impacts on Aboriginal and Torres Strait Islander economic status at varying scales of analysis and for different sub-groups in the population.

Note

1. In estimating mean incomes, the mid-point for each income category has been taken on the assumption that individuals are evenly distributed around this mid-point. The open-ended highest category is problematic, but following Treadgold (1988) it is arbitrarily assumed that the average income received by individuals in this category was one and a half times the lower limit of the highest category. Clearly, estimates of mean incomes will vary according to the upper level adopted. In this analysis the full range of income categories has been utilised with \$50,000+ as the highest category in 1986 and \$70,000+ in 1991.

Appendix: detailed statistical tables

Table A1a. Aboriginal labour force status by section-of-State and gender, 1986-91.

	Major urban		Other urban		Rural		Total	
	1986	1991	1986	1991	1986	1991	1986	1991
Males								
Employment rate	49.5	47.9	39.9	39.8	40.1	48.5	42.3	45.0
Unemployment rate	32.9	34.7	41.8	41.5	36.4	23.4	37.6	33.7
Participation rate	73.7	73.3	68.4	68.1	63.0	63.3	67.8	67.8
Females								
Employment rate	31.0	35.9	23.0	26.6	20.2	29.1	24.2	30.0
Unemployment rate	28.8	26.8	38.1	35.8	38.3	23.5	35.3	29.5
Participation rate	43.5	49.0	37.2	41.5	32.8	38.0	37.5	42.5

Table A1b. Torres Strait Islander labour force status by section-of-State and gender, 1986-91.

	Major urban		Other urban		Rural		Total	
	1986	1991	1986	1991	1986	1991	1986	1991
Males								
Employment rate	66.9	61.8	55.6	54.1	58.2	69.0	59.3	61.2
Unemployment rate	18.8	21.4	26.5	28.9	21.4	13.4	23.0	21.7
Participation rate	82.5	78.5	75.6	76.1	74.1	80.6	77.0	78.2
Females								
Employment rate	45.3	42.6	29.0	36.7	29.3	36.9	33.7	38.8
Unemployment rate	17.8	21.2	31.4	25.0	23.8	14.2	25.1	21.1
Participation rate	55.1	54.0	42.3	49.0	38.5	43.0	45.0	49.2

Table A1c. Labour force status of non-indigenous Australians by section-of-State and gender, 1986-91.

	Major urban		Other urban		Rural		Total	
	1986	1991	1986	1991	1986	1991	1986	1991
Males								
Employment rate	77.0	73.5	75.7	72.8	76.7	74.6	76.7	73.5
Unemployment rate	8.3	12.2	9.9	12.9	9.6	11.5	8.8	12.2
Participation rate	83.9	83.7	84.0	83.6	84.8	84.3	84.1	83.8
Females								
Employment rate	52.8	57.2	46.2	51.9	50.6	54.9	51.1	55.8
Unemployment rate	8.8	10.3	11.5	11.3	9.6	9.4	9.4	10.4
Participation rate	55.1	54.0	42.3	49.0	38.5	43.0	56.5	62.2

Table A2. Employment distribution by industry division: Aborigines, Torres Strait Islanders and others, 1986-91.

Industry	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
Agriculture	7.3	4.8	-354	-13.0
Mining	1.9	1.6	94	13.2
Manufacturing	8.3	7.1	413	13.4
Electricity gas and water	1.6	0.9	-150	-24.4
Construction	5.9	4.6	81	3.7
Wholesale, retail	8.7	9.3	1,324	40.7
Transport and storage	5.7	3.7	-315	-14.8
Communication	1.6	1.3	51	8.7
Financial Services	3.8	3.7	377	26.5
Public administration	12.5	12.8	1,685	36.2
Community Services	29.8	33.0	5,170	46.4
Recreation, personal services	5.4	5.4	666	33.1
Not stated	7.5	11.8	3,009	107.9
Total	100.0	100.0	12,051	32.3
Torres Strait Islanders				
Agriculture	5.7	5.3	76	23.5
Communication	1.3	1.2	22	31.0
Community Services	18.6	20.0	472	45.1
Construction	6.5	6.6	134	36.5
Electricity gas and water	1.6	1.2	4	4.5
Financial Services	3.9	4.4	113	51.4
Manufacturing	12.6	10.2	64	9.0
Mining	2.2	1.7	5	4.0
Public administration	9.4	11.3	323	60.9
Recreation, personal services	5.6	7.0	213	67.4
Transport and storage	9.5	5.1	-145	-27.1
Wholesale, retail	14.9	14.5	257	30.6
Not stated	8.2	11.5	410	88.6
Total	100.0	100.0	1,948	34.6
Others				
Agriculture	5.6	4.5	-43,410	-12.0
Communication	2.1	1.7	-18,117	-13.4
Community Services	17.3	17.6	125,583	11.2
Construction	6.6	5.9	-5,571	-1.3
Electricity gas and water	1.9	1.3	-34,568	-27.6
Financial Services	10.2	11.2	125,848	19.1
Manufacturing	15.0	13.2	-43,756	-4.5
Mining	1.4	1.2	-5,349	-5.9
Public administration	6.0	5.6	8,168	2.1
Recreation, personal services	6.1	7.0	100,699	25.7
Transport and storage	5.3	4.6	-20,764	-6.0
Wholesale, retail	18.9	18.9	110,248	9.0
Not stated	3.7	7.4	282,706	118.3
Total	100.0	100.0	581,717	9.0

Table A3a. Change in Aboriginal employment by industry division and section-of-State, 1986-91.

Industry division	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Agriculture	0.8	0.5	-12	-13.6
Mining	0.4	0.5	21	42.9
Manufacturing	13.3	10.5	53	3.5
Electricity gas and water	1.8	1.2	-25	-12.2
Construction	6.4	5.8	127	17.3
Wholesale, retail	12.0	12.9	553	40.2
Transport and storage	5.6	4.6	51	7.9
Communication	2.6	2.5	83	28.3
Financial services	6.5	6.4	214	28.7
Public administration	14.3	13.1	323	19.7
Community services	22.9	23.1	832	31.6
Recreation, personal services	6.9	7.7	356	44.8
Not stated	6.5	11.2	933	125.2
Total	100.0	100.0	3,509	30.6
Other urban				
Agriculture	3.7	3.4	64	12.1
Mining	3.3	3.0	39	8.2
Manufacturing	8.1	7.9	218	18.9
Electricity gas and water	2.0	1.2	-75	-26.1
Construction	6.6	5.2	-37	-3.9
Wholesale, retail	8.6	9.7	468	38.3
Transport and storage	7.3	4.2	-303	-29.2
Communication	1.7	1.1	-41	-17.2
Financial services	3.6	3.5	99	19.4
Public administration	14.0	14.3	485	24.3
Community services	27.7	27.0	723	18.3
Recreation, personal services	5.8	6.1	231	28.0
Not stated	7.8	13.3	1,192	107.1
Total	100.0	100.0	3,063	21.4
Rural				
Agriculture	18.2	9.9	-406	-19.4
Mining	1.6	1.3	34	18.5
Manufacturing	3.6	3.3	142	34.1
Electricity gas and water	1.1	0.4	-50	-41.0
Construction	4.5	3.0	-9	-1.7
Wholesale, retail	5.7	5.6	303	46.3
Transport and storage	3.8	2.2	-63	-14.2
Communication	0.5	0.4	9	17.0
Financial services	1.5	1.4	64	37.9
Public administration	8.8	11.1	877	86.4
Community services	39.4	47.9	3,615	79.6
Recreation, personal services	3.4	2.8	79	20.2
Not stated	8.1	10.7	884	95.0
Total	100.0	100.0	5,479	47.5

Table A3b. Change in Torres Strait Islander employment by industry division and section-of-State, 1986-91.

Industry division	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Agriculture	0.8	0.4	-4	-28.6
Mining	0.4	0.7	11	157.1
Manufacturing	19.4	13.9	8	2.2
Electricity gas and water	2.1	1.5	1	2.6
Construction	6.8	7.8	81	64.8
Wholesale, retail	21.1	19.3	121	31.0
Transport and storage	6.9	4.8	1	0.8
Communication	1.7	2.0	22	71.0
Financial services	6.8	7.6	76	60.8
Public administration	6.2	8.1	99	86.8
Community services	14.9	14.0	94	34.2
Recreation, personal services	6.8	7.3	68	54.4
Not stated	6.4	12.6	215	180.7
Total	100.0	100.0	793	42.9
Other urban				
Agriculture	3.4	4.1	28	33.7
Mining	3.9	3.0	-15	-15.6
Manufacturing	11.0	11.4	35	12.9
Electricity gas and water	1.5	1.5	5	13.9
Construction	6.8	7.2	26	15.6
Wholesale, retail	12.8	15.8	109	34.6
Transport and storage	12.7	6.6	-135	-43.3
Communication	1.5	0.9	-13	-34.2
Financial services	3.3	4.2	31	38.3
Public administration	9.4	7.5	-30	-13.0
Community services	19.1	16.8	-19	-4.0
Recreation, personal services	6.2	8.5	74	48.1
Not stated	8.5	12.6	130	61.9
Total	100.0	100.0	226	9.2
Rural				
Agriculture	17.1	12.4	52	23.0
Mining	1.7	1.4	9	39.1
Manufacturing	6.0	4.4	21	26.6
Electricity gas and water	1.1	0.5	-2	-14.3
Construction	5.7	4.5	27	36.0
Wholesale, retail	10.2	7.2	27	20.1
Transport and storage	7.3	3.8	-11	-11.5
Communication	0.2	0.7	13	650.0
Financial services	1.1	0.9	6	42.9
Public administration	14.0	19.5	254	137.3
Community services	22.8	31.0	397	131.9
Recreation, personal services	2.8	4.8	71	191.9
Not stated	10.2	8.8	65	48.5
Total	100.0	100.0	929	70.4

Table A3c. Change in non-indigenous employment by industry division and section-of-State, 1986-91.

Industry division	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Agriculture	0.5	0.4	-2,242	-10.0
Mining	0.6	0.5	-3,001	-12.1
Manufacturing	17.1	14.4	-61,774	-8.6
Electricity gas and water	1.7	1.1	-22,892	-31.2
Construction	6.3	5.7	-5,919	-2.2
Wholesale, retail	19.7	19.6	61,608	7.4
Transport and storage	5.4	4.8	-9,562	-4.2
Communication	2.2	1.8	-10,821	-11.5
Financial services	12.4	13.4	91,847	17.6
Public administration	6.2	5.8	6,297	2.4
Community services	18.0	18.2	74,134	9.8
Recreation, personal services	6.0	6.9	62,975	24.8
Not stated	3.9	7.3	168,174	103.0
Total	100.0	100.0	348,824	8.3
Other urban				
Agriculture	3.6	3.1	-2,054	-4.4
Mining	3.8	3.1	-4,791	-9.7
Manufacturing	12.7	12.0	5,017	3.0
Electricity gas and water	2.8	2.0	-9,076	-24.5
Construction	7.4	6.6	-3,485	-3.6
Wholesale, retail	20.1	20.1	24,227	9.2
Transport and storage	5.9	4.7	-10,091	-13.1
Communication	2.2	1.6	-6,062	-21.4
Financial services	7.2	7.9	19,075	20.3
Public administration	6.2	5.5	-2,286	-2.8
Community services	18.0	18.2	25,770	11.0
Recreation, personal services	7.0	8.0	23,020	25.2
Not stated	3.2	7.3	62,147	149.3
Total	100.0	100.0	121,411	9.3
Rural				
Agriculture	31.1	24.1	-39,114	-13.4
Mining	1.8	1.8	2,443	14.7
Manufacturing	9.0	9.2	13,001	15.4
Electricity gas and water	1.6	1.2	-2,600	-17.6
Construction	6.4	6.1	3,833	6.4
Wholesale, retail	13.3	14.2	24,413	19.6
Transport and storage	4.2	3.7	-1,111	-2.8
Communication	1.4	1.1	-1,234	-9.7
Financial services	4.8	5.7	14,926	33.1
Public administration	4.7	4.6	4,157	9.3
Community services	13.2	14.2	25,679	20.7
Recreation, personal services	5.0	5.9	14,704	31.2
Not stated	3.6	8.2	52,385	154.4
Total	100.0	100.0	111,482	11.9

Table A4a. Change in Aboriginal employment by industry division and gender, 1986-91.

Industry division	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Agriculture	9.8	6.8	-302	-13.3
Mining	2.8	2.5	66	10.1
Manufacturing	10.0	9.0	270	11.6
Electricity gas and water	2.4	1.4	-134	-24.1
Construction	8.6	7.1	57	2.8
Wholesale, retail	7.8	8.7	717	39.7
Transport and storage	8.2	5.5	-315	-16.5
Communication	1.7	1.5	32	8.1
Financial services	2.7	2.7	142	22.3
Public administration	13.3	13.3	757	24.4
Community services	20.9	26.1	2,713	55.7
Recreation, personal services	4.0	4.0	242	25.9
Not stated	7.7	11.4	1,534	85.8
Total	100.0	100.0	5,779	24.8
Females				
Agriculture	3.1	1.9	-52	-11.9
Mining	0.4	0.4	28	50.0
Manufacturing	5.4	4.4	143	18.9
Electricity gas and water	0.4	0.2	-16	-27.1
Construction	1.3	1.0	24	13.0
Wholesale, retail	10.3	10.1	607	42.0
Transport and storage	1.5	1.1	0	0.0
Communication	1.4	1.0	19	9.9
Financial services	5.6	5.0	235	29.8
Public administration	11.0	12.2	928	59.9
Community services	44.6	43.0	2,457	39.2
Recreation, personal services	7.7	7.4	424	39.3
Not stated	7.1	12.2	1,475	147.2
Total	100.0	100.0	6,272	44.7

Table A4b. Change in Torres Strait Islander employment by industry division and gender, 1986-91.

Industry division	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Agriculture	7.2	7.0	70	27.5
Mining	3.0	2.3	-1	-0.9
Manufacturing	14.7	12.0	34	6.5
Electricity gas and water	2.1	1.7	4	5.5
Construction	9.5	10.0	124	36.9
Wholesale, retail	13.0	12.5	118	25.7
Transport and storage	13.5	7.5	-135	-28.2
Communication	1.3	1.5	23	51.1
Financial services	2.7	3.0	43	44.3
Public administration	10.5	12.7	215	58.0
Community services	10.2	14.1	288	79.8
Recreation, personal services	3.6	5.0	101	78.3
Not stated	8.9	10.7	179	57.0
Total	100.0	100.0	1,063	30.0
Females				
Agriculture	3.3	2.5	6	8.8
Mining	0.9	0.8	6	31.6
Manufacturing	9.0	7.3	30	16.0
Electricity gas and water	0.7	0.5	0	0.0
Construction	1.5	1.4	10	32.3
Wholesale, retail	18.2	17.4	139	36.7
Transport and storage	2.7	1.5	-10	-17.9
Communication	1.2	0.8	-1	-3.8
Financial services	5.9	6.5	70	56.9
Public administration	7.6	9.0	108	67.9
Community services	32.9	29.3	184	26.8
Recreation, personal services	9.0	10.1	112	59.9
Not stated	7.1	12.8	231	155.0
Total	100.0	100.0	885	42.4

Table A4c. Change in non-indigenous employment by industry division and gender, 1986-91.

Industry division	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Agriculture	6.4	5.5	-27,216	-10.9
Mining	2.1	1.9	-6,104	-7.5
Manufacturing	18.1	16.5	-43,127	-6.1
Electricity gas and water	2.9	2.0	-33,170	-29.6
Construction	9.4	8.9	-8,462	-2.3
Wholesale, retail	17.5	18.0	41,862	6.1
Transport and storage	7.2	6.2	-29,799	-10.6
Communication	2.5	2.0	-17,234	-17.3
Financial services	8.8	9.8	53,224	15.4
Public administration	6.7	6.2	-10,899	-4.2
Community services	10.2	10.3	17,893	4.5
Recreation, personal services	4.6	5.4	40,616	22.7
Not stated	3.7	7.2	145,623	99.4
Total	100.0	100.0	123,207	3.1
Females				
Agriculture	4.4	3.2	-16,194	-14.5
Mining	0.4	0.3	755	8.4
Manufacturing	10.3	8.7	-629	-0.2
Electricity gas and water	0.5	0.4	-1,398	-10.7
Construction	2.2	1.9	2,891	5.3
Wholesale, retail	21.0	20.0	68,386	12.8
Transport and storage	2.4	2.4	9,035	14.6
Communication	1.4	1.1	-883	-2.5
Financial services	12.4	12.9	72,624	23.0
Public administration	4.9	4.8	19,067	15.2
Community services	28.2	27.5	107,690	15.0
Recreation, personal services	8.4	9.1	60,083	28.2
Not stated	3.6	7.6	137,083	148.3
Total	100.0	100.0	458,510	18.0

Table A5. Employment distribution by occupation: Aborigines, Torres Strait Islanders and others, 1986-91.

Occupational group	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
Managers and administrators	3.2	4.1	846	71.6
Professionals	5.1	7.2	1,673	88.5
Para-professionals	6.1	7.5	1,417	62.2
Tradespersons	13.5	12.1	951	18.9
Clerks	15.7	13.0	580	9.9
Personal services and sales	7.8	9.4	1,727	59.4
Plant and machine operators	10.0	8.3	358	9.6
Labourers and related workers	32.3	25.5	519	4.3
Not stated	6.3	12.8	3,980	169.9
Total	100.0	100.0	12,051	32.3
Torres Strait Islanders				
Managers and administrators	4.5	5.7	176	69.3
Professionals	4.1	4.8	132	57.4
Para-professionals	4.8	5.8	172	63.5
Tradespersons	15.6	14.6	225	25.5
Clerks	14.1	11.9	106	13.3
Personal services and sales	9.6	11.0	289	53.2
Plant and machine operators	11.7	9.7	73	11.1
Labourers and related workers	30.8	24.5	123	7.1
Not stated	4.7	12.1	652	247.0
Total	100.0	100.0	1,948	34.6
Others				
Managers and administrators	11.8	12.2	98,855	13.0
Professionals	11.9	12.6	119,252	15.5
Para-professionals	6.5	6.8	57,472	13.7
Tradespersons	15.3	13.5	-38,291	-3.9
Clerks	17.1	15.0	-44,791	-4.0
Personal services and sales	12.4	13.9	173,196	21.5
Plant and machine operators	8.2	7.0	-34,285	-6.5
Labourers and related workers	14.3	12.3	-56,234	-6.1
Not stated	2.6	6.7	306,543	182.4
Total	100.0	100.0	581,717	9.0

Table A6a. Change in Aboriginal employment by occupation and section-of-State, 1986-91.

Occupational group	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Managers and administrators	3.2	4.6	321	87.9
Professionals	6.3	10.0	767	105.6
Para-professionals	6.4	7.1	338	46.2
Tradespersons	14.1	12.4	233	14.4
Clerks	22.0	18.7	279	11.1
Personal services and sales	8.8	11.1	651	64.4
Plant and machine operators	9.9	8.6	142	12.5
Labourers and related workers	24.5	17.0	-260	-9.2
Not stated	4.7	10.5	1,038	193.3
Total	100.0	100.0	3,509	30.6
Other urban				
Managers and administrators	2.5	3.3	213	59.0
Professionals	4.9	7.4	588	84.4
Para-professionals	5.9	7.0	365	43.2
Tradespersons	14.4	12.6	120	5.8
Clerks	15.6	13.3	86	3.9
Personal services and sales	8.3	10.1	576	48.8
Plant and machine operators	11.9	9.2	-106	-6.2
Labourers and related workers	31.2	23.6	-362	-8.1
Not stated	5.4	13.5	1,583	206.4
Total	100.0	100.0	3,063	21.4
Rural				
Managers and administrators	4.0	4.5	312	68.4
Professionals	4.1	4.6	318	67.9
Para-professionals	6.1	8.3	714	101.9
Tradespersons	11.9	11.6	598	43.7
Clerks	9.5	7.7	215	19.7
Personal services and sales	6.2	7.2	500	69.6
Plant and machine operators	7.8	7.2	322	35.7
Labourers and related workers	41.6	34.9	1,141	23.8
Not stated	9.0	14.1	1,359	130.9
Total	100.0	100.0	5,479	47.5

Table A6b. Change in Torres Strait Islander employment by occupation and section-of-State, 1986-91.

Occupation	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Managers and administrators	4.0	5.0	59	80.8
Professionals	3.9	5.0	60	83.3
Para-professionals	4.1	6.1	86	114.7
Tradespersons	16.5	16.1	120	39.3
Clerks	19.2	15.0	41	11.5
Personal services and sales	12.8	12.8	101	42.8
Plant and machine operators	12.2	9.5	27	12.0
Labourers and related workers	21.9	18.3	80	19.8
Not stated	5.6	12.2	219	212.6
Total	100.0	100.0	793	42.9
Other urban				
Managers and administrators	3.0	2.9	2	2.7
Professionals	3.7	4.5	29	31.5
Para-professionals	4.6	4.8	14	12.3
Tradespersons	16.5	15.7	17	4.2
Clerks	12.9	13.0	33	10.4
Personal services and sales	8.4	12.2	120	58.0
Plant and machine operators	13.1	10.6	-38	-11.7
Labourers and related workers	33.7	26.3	-124	-14.9
Not stated	4.0	10.1	173	174.7
Total	100.0	100.0	226	9.2
Rural				
Managers and administrators	8.0	9.8	115	108.5
Professionals	5.0	4.8	43	65.2
Para-professionals	6.2	6.8	72	87.8
Tradespersons	12.9	11.5	88	51.8
Clerks	9.5	7.0	32	25.6
Personal services and sales	7.6	7.5	68	68.0
Plant and machine operators	8.3	8.6	84	76.4
Labourers and related workers	37.8	29.6	167	33.5
Not stated	4.7	14.3	260	419.4
Total	100.0	100.0	929	70.4

Table A6c. Change in non-indigenous employment by occupation and section-of-State, 1986-91.

Occupation	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Managers and administrators	8.6	10.0	93,055	25.7
Professionals	13.3	14.2	86,871	15.4
Para-professionals	6.7	7.0	35,489	12.5
Tradespersons	15.1	13.0	-45,246	-7.1
Clerks	19.6	16.9	-56,715	-6.8
Personal services and sales	12.9	14.4	114,343	21.0
Plant and machine operators	7.6	6.4	-28,063	-8.7
Labourers and related workers	13.5	11.5	-46,562	-8.2
Not stated	2.5	6.6	195,652	182.6
Total	100.0	100.0	348,824	8.3
Other urban				
Managers and administrators	9.0	9.5	18,781	16.0
Professionals	9.9	10.2	15,892	12.3
Para-professionals	6.7	6.9	11,072	12.6
Tradespersons	17.6	15.7	-6,024	-2.6
Clerks	14.0	12.9	471	0.3
Personal services and sales	13.9	15.2	35,268	19.4
Plant and machine operators	10.2	8.7	-8,766	-6.6
Labourers and related workers	16.2	14.2	-9,808	-4.6
Not stated	2.5	6.8	64,525	199.6
Total	100.0	100.0	121,411	9.3
Rural				
Managers and administrators	29.8	25.4	-12,981	-4.6
Professionals	8.0	8.7	16,489	22.0
Para-professionals	5.0	5.5	10,911	23.3
Tradespersons	12.9	12.8	12,979	10.7
Clerks	10.0	10.0	11,453	12.2
Personal services and sales	8.3	9.7	23,585	30.2
Plant and machine operators	8.1	7.5	2,544	3.4
Labourers and related workers	14.9	13.3	136	0.1
Not stated	3.0	7.1	46,366	162.0
Total	100.0	100.0	111,482	11.9

Table A7a. Change in Aboriginal employment by occupation and gender, 1986-91.

Occupation	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Managers and administrators	3.7	4.7	521	60.9
Professionals	4.0	5.4	624	66.4
Para-professionals	5.3	7.3	879	70.8
Tradespersons	18.5	17.4	748	17.4
Clerks	5.8	5.1	121	8.9
Personal services and sales	3.2	3.9	402	54.6
Plant and machine operators	14.6	12.7	295	8.7
Labourers and related workers	38.5	30.5	-109	-1.2
Not stated	6.3	12.9	2,298	157.2
Total	100.0	100.0	5,779	24.8
Females				
Managers and administrators	2.3	3.2	325	99.7
Professionals	6.8	9.9	1,049	110.3
Para-professionals	7.4	7.8	538	51.9
Tradespersons	5.3	4.6	203	27.5
Clerks	32.0	24.4	459	10.2
Personal services and sales	15.5	17.2	1,325	61.0
Plant and machine operators	2.4	2.0	63	18.7
Labourers and related workers	22.1	18.3	628	20.3
Not stated	6.3	12.6	1,682	191.1
Total	100.0	100.0	6,272	44.7

Table A7b. Change in Torres Strait Islander employment by occupation and gender, 1986-91.

Occupation	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Managers and administrators	4.8	6.2	117	68.4
Professionals	3.3	3.6	50	43.1
Para-professionals	4.1	5.6	113	76.9
Tradespersons	21.5	21.4	221	28.9
Clerks	5.0	3.7	-9	-5.0
Personal services and sales	4.5	5.0	70	43.5
Plant and machine operators	16.9	14.3	57	9.5
Labourers and related workers	34.8	28.0	57	4.6
Not stated	4.9	12.2	387	221.1
Total	100.0	100.0	1,063	30.0
Females				
Managers and administrators	4.0	4.8	59	71.1
Professionals	5.5	6.6	82	71.9
Para-professionals	5.9	6.2	59	47.6
Tradespersons	5.6	4.1	4	3.4
Clerks	29.6	24.7	115	18.6
Personal services and sales	18.3	20.2	219	57.3
Plant and machine operators	2.8	2.5	16	27.6
Labourers and related workers	24.0	19.1	66	13.2
Not stated	4.3	11.9	265	297.8
Total	100.0	100.0	885	42.4

Table A7c. Change in non-indigenous employment by occupation and gender, 1986-91.

Occupation	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Managers and administrators	14.5	15.3	49,861	8.7
Professionals	11.7	12.2	33,870	7.3
Para-professionals	6.1	6.4	18,709	7.8
Tradespersons	22.8	20.9	-48,713	-5.4
Clerks	7.4	6.0	-50,635	-17.4
Personal services and sales	8.1	8.9	43,281	13.7
Plant and machine operators	11.3	10.4	-25,507	-5.7
Labourers and related workers	15.2	13.1	-65,216	-10.9
Not stated	2.7	6.8	167,557	156.3
Total	100.0	100.0	123,207	3.1
Females				
Managers and administrators	7.5	7.9	48,994	25.8
Professionals	12.0	13.0	85,382	27.9
Para-professionals	7.0	7.3	38,763	21.6
Tradespersons	3.8	3.5	10,422	10.9
Clerks	32.0	27.3	5,844	0.7
Personal services and sales	19.2	20.6	129,915	26.6
Plant and machine operators	3.3	2.5	-8,778	-10.3
Labourers and related workers	12.8	11.1	8,982	2.8
Not stated	2.4	6.7	138,986	228.3
Total	100.0	100.0	458,510	18.0

Table A8. Change in employment by industry sector: Aborigines, Torres Strait Islanders, and others, 1986-91.

Industry sector	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
Australian government	9.8	8.6	635	17.5
State government	23.5	17.0	-334	-3.8
Local government	7.0	9.6	2,168	83.7
Private sector	52.7	54.4	7,216	36.8
Not stated	7.0	10.3	2,470	94.8
Total	100.0	100.0	12,155	32.7
Torres Strait Islanders				
Australian government	6.7	5.4	31	8.2
State government	22.3	14.7	-149	-11.8
Local government	6.2	9.4	363	103.1
Private sector	58.5	60.7	1,284	38.8
Not stated	6.3	9.7	380	106.4
Total	100.0	100.0	1,909	33.7
Others				
Australian government	7.7	6.2	-56,706	-11.4
State government	15.7	13.9	-31,823	-3.1
Local government	2.2	2.0	1,263	0.9
Private sector	72.4	72.0	393,403	8.4
Not stated	2.1	5.8	275,592	207.5
Total	100.0	100.0	581,729	9.0

Table A9a. Change in Aboriginal employment by industry sector and section-of-State, 1986-91.

Industry	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Australian government	16.1	14.3	298	16.2
State government	19.6	18.2	480	21.4
Local government	4.5	2.8	-89	-17.4
Private sector	54.4	54.7	1,939	31.1
Not stated	5.4	9.9	863	140.6
Total	100.0	100.0	3,491	30.5
Other urban				
Australian government	9.8	8.3	38	2.7
State government	27.3	19.9	-426	-11.0
Local government	8.6	10.0	517	42.2
Private sector	47.4	50.2	1,974	29.2
Not stated	7.0	11.6	1,010	101.2
Total	100.0	100.0	3,113	21.8
Rural				
Australian government	3.4	4.0	299	76.7
State government	22.7	13.0	-388	-14.9
Local government	7.4	15.2	1,740	203.5
Private sector	57.8	58.3	3,303	49.8
Not stated	8.7	9.3	597	60.1
Total	100.0	100.0	5,551	48.4

Table A9b. Change in Torres Strait Islander employment by industry sector and section-of-State, 1986-91.

Industry	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Australian government	8.4	8.5	63	39.9
State government	14.4	11.4	28	10.4
Local government	2.4	2.6	24	53.3
Private sector	70.7	66.5	410	31.0
Not stated	4.1	11.0	211	277.6
Total	100.0	100.0	736	39.3
Other urban				
Australian government	7.1	4.9	-44	-25.4
State government	25.8	18.4	-143	-22.7
Local government	6.3	4.9	-25	-16.1
Private sector	53.7	61.8	324	24.7
Not stated	7.0	10.0	93	54.1
Total	100.0	100.0	205	8.4
Rural				
Australian government	3.4	2.5	12	26.1
State government	26.9	14.2	-34	-9.4
Local government	11.3	22.3	364	239.5
Private sector	50.3	53.0	550	81.1
Not stated	8.1	8.0	76	69.7
Total	100.0	100.0	968	71.9

Table A9c. Change in non-indigenous employment by industry sector and section-of-State, 1986-91.

Industry sector	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
Australian government	8.8	7.2	-43,012	-11.6
State government	15.2	13.6	-20,993	-3.3
Local government	1.8	1.7	704	0.9
Private sector	71.9	71.6	237,249	7.8
Not stated	2.2	5.9	174,925	187.4
Total	100.0	100.0	348,873	8.3
Other urban				
Australian government	6.4	4.9	-13,188	-15.8
State government	19.0	16.2	-16,344	-6.6
Local government	3.2	2.9	-923	-2.2
Private sector	69.6	70.2	93,734	10.3
Not stated	1.9	5.8	58,176	239.0
Total	100.0	100.0	121,455	9.3
Rural				
Australian government	4.5	4.0	-506	-1.2
State government	12.9	12.1	5,514	4.5
Local government	2.3	2.2	1,482	6.8
Private sector	78.6	76.2	62,420	8.5
Not stated	1.6	5.5	42,491	280.9
Total	100.0	100.0	111,401	11.9

Table A10a. Change in Aboriginal employment by industry sector and gender, 1986-91.

Industry sector	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Australian government	8.8	7.5	154	7.6
State government	21.0	14.0	-798	-16.4
Local government	9.5	11.6	1,170	53.2
Private sector	54.2	56.9	3,956	31.5
Not stated	6.6	10.0	1,361	88.8
Total	100.0	100.0	5,843	25.2
Females				
Australian government	11.4	10.2	481	30.2
State government	27.7	21.4	464	12.0
Local government	2.8	6.8	998	255.9
Private sector	50.4	50.8	3,260	46.3
Not stated	7.7	10.8	1,109	103.4
Total	100.0	100.0	6,312	45.2

Table A10b. Change in Torres Strait Islander employment by industry sector and gender, 1986-91.

Industry sector	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Australian government	6.2	4.9	3	1.4
State government	20.8	12.7	-161	-21.6
Local government	8.0	12.0	265	92.7
Private sector	58.8	61.0	700	33.2
Not stated	6.3	9.5	209	92.1
Total	100.0	100.0	1,016	28.3
Females				
Australian government	7.5	6.2	28	18.1
State government	24.9	17.8	12	2.3
Local government	3.2	5.5	98	148.5
Private sector	58.1	60.3	584	48.6
Not stated	6.3	10.2	171	131.5
Total	100.0	100.0	893	43.2

Table A10c. Change in non-indigenous employment by industry sector and gender, 1986-91.

Industry	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
Australian government	8.5	6.9	-52,738	-15.8
State government	14.2	11.9	-73,664	-13.2
Local government	2.7	2.4	-9,871	-9.4
Private sector	72.8	73.2	105,838	3.7
Not stated	1.8	5.6	153,692	211.8
Total	100.0	100.0	123,257	3.1
Females				
Australian government	6.5	5.3	-3,968	-2.4
State government	18.0	16.6	41,841	9.2
Local government	1.4	1.6	11,134	31.4
Private sector	71.8	70.4	287,565	15.7
Not stated	2.4	6.1	121,900	202.4
Total	100.0	100.0	458,472	18.0

Table A11. Change in employment by hours worked: Aborigines, Torres Strait Islanders and others, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Aborigines				
0-24	17.7	24.9	5,686	86.3
25-34	7.3	8.8	1,639	60.3
Total part time	25.0	33.7	7,325	78.7
35-39	22.4	21.3	2,162	26.0
40+	46.6	37.1	971	5.6
Total full time	69.0	58.3	3,133	12.2
Not stated	6.0	8.0	1,697	75.8
Total	100.0	100.0	12,155	32.7
Torres Strait Islanders				
0-24	17.0	20.6	596	61.9
25-34	5.4	7.8	289	95.1
Total part time	22.4	28.4	885	69.9
35-39	18.6	19.0	384	36.4
40+	52.4	45.0	440	14.8
Total full time	71.0	64.0	824	20.5
Not stated	6.6	7.6	200	53.6
Total	100.0	100.0	1,909	33.7
Others				
0-24	16.9	19.1	250,692	22.9
25-34	5.8	6.7	97,036	25.7
Total part time	22.7	25.8	347,728	23.6
35-39	25.0	22.4	-38,411	-2.4
40+	49.7	46.6	72,282	2.2
Total full time	74.7	69.0	33,871	0.7
Not stated	2.6	5.2	200,130	119.9
Total	100.0	100.0	581,729	9.0

Table A12a. Change in Aboriginal employment by hours worked and section-of-State, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
0-24	14.2	16.6	846	52.0
25-34	6.0	7.1	376	55.0
Total part time	20.2	23.7	1,222	52.9
35-39	30.5	28.1	714	20.5
40+	45.1	40.9	943	18.3
Total full time	75.6	69.0	1,657	19.2
Not stated	4.2	7.3	612	126.4
Total	100.0	100.0	3,491	30.5
Other urban				
0-24	16.8	23.7	1,729	72.3
25-34	6.1	8.1	527	60.4
Total part time	22.9	31.8	2,256	69.1
35-39	22.8	22.2	608	18.7
40+	48.3	37.4	-378	-5.5
Total full time	71.0	59.6	230	2.3
Not stated	6.1	8.6	627	72.5
Total	100.0	100.0	3,113	21.8
Rural				
0-24	22.4	33.3	3,111	121.2
25-34	10.1	11.1	736	63.3
Total part time	32.5	44.5	3,847	103.2
35-39	13.9	14.3	840	52.8
40+	45.9	33.3	406	7.7
Total full time	59.8	47.6	1,246	18.2
Not stated	7.8	7.9	458	51.4
Total	100.0	100.0	5,551	48.4

Table A12b. Change in Torres Strait Islander employment by hours worked and section-of-State, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
0-24	14.7	19.3	229	83.3
25-34	5.9	5.9	45	40.9
Total part time	20.6	25.3	274	71.2
35-39	27.1	23.6	107	21.1
40+	48.2	43.3	227	25.2
Total full time	75.3	66.9	334	23.7
Not stated	4.1	7.9	128	166.2
Total	100.0	100.0	736	39.3
Other urban				
0-24	16.6	19.8	120	29.6
25-34	4.7	7.4	82	71.3
Total part time	21.3	27.3	202	38.8
35-39	17.8	20.0	95	21.9
40+	53.1	44.3	-124	-9.6
Total full time	70.8	64.3	-29	-1.7
Not stated	7.9	8.5	32	16.7
Total	100.0	100.0	205	8.4
Rural				
0-24	21.0	22.9	247	87.3
25-34	5.9	10.4	162	205.1
Total part time	26.9	33.3	409	113.0
35-39	8.3	12.7	182	162.5
40+	57.1	47.8	337	43.8
Total full time	65.4	60.5	519	58.9
Not stated	7.7	6.2	40	38.5
Total	100.0	100.0	968	71.9

Table A12c. Change in non-indigenous employment by hours worked and section-of-State, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Major urban				
0-24	16.5	18.9	167,894	24.1
25-34	6.0	6.8	56,645	22.5
Total part time	22.5	25.7	224,539	23.7
35-39	28.1	24.4	-70,660	-6.0
40+	47.0	44.9	67,820	3.4
Total full time	75.1	69.3	-2,840	-0.1
Not stated	2.4	5.0	127,174	123.2
Total	100.0	100.0	348,873	8.3
Other urban				
0-24	18.4	20.1	47,788	19.9
25-34	5.8	6.9	22,955	30.1
Total part time	24.2	27.1	70,743	22.3
35-39	22.4	21.3	11,439	3.9
40+	50.9	46.3	-3,910	-0.6
Total full time	73.3	67.6	7,529	0.8
Not stated	2.5	5.3	43,183	133.1
Total	100.0	100.0	121,455	9.3
Rural				
0-24	16.6	18.1	35,010	22.5
25-34	5.3	6.4	17,436	35.2
Total part time	21.8	24.5	52,446	25.6
35-39	14.7	15.1	20,810	15.0
40+	60.1	54.5	8,372	1.5
Total full time	74.8	69.7	29,182	4.1
Not stated	3.3	5.8	29,773	95.3
Total	100.0	100.0	111,401	11.9

Table A13a. Change in Aboriginal employment by hours worked and gender, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
0-24	13.0	20.4	2,910	96.8
25-34	5.3	7.4	908	73.5
Total part time	18.3	27.8	3,818	90.0
35-39	22.4	21.0	885	17.0
40+	53.3	43.8	335	2.7
Total full time	75.8	64.7	1,220	6.9
Not stated	6.0	7.5	805	58.2
Total	100.0	100.0	5,843	25.2
Females				
0-24	25.6	31.3	2,776	77.6
25-34	10.6	10.9	731	49.3
Total part time	36.2	42.2	3,507	69.3
35-39	22.3	21.7	1,277	40.9
40+	35.3	27.5	636	12.9
Total full time	57.7	49.1	1,913	23.7
Not stated	6.1	8.6	892	104.1
Total	100.0	100.0	6,312	45.2

Table A13b. Change in Torres Strait Islander employment distribution by hours worked and gender, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
0-24	12.5	14.5	222	49.6
25-34	3.5	6.2	158	124.4
Total part time	16.0	20.7	380	66.1
35-39	17.0	18.9	261	42.8
40+	60.1	53.0	284	13.2
Total full time	77.0	71.9	545	19.7
Not stated	7.0	7.4	91	36.4
Total	100.0	100.0	1,016	28.3
Females				
0-24	24.9	30.0	374	72.6
25-34	8.6	10.4	131	74.0
Total part time	33.5	40.4	505	73.0
35-39	21.5	19.1	123	27.7
40+	39.1	32.6	156	19.3
Total full time	60.6	51.7	279	22.3
Not stated	5.9	7.8	109	88.6
Total	100.0	100.0	893	43.2

Table A13c. Change in non-indigenous employment by hours worked and gender, 1986-91.

Hours worked	Per cent employed		Change	
	1986	1991	Net	Per cent
Males				
0-24	8.9	10.1	58,666	16.7
25-34	3.4	4.1	31,292	23.4
Total part time	12.3	14.2	89,958	18.6
35-39	25.6	22.6	-89,892	-8.9
40+	59.6	58.0	7,893	0.3
Total full time	85.3	80.6	-81,999	-2.5
Not stated	2.4	5.2	115,298	122.4
Total	100.0	100.0	123,257	3.1
Females				
0-24	29.2	31.1	192,026	25.9
25-34	9.6	10.3	65,744	27.0
Total part time	38.8	41.4	257,770	26.1
35-39	24.1	22.1	51,481	8.4
40+	34.3	31.2	64,389	7.4
Total full time	58.4	53.3	115,870	7.8
Not stated	2.9	5.2	84,832	116.7
Total	100.0	100.0	458,472	18.0

Table A14. Change in level of qualifications: Aborigines, Torres Strait Islanders and others, 1986-91.

Level of qualifications	Per cent		Change	
	1986	1991	Net	Per cent
Aborigines				
Higher degree/diploma	0.1	0.2	193	153.2
Bachelor degree	0.2	0.6	591	217.3
Other diploma	0.6	1.4	1,296	186.2
Vocational	5.0	5.1	1,097	17.6
No qualification	75.5	80.1	21,350	22.8
Not stated	18.6	12.5	-5,036	-21.9
Total	100.0	100.0	19,491	15.8
Torres Strait Islanders				
Higher degree/diploma	0.05	0.2	19	237.5
Bachelor degree	0.2	0.4	43	134.4
Other diploma	0.9	1.8	181	143.7
Vocational	8.4	8.4	258	22.7
No qualification	72.5	76.0	2,819	28.7
Not stated	17.9	13.1	-246	-10.1
Total	100.0	100.0	3,074	22.7
Others				
Higher degree/diploma	1.2	1.9	102,977	68.6
Bachelor degree	3.8	5.7	289,375	63.9
Other diploma	3.5	5.2	262,305	62.6
Vocational	17.5	13.5	-323,316	-15.5
No qualification	60.3	61.2	796,054	11.0
Not stated	13.6	12.3	-5,468	-0.3
Total	100.0	100.0	1,121,927	9.4

Table A15a. Change in level of qualifications of Aborigines by section-of-State, 1986-91.

Level of qualification	Per cent		Change	
	1986	1991	Net	Per cent
Major urban				
Higher degree/diploma	0.2	0.5	110	159.4
Bachelor degree	0.6	1.4	340	180.9
Other diploma	1.0	2.4	611	197.1
Vocational	8.6	7.9	393	15.0
No qualification	74.1	76.5	6,486	25.6
Not stated	15.5	11.3	-434	-9.1
Total	100.0	100.0	7,506	24.5
Other urban				
Higher degree/diploma	0.1	0.1	28	70.0
Bachelor degree	0.1	0.4	142	240.7
Other diploma	0.5	1.2	478	203.4
Vocational	5.2	5.3	397	15.1
No qualification	77.2	81.0	7,413	19.2
Not stated	16.9	12.0	-1,642	-19.5
Total	100.0	100.0	6,816	13.6
Rural				
Higher degree/diploma	0.03	0.1	55	323.5
Bachelor degree	0.06	0.3	109	436.0
Other diploma	0.3	0.7	207	137.1
Vocational	2.3	2.7	307	31.3
No qualification	74.5	82.1	7,451	23.3
Not stated	22.7	14.1	-2,960	-30.3
Total	100.0	100.0	5,169	12.0

Table A15b. Change in level of qualifications of Torres Strait Islanders by section-of-State, 1986-91.

Level of qualification	Per cent		Change	
	1986	1991	Net	Per cent
Major urban				
Higher degree/diploma	0.05	0.3	16	800.0
Bachelor degree	0.7	1.0	30	125.0
Other diploma	0.8	2.0	80	258.1
Vocational	12.6	10.7	142	31.0
No qualification	71.0	72.6	1,490	58.1
Not stated	14.8	13.3	210	39.2
Total	100.0	100.0	1,968	54.4
Other urban				
Higher degree/diploma	0.03	0.04	1	50.0
Bachelor degree	0.06	0.2	8	200.0
Other diploma	0.9	1.6	48	85.7
Vocational	7.5	8.2	45	9.3
No qualification	73.4	76.7	178	3.7
Not stated	18.1	13.2	-322	-27.6
Total	100.0	100.0	-220	-3.4
Rural				
Higher degree/diploma	0.1	0.1	2	50.0
Bachelor degree	0.1	0.2	5	125.0
Other diploma	1.1	2.0	53	135.9
Vocational	5.5	5.7	71	36.7
No qualification	72.3	79.2	1,151	45.5
Not stated	20.8	12.8	-134	-18.4
Total	100.0	100.0	-3	-0.1

Table A15c. Change in level of qualifications of non-indigenous Australians by section-of-State, 1986-91.

Level of qualifications	Per cent		Change	
	1986	1991	Net	Per cent
Major urban				
Higher degree/diploma	1.5	2.3	77,610	67.2
Bachelor degree	4.6	6.8	218,305	62.2
Other diploma	3.6	5.3	168,094	60.6
Vocational	17.7	13.3	-253,666	-18.7
No qualification	58.4	59.4	470,361	10.5
Not stated	14.1	12.8	-7,067	-0.6
Total	100.0	100.0	673,637	8.8
Other urban				
Higher degree/diploma	0.8	1.2	14,064	68.5
Bachelor degree	2.4	3.6	40,491	65.9
Other diploma	3.2	4.9	54,087	65.5
Vocational	17.8	14.5	-51,790	-11.3
No qualification	62.6	63.5	173,330	10.8
Not stated	13.2	12.2	4,673	1.3
Total	100.0	100.0	234,855	9.2
Rural				
Higher degree/diploma	0.9	1.4	11,303	79.4
Bachelor degree	2.5	3.9	30,579	75.0
Other diploma	3.7	5.5	40,124	67.7
Vocational	17.1	14.3	-17,860	-6.4
No qualification	63.1	63.7	131,287	12.9
Not stated	12.7	11.2	-3,074	-1.5
Total	100.0	100.0	192,365	11.9

Table A16a. Change in level of qualifications of Aborigines by gender, 1986-91.

Level of qualification	Per cent		Change	
	1986	1991	Net	Per cent
Males				
Higher degree/diploma	0.1	0.2	68	97.1
Bachelor degree	0.2	0.5	215	145.3
Other diploma	0.4	0.9	358	130.2
Vocational	6.1	7.3	1,421	38.6
No qualification	74.1	78.6	10,058	22.7
Not stated	18.4	12.4	-2,711	-24.0
Total	100.0	100.0	9,409	15.7
Females				
Higher degree/diploma	0.1	0.2	125	223.2
Bachelor degree	0.2	0.7	376	303.2
Other diploma	0.7	1.8	938	222.8
Vocational	4.0	3.0	-324	-12.8
No qualification	76.8	81.6	11,292	23.1
Not stated	18.3	12.7	-2,325	-19.9
Total	100.0	100.0	10,082	15.8

Table A16b. Change in level of qualifications of Torres Strait Islanders by gender, 1986-91.

Level of qualification	Per cent		Change	
	1986	1991	Net	Per cent
Males				
Higher degree/diploma	0.1	0.1	6	100.0
Bachelor degree	0.3	0.3	9	50.0
Other diploma	0.6	1.1	48	114.3
Vocational	11.0	12.8	312	42.6
No qualification	69.6	72.9	1,304	28.3
Not stated	18.3	12.6	-189	-15.5
Total	100.0	100.0	1,490	22.5
Females				
Higher degree/diploma	0.02	0.2	13	650.0
Bachelor degree	0.2	0.6	34	242.9
Other diploma	1.2	2.5	133	158.3
Vocational	5.8	4.1	-54	-13.4
No qualification	75.2	79.0	1,515	29.1
Not stated	17.5	13.6	-57	-4.7
Total	100.0	100.0	1,584	22.9

Table A16c. Change in level of qualifications of non-indigenous Australians by gender, 1986-91.

Level of qualification	Per cent		Change	
	1986	1991	Net	Per cent
Males				
Higher degree/diploma	1.5	2.2	48,082	52.9
Bachelor degree	4.7	6.3	126,546	45.3
Other diploma	3.2	3.8	54,541	28.8
Vocational	23.5	21.1	-28,856	-2.0
No qualification	53.9	55.2	366,492	11.6
Not stated	13.1	11.4	-40,326	-5.2
Total	100.0	100.0	526,479	8.9
Females				
Higher degree/diploma	1.0	1.7	54,895	92.5
Bachelor degree	2.9	5.1	162,829	93.5
Other diploma	3.8	6.6	207,764	90.4
Vocational	11.7	6.2	-294,460	-41.6
No qualification	66.7	67.1	429,571	10.7
Not stated	14.0	13.2	34,858	4.1
Total	100.0	100.0	595,457	9.8

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The Relative Economic Status of Indigenous Australians, 1986-91

is the first of several CAEPR contributions to the mid-term review of the Aboriginal Employment Development Policy (AEDP). The work was commissioned by the Aboriginal and Torres Strait Islander Commission and the Commonwealth Department of Employment, Education and Training to assess the labour market impact of the AEDP. A detailed analysis of 1986 and 1991 Census data was conducted to ascertain the degree to which AEDP objectives of employment and income equality have been achieved. The analysis compares changes in the economic status of Aborigines and Torres Strait Islanders separately with that of other Australians, using a range of social indicators at the national level, disaggregated by section-of-State. These indicators include labour force status, occupational status, industry, industry sector of employment, hours worked, level of qualifications, income status and levels of welfare dependence.

As the first national overview of the relative economic status of indigenous Australians to be based on 1991 Census data, this study lays the ground for further inquiry into the contemporary economic situation of Aboriginal and Torres Strait Islander people. As well as directly informing the AEDP review process, this monograph will be of great relevance to indigenous Australians generally, policy makers, bureaucrats and researchers with an interest in Aboriginal and Torres Strait Islander affairs.

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ISBN 0 7315 1841 1
ISSN 1036-6962