The Australian National University

◆ a n u

C entre for
A boriginal
E conomic
P olicy
R esearch

Discussion Paper

The impact of welfare on the economic status of Aboriginal women

A.E. Daly

No.7/1991

SERIES NOTE

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

- to investigate issues relating to Aboriginal employment and unemployment;

- to identify and analyse the factors affecting Aboriginal participation in the labour force; and

- to assist in the development of government strategies aimed at raising the level of Aboriginal participation in the labour force and at the stimulation of Aboriginal economic development.

The Director of the Centre is responsible to the Vice-Chancellor of the ANU and receives assistance in formulating the Centre's research agenda from an Advisory Committee consisting of senior ANU academics nominated by the Vice-Chancellor and Aboriginal representatives nominated by the Chief Executive Officer of the Aboriginal and Torres Strait Islander Commission and the Secretary of the Department of Employment, Education and Training.

CAEPR DISCUSSION PAPERS are intended as a forum for the dissemination of refereed papers on research that falls within the CAEPR ambit. These papers are produced for discussion and comment within the research community and Aboriginal affairs policy arena. Copies of discussion papers are available from Bibliotech, ANUTECH Pty Ltd, GPO Box 4, Canberra, ACT, 2601 (Phone: 06 249 2479 FAX 06 257 5088).

Jon Altman
Director, CAEPR
Australian National University

ABSTRACT

Despite the relatively low levels of employment among Aboriginal women, their average income, according to the 1986 Census, was not substantially lower than the average income of Australian women in general. The Census does not distinguish sources of income, but other evidence suggests that welfare payments are important in raising the average income of individual Aboriginal women to a level not very different from that of all Australian women.

The Aboriginal Employment Development Policy (AEDP) has the stated goal of reducing Aboriginal welfare dependency and this paper considers some of the problems that will be associated with this goal for Aboriginal women. Expected earnings from full-time employment are predicted for Aboriginal and non-Aboriginal women based on individual characteristics such as education, potential labour market experience, marital status and location of residence. These are compared with welfare entitlements in the calculation of a replacement ratio. The replacement ratio measures the extent to which income from welfare compensates for lack of income from employment. These calculations, which are a conservative estimate, show that the replacement ratio for Aboriginal women in 1986 was higher than for non-Aboriginal women. The results suggest that it will be difficult to reduce the welfare dependence of Aboriginal women and the implications of these findings for policy are discussed in the final section.

Acknowledgements

Dr Anne Daly is a Research Fellow at the Centre for Aboriginal Economic Policy Research, Australian National University.
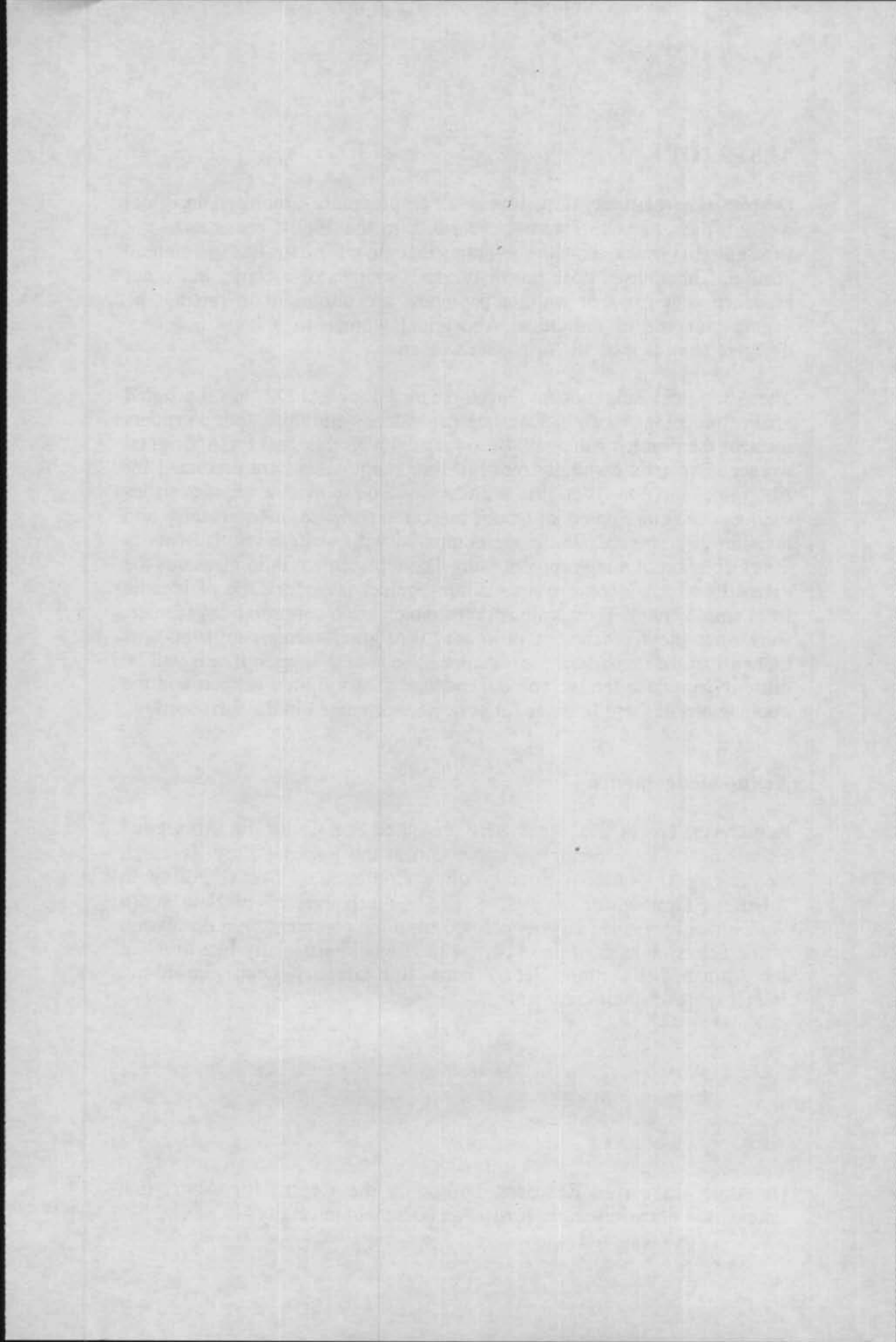
Evidence from the Population Censuses since 1971 shows a relatively small percentage of Aboriginal women, compared with the total female population of Australia, employed in the formal labour market. Studies of family poverty suggest that this fact is of concern to policy makers, as lack of employment among the adults in a family (both among couples and sole parent families) has been shown to be related to a higher incidence of family poverty (see, for example, Ross and Whiteford 1990). This relationship is especially marked for sole parent families and, as almost a third of Aboriginal families at the time of the 1986 Census were sole parent families, the low levels of employment among Aboriginal women are of particular significance. The Royal Commission into Aboriginal Deaths in Custody (Commonwealth of Australia 1991) also emphasised the importance of low levels of employment in explaining the over-representation of Aboriginal people in the criminal justice system.

Although the incidence of poverty among Aboriginal families was estimated at about three times the level of non-Aboriginal families in 1986 (Ross and Whiteford 1990), income figures for individual women taken from the 1986 Census do not suggest a substantial difference between the median income of Aboriginal and non-Aboriginal women. Lack of employment may be associated with low incomes but the average income of Aboriginal women was not substantially different from that of non-Aboriginal women. The Population Census does not distinguish sources of income but other evidence (Fisk 1985; Miller 1985) suggests that welfare payments are an important factor in explaining the similar average levels of income for Aboriginal and non-Aboriginal women. It would appear that the welfare system has been successful in guaranteeing a certain minimum level of income for individuals.

The Aboriginal Employment Development Policy (AEDP) has the stated goal of achieving 'a reduction of Aboriginal welfare dependency to a level commensurate with that of other Australians' (Australian Government 1987: 4) and it pays particular attention to the dependence of Aborigines on unemployment benefits.[1] This paper will argue that for Aboriginal women, there are features of the relationship between potential employment income and actual income from welfare which operate to reduce incentives for Aboriginal women to enter the labour market. Earnings equations are estimated from the 1 per cent sample of the 1986 Census which show that on average, Aboriginal women could have expected to earn about 80 per cent of the full-time weekly earnings of a non-Aboriginal woman, given their average characteristics (such as level of education and experience). The estimates presented are an illustration of the point made in the economics literature about poverty traps: for those with limited earnings power in the labour market, the

incentives to enter the labour market and give up a reliable source of income from welfare are relatively small. For this reason, it is likely to be difficult for the AEDP to reduce both Aboriginal poverty and welfare dependency.

The paper will begin by describing the employment and income levels of Aboriginal women and all women using 1986 Census data before presenting some preliminary calculations of the relationship for women between earnings from employment and income from the welfare system.

The employment and income levels of Aboriginal women

Like all Australian women, Aboriginal women have increased their participation in the formal labour market since the early 1970s (Tesfaghiorghis and Altman 1991), but their participation rate remains well below that of the total female population. In 1986, 56 per cent of Australian women aged 15-64 years were in the work force, compared with 38 per cent of Aboriginal women. Aboriginal employment rates were also much lower. While 50 per cent of Australian women in this age group were employed, only a quarter of Aboriginal women were in employment. The unemployment rate among Aboriginal women was more than twice the level for the total female population (13 per cent compared with 5.4 per cent), and there was also a much larger proportion of Aboriginal women who were outside the labour market.[2]

These much lower levels of employment among Aboriginal women were not associated, as might be expected, with very much lower average incomes. Some evidence from the 1986 Census is presented in Table 1.[3] Although only 22.7 per cent of Aboriginal women over 15 years of age were employed compared with 42.3 per cent of all women, the average income of Aboriginal women was 80 per cent of that for all women. The figures presented here show quite clearly that employment is associated with higher average incomes. However, not being employed did not reduce the incomes of Aboriginal women to the same extent as it did for the total female population. Aboriginal women who were not employed had incomes about 40 per cent of those in employment, while the corresponding figure for the total female population was 30 per cent.

The Aboriginal women who were in employment had a mean income which was 88 per cent of the mean income for all employed women. This may reflect differences in the number of hours worked per year and in the types of jobs held by Aborigines, as well as any racial discrimination which may exist in the labour market. The mean incomes of Aboriginal

women who were unemployed or not in the labour force were higher than for the total female population; 23 per cent higher in the case of unemployed Aboriginal women and 17 per cent higher for those not in the labour force. The explanation of these differences is presumably related to the calculation of welfare benefits which include loadings for dependents, marital status and location of residence in a remote area. On average, Aboriginal women had more of the characteristics likely to raise their benefit entitlement such as a larger number of dependents.

It is important to note, when considering these figures, that the mean is a summary measure which may hide quite different distributions of income among Aboriginal women and the total female population. Some evidence for a distinct Aboriginal income distribution is presented in Figure 1. While a similar percentage of each group had no measured annual income, a much larger percentage of women in the general population (11 per cent) had incomes above $15,000 (income category 7) than among Aboriginal women (3.7 per cent). Fifty-three per cent of Aboriginal women had incomes in the range $4,001 to $12,000 compared with 43 per cent of all women, so the distribution of income among Aboriginal women was more concentrated in the lower income ranges than among women in the general population.

The relationship between earnings and welfare

Some calculations using 1986 data are now presented which represent an initial attempt to compare the potential incomes from employment and welfare for Aboriginal women. As such they should be taken as estimates. The figures as presented are before tax; adjustments will be made in future work for the incidence of tax on earnings from employment and on welfare payments. Most pensions and benefits were subject to income tax in 1986, but a special pensioner tax rebate ensured that pensioners with little or no other source of income did not pay tax.

The replacement ratio measures the extent to which income from welfare compensates for loss of income from employment. As people are required to give up leisure in order to gain the higher income from employment, the replacement ratio can be thought of as an inverse measure of the additional gains in income from sacrificing leisure. If income from welfare equalled earnings from employment then the replacement ratio would equal one and there would be no benefits in terms of higher income associated with employment. A replacement ratio of zero means that an individual has the choice of either working for an income or having leisure but no income at all. There are a number of

Table 1. Real mean annual incomes by labour force status, women aged 15 and over, 1986 (1980-81 dollars).

	Employed	Unemployed	Not in the labour force	Total
Aborigines	7,966	3,107	3,284	4,467
% in each category	22.7	11.8	65.5	100
% mean income				
of employed		39	41	
Total population	8,999	2,521	2,814	5,572
% in each category	42.3	4.5	53.2	100
% mean income				
of employed		28	31	
Ratio Aborigines/total (%)	88.5	123.2	116.7	80.2

Source: Treadgold (1988) Tables 4 and 8; Tesfaghiorghis and Altman (1991) Table 6.

ways of calculating a replacement ratio. Ideally all the benefits including payments-in-kind should be included, but the simple replacement ratio is usually defined as :

$$RR = (B - T_1) / (E - T_2) \qquad (1)$$

where RR is the replacement ratio, B is the estimated benefit entitlement, E is full-time earnings and T_1 and T_2 are income tax liabilities while not employed and employed respectively. T_2 will be greater than T_1 under a progressive income tax system such as that found in Australia where the marginal tax rate increases with income. (For an example of these types of calculations for the whole Australian population see Saunders, Bradbury and Whiteford 1989.)

The option for some Aboriginal people of 'working for unemployment benefit' under the Community Development Employment Projects (CDEP) scheme adds an additional choice for these individuals. This scheme offers Aboriginal people the choice of working part-time in community-based employment projects for the equivalent of their social security entitlements.[4] The choice now becomes one between working in an ordinary job for a wage, working part-time for the community under the CDEP scheme or receiving a benefit with no work requirement attached. The number of women working under the CDEP scheme in 1986 is not known, but data for later years show that women were under-represented in the scheme.[5] The replacement ratios discussed below focus

Figure 1. The income distribution of Aboriginal and all Australian women, 1986.
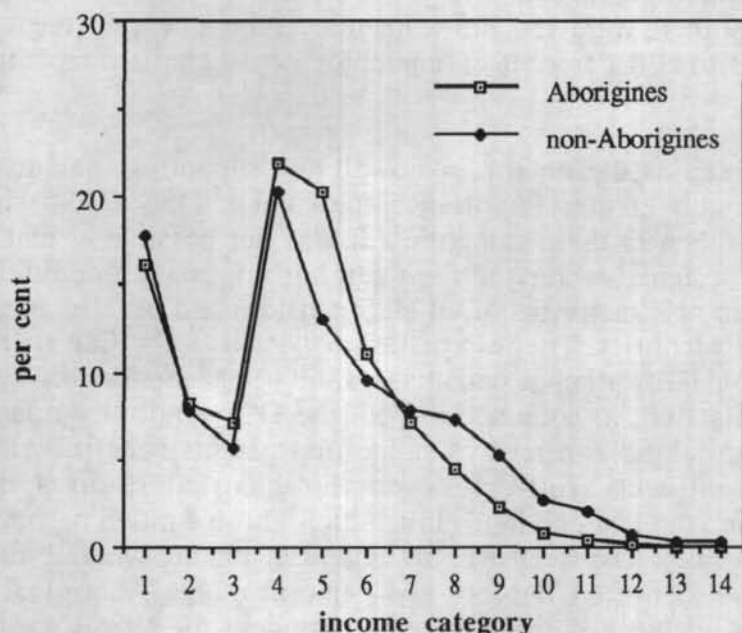
The income categories are as follows- 1 = $0; 2 = $1-2,000; 3 = $2,001-4,000; 4 = $4,001-6,000; 5 = $6,001-9,000; 6 = $9,001-12,000; 7 = $12,001-15,000; 8 = $15,001-18,000; 9 = $18,001-22,000; 10 = $22,001-26,000; 11 = $26,001-32,000; 12 = $32,001-40,000; 13 = $40,001-50,000; 14 = $50,000+.

Source: The full count of the 1986 Population Census.

on the relationship between income from employment and income from the standard welfare benefits.

Most married women are not entitled to welfare benefits in their own right. For obvious reasons they do not qualify for sole or supporting parents benefits or for widow's pension. In the case of unemployment benefit, either their spouse is employed and this income makes them ineligible for benefit or their spouse is unemployed and collecting the married person's unemployment benefit therefore making the woman ineligible in her own right.[6] Evidence suggests that when the two partners in the marriage are unemployed, the male tends to collect the benefit (see Smith forthcoming). As 74 per cent of the total female

population aged 15-64 were married or in a de facto 'marriage-like' relationship and were therefore unlikely to be eligible for unemployment benefit, the calculations of the replacement ratio presented below based on the unemployment benefit should be thought of as illustrative rather than of great empirical relevance.[7] Department of Social Security (DSS) showed that there were 160,103 women receiving unemployment benefit, accounting for 28 per cent of unemployment benefit recipients (DSS 1986).

Pensions such as the invalid, widowed and supporting parents benefit were of much greater importance to women. DSS (1986) included 395,195 women in these categories. It was not possible at that time to identify Aboriginal women in the total, but information currently being collected on new recipients of all DSS pensions and benefits includes an Aboriginal identifier. The information collected in the Census does not enable the identification of potential invalid pensioners but it does enable the identification, in conjunction with the DSS eligibility rules, of the broad group eligible to receive supporting parents benefit (being those who did not work full-time, were not married or in a de facto relationship, and had children). In addition, those entitled to the widow's pension (women who were over 50, widowed and not working full-time), can also be identified. Twenty-two per cent of the Aboriginal women aged 15-64 included in the 1 per cent sample of the 1986 Census would have qualified for sole parent or widow's pension according to these broad criteria compared with 9 per cent of the female non-Aboriginal population. It is important to remember that these criteria do not exactly encompass DSS eligibility requirements; for example, some individuals included here in the pool of potential benefit recipients may have had incomes from sources other than full-time employment that made them ineligible for the pension owing to the income test.

As already noted, since 1976 the Census has not asked a question about sources of income so there is no direct information on any individual's earnings from employment. The 1986 Census also did not seek detailed information on the number of hours worked each week, but included broad categories of hours worked. This makes it very difficult to estimate an hourly income where the categories cover a broad range of hours (for example, 1-15 hours of work per week). In an attempt to reduce the problems associated with these two sources of measurement error, the estimation presented here has been restricted to full-time employees (those working 35 or more hours per week). The Income and Housing Survey conducted by the Australian Bureau of Statistics in 1985/86 showed that 85 per cent of the income of those employed full-time came from employment, so the Census income figures for this

group are probably a fairly good indicator of earnings (Australian Bureau of Statistics, 1989). The predicted earnings from full-time work have been calculated from an earnings regression, using the 1 per cent sample in which weekly earnings depend on age, years of schooling, educational qualifications, marital status, number of dependents, location and Aboriginality.

The explanatory variables include some of the important determinants of earnings suggested by the human capital model, education and potential experience, represented here by age.[8] In addition, a variable to capture any specific effect of Aboriginality on earnings is included. If the coefficient on this variable is statistically significant, it suggests that there is an additional effect of Aboriginality on earnings even after all the other determinants of earnings such as education, age, marital status and number of dependents have been taken into account. A negative coefficient may measure both the effects of racial discrimination on earnings and the choice by some Aboriginal women not to maximise their money income for social or cultural reasons. There has been no attempt here to assess which of these possible sources of difference in earnings is most important due to the limitations of the data available in the Census.

Location of residence has been measured by section-of-State variables (major urban, other urban or rural residence), as this geographical breakdown was the only one available in the 1 per cent sample held at the Australian National University. It has therefore not been possible to estimate different earnings equations for remote and non-remote areas as defined by the Australian Tax Office and used by DSS for the determination of eligibility for remote area allowance (see Table 2).

The regression results are presented in Appendix Table A1. They show that earnings increased with education and initially with age. Marriage, dependent children, poor English and residence outside major urban areas were all associated with lower earnings, but these coefficients were not always statistically significant. Aboriginality in itself was also associated with lower earnings. There are several possible explanations of this result. Aboriginal women may face discrimination in the labour market and do not earn the same as otherwise identical non-Aboriginal women, or they may choose not to be employed in as highly paid jobs as otherwise identical non-Aboriginal women for some non-pecuniary reason. An example of this might be a nurse or teacher who accepted lower pay and less chance of promotion in order to work in a socially familiar remote Aboriginal community rather than in a large urban centre. A third possibility is that the broad definitions used for the other explanatory variables do not fully capture differences between the

Aboriginal and non-Aboriginal women in the sample. For example, years of schooling as a measure of educational attainment do not measure any differences in the quality of education received by the two groups.

There are important methodological problems in calculating replacement ratios. The only observations of actual earnings are for the group currently employed. This group may differ from those not in employment in ways which may be difficult to measure. For example, the levels of motivation and natural ability may differ between the employed and those not working even after observable characteristics such as education and age have been taken into account. There is an econometric technique, the Heckman correction (see Heckman 1979), which makes an adjustment for this problem and the results reported in Table 3 include the necessary correction. These estimates of potential full-time earnings for those who are both currently employed full-time and those who are not, can then be compared with income from benefits. The detailed headings under which pension and unemployment benefits are paid are set out in Table 2. There is a large amount of detailed calculation involved in arriving at an individual's welfare entitlement. These calculations can be further complicated in the case of Aborigines by the application of rules based on

Table 2. Pension and benefit rates applicable to an unmarried women, 1986.

	Invalid, age,widow and supporting parent pension ($)	Unemployment benefit ($)
Basic rate	102.10	95.40
Addition/child	16.00	16.00
Mother/ guardian allowance[a]	12.00	12.00
Rent allowance[b]	15.00	10.00
Remote area allowance[c]	7.00	7.00
Remote area allowance/child[c]	3.50	3.50

a. Paid to mothers or guardians on pensions or benefits.
b. Rent allowance was not paid for public housing.
c. This allowance was paid to those living in specified remote areas (most of Income Tax Zone A which covers most of the northern part of Australia).

Source: DSS 1986.

Table 3. Comparison of income from welfare and income from employment for single women over 21 years, 1986 Census.

No. of dependent children	Pensioner[a]			Unemp. beneficiaries[b]		
	0	2	4	0	2	4
Full welfare benefit						
Non-remote areas	$117.10	$161.10	$193.10	$105.40	$149.40	$181.40
Remote areas	$124.10	$175.10	$214.10	$112.40	$163.40	$202.40
Free limit[c]	$30.00	$42.00	$54.00	$30.00	$30.00+	$30.00+
No benefit paid when						
other income exceeded[d]	$234.20	$334.20	$410.20	$145.40	$224.10	$256.10

Predicted average weekly earnings from full-time work for those currently not in the labour force[e]

	0	2	4			
Non-Aboriginal	$341.15	$328.04	$315.43			
Aboriginal	$270.96	$260.55	$250.53			

Ratio welfare benefit income/predicted average earnings

	0	2	4	0	2	4
Non-remote areas						
Non-Aboriginal	0.34	0.49	0.61	0.31	0.46	0.58
Aboriginal	0.43	0.62	0.77	0.39	0.57	0.72
Remote areas						
Non-Aboriginal	0.36	0.53	0.68	0.33	0.50	0.64
Aboriginal	0.46	0.67	0.85	0.41	0.63	0.81

Predicted earnings from full-time work using the average characteristics of those currently working full-time:

    Non-Aboriginal $303.10   Aboriginal $239.27

Predicted earnings from full-time work using the average characteristics of those currently not in the labour force:

    Non-Aboriginal $338.75   Aboriginal $265.02

a. Pensioner includes recipients of the following types of pension; age, invalid, wife's, carer's and widow's pension and supporting parents benefit.

b. Unemployment benefit for single people with no dependents varied with the age of the beneficiary. The figures presented here are for a woman aged over 21.

c. The free limit is the maximum income from other sources which beneficiaries were entitled to without losing any benefit.

d. Above the free limit, beneficiaries lose some welfare income for every dollar received from an alternative source. At the weekly incomes shown in this row, individuals were no longer entitled to any benefit. For married women, other income included the income of their spouse.

e. These earnings are predicted from equation (2) Table A1 using the average endowments of education, age, language ability and location of residence of women who were outside the labour force presented in Table A2. The earnings were predicted for single women with varying numbers of dependent children as shown in each column.

Source: DSS 1986; 1 per cent sample of the 1986 Population Census.

the norms of mainstream Australian society.[9] The figures presented in Table 2 are intended to provide the basis for some simplified calculations of replacement ratios. They relate to women who were not married or in a de facto relationship, without additional sources of income, and renting private accommodation.

The results of a comparison of earnings from full-time employment and welfare income are presented in Table 3. Many of the features of the table, such as higher welfare payments with additional children, are not specific to Aborigines. What is new is the estimation of expected earnings from employment for Aborigines allowing for both their endowments of human capital and any additional effect of Aboriginality on earnings. The figures presented here do not take into account the additional taxes to be paid on the higher earnings from employment under a progressive income tax system, the additional benefits (like free medical treatment) that those on welfare are entitled to or the costs associated with employment (such as travel and special clothing costs). As such they represent conservative estimates of the replacement ratio. Four major points emerge from this table.

First, the replacement ratio was higher for Aboriginal women than for non-Aboriginal women as Aboriginal women were predicted to have lower potential earnings than non-Aboriginal women. This arose from their relatively low level of human capital endowments, such as education, and from the negative effect of Aboriginality on earnings.

Second, common to both Aboriginal and non-Aboriginal women, is the different effect dependent children have on the two types of incomes. In the welfare system, more dependents generate more income, but the statistical evidence suggests that dependent children reduce earnings from employment. The mechanism by which this takes place is not clear. The human capital model would explain this result in terms of reduced investment in human capital skills valued in the workplace among women with many children. In addition children may constrain choice of employment and hours of work.

Third, replacement ratios were highest in remote areas where there are relatively more Aborigines and fewer jobs. For those living in these remote areas, full-time employment at the wages predicted here would probably involve additional financial and social costs of migration to other areas. A final feature of the table is the slightly higher replacement ratio from pensions than from unemployment benefit.

An additional benefit of pension income over unemployment benefit is the greater reliability of this source of income. The receipt of unemployment benefit may involve work tests, job interviews and regular attendance at the Commonwealth Employment Service (CES). In contrast, once deemed to have satisfied the necessary criteria, it is much easier to retain the pension. Pension income is also more easily portable as cheques can be forwarded on to new addresses while more forms need to be completed before unemployment benefit can be collected from a CES office other than the initial point of contact. A further advantage of a pension over unemployment benefit was the larger amount of income from other sources which was permitted before welfare income was withdrawn (see Table 3).

The figures presented in Table 3 are averages for the Aboriginal and non-Aboriginal populations. Each individual has a replacement ratio based on her particular circumstances and these can be summarised by the distribution of replacement ratios across the Aboriginal and non-Aboriginal female populations. Every individual has potentially a positive replacement ratio either from unemployment benefit or from supporting parent or widow's pensions. Married women can change their marital status and women can move in and out of de facto relationships. In addition, the DSS may enforce eligibility criteria with varying degrees of rigour so that status may change without loss of benefit. Table 4 columns 1 and 3, show the distribution of replacement ratios from supporting parent or widow's pensions based on the information on marital status provided in the 1986 Census and making no allowance for possible changes in this status. Therefore, women who were married or living in a de facto relationship and single women without children, in these calculations had a replacement ratio of zero. Columns 2 and 4 of Table 4 show the distribution of replacement ratios among women if all women changed their marital status in order to qualify for either of these benefits.

As columns 1 and 3 of Table 4 show, on the basis of their existing marital status the majority of women did not qualify for either supporting parent or widow's pension. This group accounted for 78 per cent of Aboriginal women and about 89 per cent of non-Aboriginal women. In other words, the availability of these pensions offered no incentive for these women to remain outside the labour force.

A larger percentage (22 per cent) of Aboriginal women of working age were eligible for these benefits compared with the rest of the population (11 per cent). Of the 22 per cent of Aboriginal women who would have been entitled to benefit, two-thirds (14.5 per cent of all Aboriginal

women) had a replacement ratio greater than 50 per cent compared with only 2.3 per cent of women in the rest of the population. As these are conservative estimates of the replacement ratio, these results suggest that for a substantial number of Aboriginal women, the incentives to leave welfare and take up any available paid employment were small.

Columns 2 and 4 of Table 4 present replacement ratios calculated on the assumption that women changed their marital status but not their number of children. The focus here is on the replacement ratio from supporting parent and widow's pension so women who did not have children or were too young to qualify for widow's pension without a dependent child (that is under 50 years of age) had replacement ratios from these benefits of zero. These women would have been entitled to apply for unemployment benefit and therefore have some income support from the welfare system. While about a third of Aboriginal women were in this category, almost half of non-Aboriginal women belonged here. High replacement ratios from supporting parents and widow's pension were potentially much more important for Aboriginal women than for non-Aboriginal women. Fifty-five per cent of Aboriginal women had a replacement ratio greater than 50 per cent compared with 20 per cent of non-Aboriginal women. These calculations further emphasise the disincentive effect these welfare payments may have on searching for full-time employment.

Table 4. The distribution of replacement ratios from sole parent and widows pensions for women, 1986.

Replacement ratio (per cent)	Aboriginal women		Non-Aboriginal women	
	marital status unchanged (1)	marital status changed (2)	marital status unchanged (3)	marital status changed (4)
0 - 10	78.1	30.9	89.2	47.5
10.1 - 20	0	0	0	0
20.1 - 30	0	0	1.3	1.5
30.1 - 40	1.5	1.5	3.9	7.8
40.1 - 50	5.7	12.5	3.1	21.9
50.1 - 60	7.0	21.2	1.4	13.8
60.1 - 70	4.0	14.0	0.3	3.1
70.1 - 80	1.0	7.2	0.4	2.1
80.1 - 90	1.3	5.5	0.2	1.0
90.1 - 100	0.8	2.7	0	0
100+	0.5	4.0	0	0

Source: Table A1 and Table 2.

Conclusion and policy implications

The paper shows that despite a lower level of employment than among the general female population, the average income of Aboriginal women in 1986 was not very different from that of other Australian women. The evidence is consistent with the hypothesis that this is due to the greater average welfare income of Aboriginal women than for women in the total population. This reflects the larger number of dependent children, the lower marriage rates and the relatively large numbers of Aboriginal women living in the remote areas where benefits were higher. However, better information on the sources of Aboriginal income is required to confirm this result. While not suggesting that the abolition of all welfare payments is the appropriate policy response, the calculations presented in Table 3 and Table 4, showing high replacement ratios for a substantial percentage of Aboriginal women, have certain implications for the Federal Government's objective of reducing both welfare dependence and poverty among Aborigines.[10]

First, it will be difficult to reduce welfare dependency when the replacement ratios for some Aboriginal women are so high; however reducing replacement ratios will raise poverty. The figures presented here do not take into account the additional taxes to be paid on the higher earnings from employment under a progressive income tax system, the additional benefits (for example medical treatment) that those on welfare are entitled to or the costs associated with employment (such as travel and clothing costs). In the case of remote Aborigines, there may be the further costs of employment associated with migration. All these factors would tend to raise the ratio and make the estimates presented here conservative. Welfare payments also have the advantage of reliability for those individuals whose employment opportunities may be restricted to seasonal work. For seasonal workers, coming off unemployment benefit for short-term employment has substantial costs in terms of the waiting period between the completion of a job and the time when they are once again eligible for unemployment benefit. These disincentive effects on those marginally attached to the work force need to be recognised. Sanders (1985), presents evidence that at least in some instances in the past, the DSS has continued to pay unemployment benefit even when some casual and seasonal work was being undertaken.

Second, the CDEP scheme may be one way of reducing the dependence of Aborigines on unemployment benefit but, as it currently stands, it will have little effect on Aboriginal dependence on other types of welfare payments which are more important for women. This raises a policy issue: should the CDEP scheme be used more widely as an alternative to

all kinds of welfare benefits? There are important horizontal equity issues in such an idea of broadening the CDEP scheme to include all recipients of welfare, as other invalid, age and supporting parent beneficiaries are not expected to work for their pensions.

Third, the existence of the CDEP notionally linked to Job Search Allowance and Newstart (formerly unemployment benefits) for Aborigines, changes the nature of the calculation of replacement ratios. For the general population, the replacement ratio reflects the trade-off between work and leisure, but for Aborigines participating in the CDEP scheme, the replacement ratio reflects a trade-off between earnings from two different types of employment, ordinary full-time work and community-based part-time employment.

Finally, the replacement ratio can be altered either by lowering the level of welfare payments or by increasing the earnings Aboriginal women could expect from employment. One way of encouraging Aboriginal women into the work force might be to raise their earnings power (for example, with more education) but this is only likely to have any effect where Aboriginal women are already residing in areas where there are employment opportunities or when they are willing to migrate to areas of employment. It is also a policy direction which would take a very long time to have any effect.

Notes

1. In July 1991 unemployment benefit was replaced by a Job Search Allowance and Newstart. As this discussion relates to 1986, the terminology applicable at the time has been used.

2. See Daly (1991) for a fuller description of female Aboriginal employment and unemployment rates.

3. Although it is possible to find information about the Aboriginal population in published tables from the 1986 Population Census, published data do not distinguish the non-Aboriginal population from the total population. It has therefore been necessary, for comparative purposes, to use the figures for the total population. As Aborigines accounted for about 1.5 per cent of the total Australian population, their inclusion in the total should not produce different conclusions from a more accurate comparison with the non-Aboriginal population. Where Census data are presented from the 1 per cent sample, the more accurate comparison between the Aboriginal and non-Aboriginal population has been made.

4. For a description of the scheme see Sanders (1988), Altman and Sanders (1991) and Morony (1991).

5.   A review of the funding and administration of the CDEP, conducted in 1990, noted that there were no comprehensive data on the participation of women in CDEP but 'Of 50 of a total of 129 CDEP communities for which data was available from the P3 forms, the percentage of female **workers** on CDEP (as opposed to **participants**) ranges on average between 20% to 36%. Some participation rates were as low as 4%' (their emphasis, CDEP Working Party 1990: 48).

6.   If each spouse is over the age of 21, they are not entitled to a separately assessed benefit. It is possible, however, by agreement between the parties, for the payment of the married person's unemployment benefit to be split between them. This is just a way of allocating the married person's benefit between them if they are both unemployed.

7.   The DSS considers a de facto 'marriage-like' relationship to be a marriage, so unmarried women with children living in a de facto relationship would not be eligible for benefit.

8.   Age has been used here rather than potential experience (age minus age left school) because of the presentation of age data in five year categories in the 1 per cent sample of the Census. The estimation of potential experience using these age categories would introduce additional measurement error in the explanatory variable. Age is very closely correlated with potential experience ($r = 0.98$) so the use of age category dummy variables seemed most appropriate. Earnings regressions using data from the full Census without these restrictions on the age variable are currently being estimated on my behalf (on a consultancy basis) by the Australian Bureau of Statistics.

10.   For an example of some of the difficulties faced in applying DSS rules established on the assumption of a monogamous society, see the discussion of the DSS's treatment of Aboriginal polygyny and tribal marriage in Sanders (1987). There was also considerable debate surrounding the applicability of unemployment benefit to remote communities without a formal labour market (see Sanders 1985).

11.   For a discussion of this issue in the context of the Torres Strait see Arthur (1991).

Appendix

Table A1. Weekly earnings of women working full-time, 1986.

	OLS regression (1)	Heckman correction (2)
Constant	4.7735 (88.60**)	4.8564 (18.22**)
High	-0.0845 (-3.50**)	-0.0826 (-3.34**)
Post-secondary	0.1253 (8.66**)	0.1168 (3.82**)
Graduate	0.3691 (16.63**)	0.3553 (7.29**)
Years of primary and	0.0453	0.0409
secondary schooling	(8.68**)	(2.78**)
Age 20-24	0.3843 (16.64**)	0.3868 (17.60**)
Age 25-29	0.5237 (22.18**)	0.5344 (13.00**)
Age 30-34	0.5927 (22.59**)	0.6078 (11.22**)
Age 35-39	0.6193 (23.44**)	0.6199 (23.48**)
Age 40-44	0.6229 (22.56**)	0.6279 (19.78**)
Age 45-49	0.5275 (17.57**)	0.5435 (9.26**)
Age 50-54	0.5150 (15.71**)	0.5453 (5.40**)
Age 55-59	0.5084 (12.98**)	0.5579 (3.47**)
Age 60-64	0.6408 (9.74**)	0.7284 (2.57**)
Married	-0.0073 (-0.47)	-0.0089 (-0.17)
Widowed, separated, divorced	-0.0363 (1.70)	0.0419 (1.52)
Number dependents	-0.0355 (-5.27**)	-0.0196 (-0.39)
Poor English	-0.0826 (-1.97*)	-0.0873 (-1.97*)
Other urban	-0.0413 (-2.75**)	-0.0308 (-0.85)
Rural	-0.0484 (-2.32**)	-0.0307 (-0.85)
Aboriginal	-0.0936 (-2.39**)	-0.0761 (-1.13)
Lambda		-0.0660 (-0.32)
R^2	0.41	0.41
Mean of dependent variables	5.7085	5.7085
Standard error of regression	0.3045	0.3034
Number of observations	2922	2922

't' statistics are in brackets. The constant term relates to a single unqualified woman with no dependents living in a major urban area who was proficient in English. The variables are defined as follows: There were 10 age categories defined, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64; years of primary and secondary school were calculated as age left school minus 5 with a maximum value of 12; high school took a value of 1 for those who had completed high school, post-secondary for those who had some post-secondary qualification and graduate for those with either a bachelor's or postgraduate degree; married took a value of 1 for those who were married and widowed, separated or divorced took a value of 1 for those with one of these marital statuses; number of dependent children in the family recorded the number of children with a maximum of 8; poor English took a value of 1 for those who registered an inability to communicate easily in English; other urban took a value of 1 for those living in urban settlements of between 1,000 and 99,999 inhabitants and rural took a value of 1 for those living in smaller settlements; Aborigine took a value of 1 for those who identified themselves as Aborigines or Torres Strait Islanders.

Table A2. Mean values of variables for women in the sample, 1986.

	Aboriginal women		non-Aboriginal women	
	Full-time workers	Not in the labour force	Full-time workers	Not in the labour force
Education				
Unqualified	0.73	0.93	0.58	0.78
High	0.06	0.04	0.08	0.05
Post-secondary	0.16	0.03	0.25	0.14
Graduate	0.05	0	0.09	0.03
Years of primary and secondary schooling	9.56	8.50	10.15	9.21
Age				
15-19	0.22	0.11	0.12	0.03
20-24	0.29	0.15	0.23	0.07
25-29	0.13	0.18	0.16	0.12
30-34	0.13	0.15	0.10	0.13
35-39	0.06	0.13	0.12	0.11
40-44	0.03	0.05	0.10	0.08
45-49	0.08	0.05	0.07	0.08
50-54	0.06	0.08	0.05	0.09
55-59	0	0.07	0.03	0.13
60-64	0	0.02	0.01	0.16
Marital status				
Single	0.52	0.32	0.43	0.10
Married	0.37	0.48	0.45	0.73
Widowed, separated, divorced	0.11	0.20	0.12	0.17
No. of dependents	0.79	1.78	0.56	1.06
Poor English	0.02	0.05	0.02	0.05
Location of residence				
Major urban	0.41	0.22	0.74	0.62
Other urban	0.43	0.44	0.17	0.24
Rural	0.16	0.34	0.08	0.14
Lambda	1.37	-0.20	0.98	-0.33

Source: 1 per cent sample of the 1986 Census.

18

References

Altman, J.C. and Sanders, W. 1991. *The CDEP Scheme: Administrative and Policy Issues*, CAEPR Discussion Paper No. 5. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.

Arthur W.S. 1991. 'The prospect of employment equity in remote areas: the Torres Strait case', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.

Australian Bureau of Statistics 1989. *Income and Housing Survey, 1985-86 - Person Records*. Canberra: Australian Bureau of Statistics.

Australian Government 1987. *Aboriginal Employment Development Policy Statement: Policy Paper No. 1*. Canberra: Australian Government Publishing Service.

CDEP Working Party 1990. Community Development Employment Projects Scheme: Review of Funding and Administration, unpublished report, Department of Aboriginal Affairs, Canberra.

Commonwealth of Australia 1991. Royal Commission into Aboriginal Deaths in Custody, National Report, Vol. 4. (Commissioner Elliot Johnston), Australian Government Publishing Service, Canberra.

Daly A.E. 1991. 'Aboriginal women in the labour market', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.

Department of Social Security 1986. *Annual Report 1985-86*. Canberra: Australian Government Publishing Service.

Fisk, E.K. 1985. *The Aboriginal Economy in Town and Country*. Sydney: George Allen and Unwin.

Heckman J. 1979. 'Sample selection bias as a specification error', *Econometrica*, 47(1): 153-62.

Morony, R. 1991. 'The Community Development Employment Projects (CDEP) scheme', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.

Miller, M. (Chairman) 1985. *Report of the Committee of Review of Aboriginal Employment and Training Programs*. Canberra: Australian Government Publishing Service.

Ross, R. and Whiteford, P. 1990. *Income Poverty Among Aboriginal Families with Children: Estimates from the 1986 Census*, Discussion Paper No. 20. Sydney: Social Policy Research Centre, University of New South Wales.

Sanders W. 1985. 'The politics of unemployment benefits for Aborigines: some consequences of economic marginalisation,' in D. Wade-Marshall and P. Loveday (eds) *Employment and Unemployment: A Collection of Papers*. Darwin: North Australia Research Unit.

Sanders W. 1987. 'The Department of Social Security's treatment of Aboriginal polygyny and tribal marriage: a saga of administrative debate', *Australian Journal of Public Administration*, XLVI(4): 402-20.

Sanders, W. 1988. 'The CDEP scheme: bureaucratic politics, remote community politics, and the development of an Aboriginal 'workfare' program in times of rising unemployment', *Politics*, 23(1): 32-47.

Saunders, P., Bradbury, B. and Whiteford, P. 1989. 'Unemployment benefit replacement rates', *Australian Bulletin of Labour*, 15(2): 223-44.

Smith D.E. (forthcoming). *Aboriginal Unemployment Statistics: Policy Implications of the Divergence Between Official and Case Study Data*, CAEPR Discussion Paper No. 13. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.
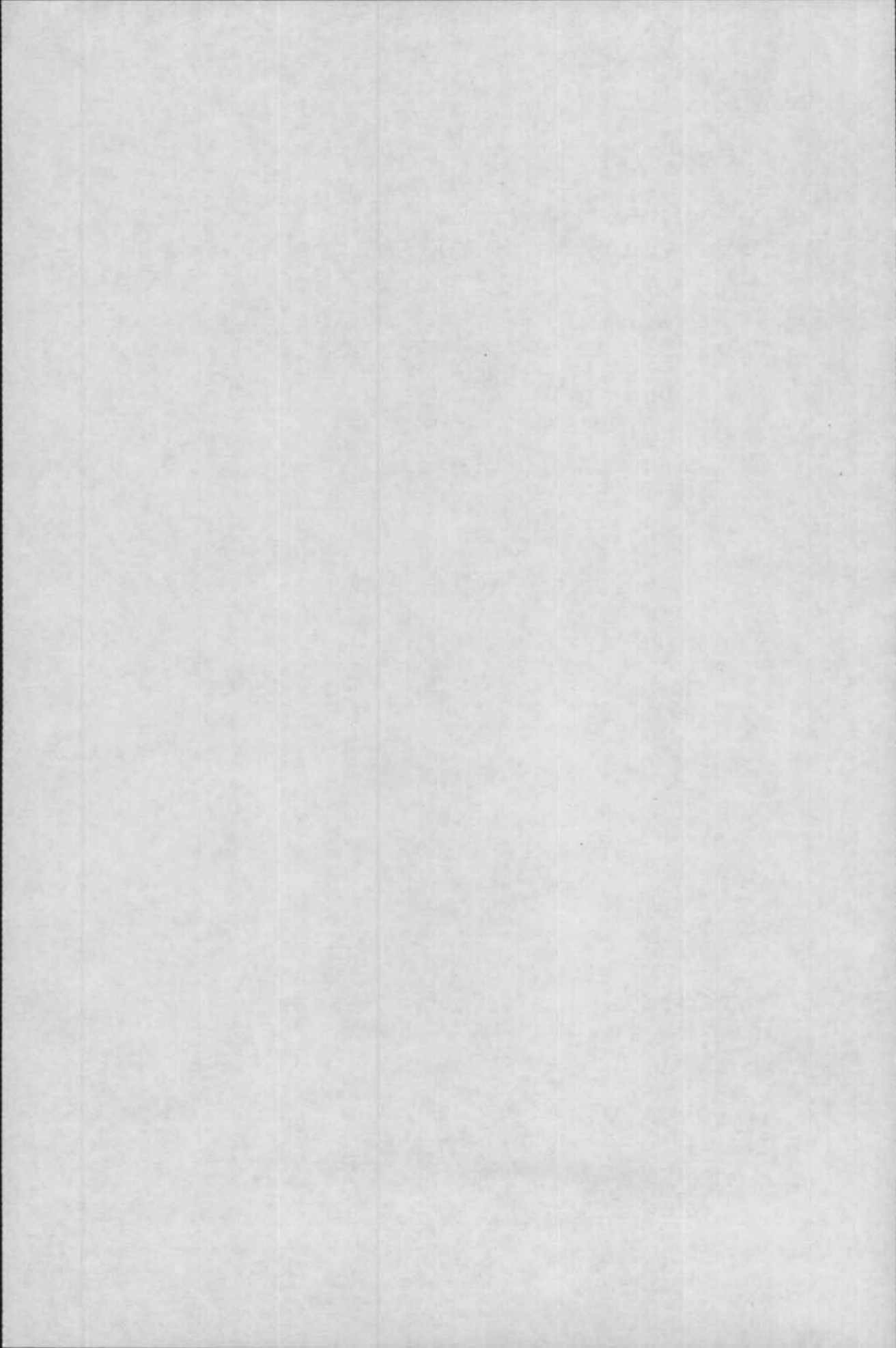
Tesfaghiorghis, H. and Altman, J.C. 1991. *Aboriginal Socio-economic Status: Are there any Evident Changes?*, CAEPR Discussion Paper No. 3. Canberra: Centre for Aboriginal Economic Policy Research, Australian National University.

Treadgold, M. 1988. 'Intercensal change in Aboriginal incomes, 1976-86', *Australian Bulletin of Labour*, 14(4): 592-609.
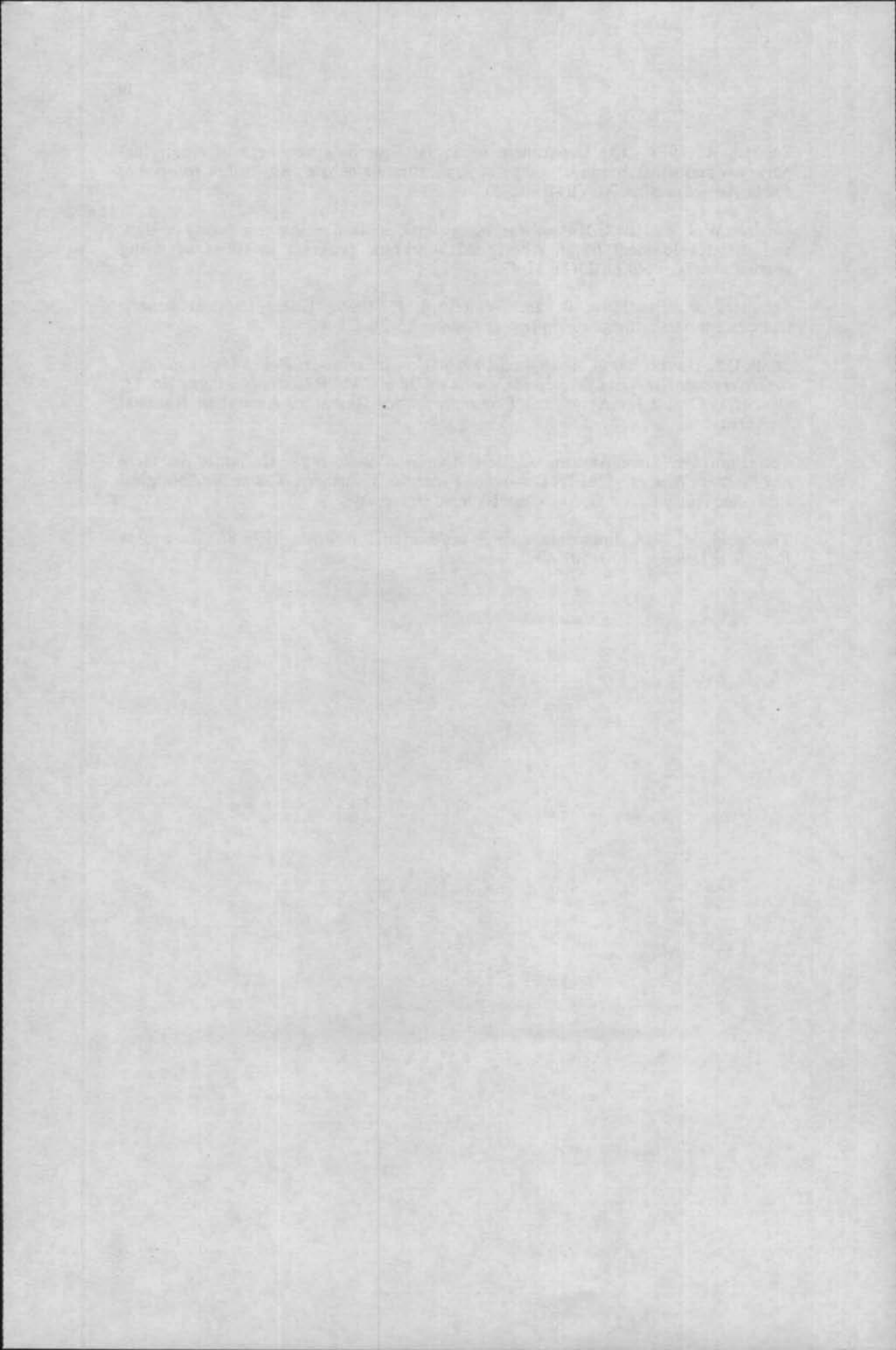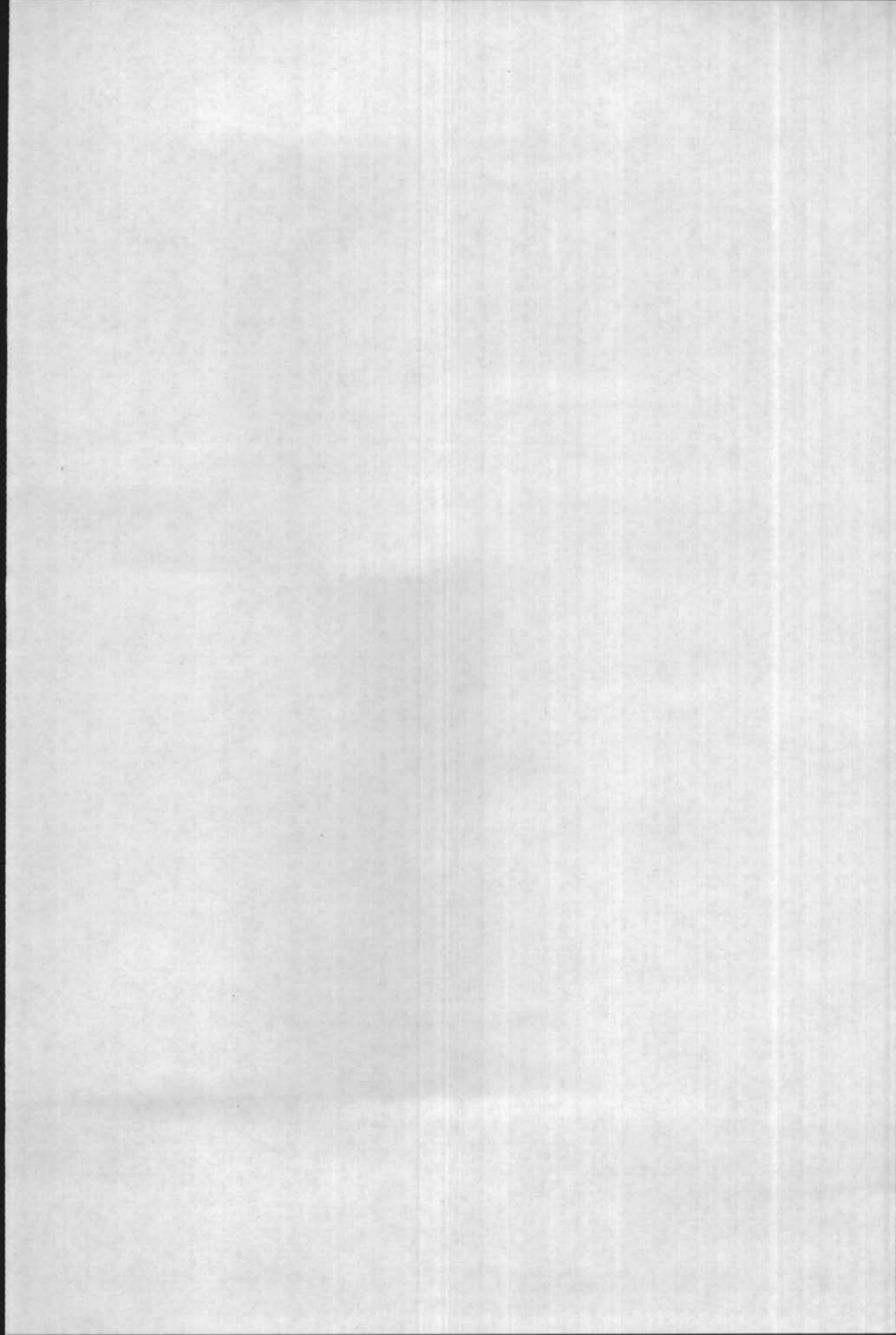
CENTRE FOR ABORIGINAL ECONOMIC POLICY
RESEARCH (CAEPR) DISCUSSION PAPERS:

1. 'From exclusion to dependence: Aborigines and the welfare state in Australia' by J.C. Altman and W. Sanders (March 1991).

2. 'Geographic variations in the economic status of Aboriginal people: a preliminary investigation' by H. Tesfaghiorghis (March 1991).

3. 'Aboriginal socio-economic status: are there any evident changes?' by H. Tesfaghiorghis and J.C. Altman (March 1991).

4. 'Indigenous economic development in the Torres Strait: possibilities and limitations' by W.S. Arthur (March 1991).

5. 'The CDEP scheme: administrative and policy issues' by J.C. Altman and W. Sanders (September 1991).

6. 'The participation of Aboriginal people in the Australian labour market' by A.E. Daly (September 1991).

7. 'The impact of welfare on the economic status of Aboriginal women' by A.E. Daly (September 1991).

8. 'Geographic location and Aboriginal economic status: a census-based analysis of outstations in the Northern Territory' by J. Taylor (September 1991).

9. 'Aboriginal expenditure patterns: an analysis of empirical data and its policy implications' by D.E. Smith (September 1991).

10. 'Toward an Aboriginal household expenditure survey: conceptual, methodological and cultural considerations' by D.E. Smith (September 1991).