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CAEPR Centre for Aboriginal Economic Policy Research

The opportunity costs of future Indigenous labour force status

J. Taylor

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DISCUSSION PAPER

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ABSTRACT

The analysis of economic policy impacts in the context of Indigenous affairs suffers from a paucity of data and a mismatch between political and statistical cycles. Rather than waiting for the effects of policy and free market forces to show up as changes in social indicators, this paper adopts a proactive approach in the face of a looming information gap to forecast outcomes in Indigenous labour force status over the next decade. Related to the current and future labour force status of Indigenous Australians is the economic cost to government of supporting individuals who are unemployed or not in the labour force. This may be set against economic returns from gainful employment. These relativities are estimated using a balance sheet of financial costs drawn from data on fiscal flows. The findings reveal an underlying demographic trend underway that could see the economic situation of Indigenous Australians continue to worsen given current levels of government intervention. In purely financial terms, the opportunity cost of this to government is potentially huge with the welfare bill almost doubling in real terms.

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The analysis of economic policy impacts in the context of Indigenous affairs suffers from a paucity of data and a mismatch between political and statistical cycles. As far as data inadequacy is concerned, this is underlined by an almost total reliance on the five-yearly census for basic information on labour force status and other economic indicators. As for lack of timeliness, this is epitomised by the fact that 1996 Census results are unlikely to reflect the current labour force status of Indigenous people as these data refer to the period prior to fiscal tightening announced in the 1996/97 budget as well as to recent reforms in workplace relations (Hunter 1997). Furthermore, as noted in a recent assessment of the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) results (Altman and Taylor 1996: 199), the next two federal elections will be in 1999 and 2002, assuming full parliamentary terms. Presently, no commitment has been given by the Australian Bureau of Statistics (ABS) for another NATSIS nor for any enhanced use of Indigenous identifiers in ABS social surveys over this time frame (Barnes 1996). Without these, the next opportunity to obtain comprehensive information on the socioeconomic status of Indigenous Australians will be in the year 2002 following the 2001 Census. In short, there is a danger that the electorate, and Indigenous Australians in particular, will not enjoy the opportunity to be informed about the positive or negative impacts of new policy directions for the life of two parliaments at least.

Rather than waiting for the effects of policy and free market forces to show up as changes in social indicators, a more proactive approach in the face of a looming information gap is to forecast outcomes in labour force status, at least in terms of establishing the likely future parameters that decision-makers will need to consider. A key dynamic in such an exercise is the fact of rapid Indigenous population growth. The Indigenous population is currently expanding at a rate more than twice that of the total population, with an average annual rate of growth of around 2.3 per cent compared to 1 per cent generally (ABS 1996a: 2). At the same time, the Indigenous age structure is shifting with an increasing emphasis on persons of working age.

One policy issue directly affected by this population growth and change in age structure relates to employment prospects for Indigenous people. This is dealt with in the first part of the paper. In labour market terms, the consequence is an ever-increasing number of young Indigenous adults who are entering the transition phase from school to work, a process that will continue well into the new millennium. In the recent past, sustained growth in the Community Development Employment Projects (CDEP) scheme has helped to absorb much of this expanded labour supply (Sanders 1993). This capacity is now diminished, at least for the time being, as funding for the scheme was pegged in the 1996/97 budget (Hunter and Taylor 1996). If this situation continues, the challenge for policy makers will be to quickly boost alternative opportunities for new entrants to the workforce.

Several attempts have been made to estimate the scale of this task by calculating the number of additional jobs required to meet various employment/population ratio targets (Australian Government 1987; Gray and Tesfaghiorghis 1991; Altman and Gaminiratne 1994). The present exercise is essentially no different from these, except that it revises previous employment rates and numbers in light of the latest data from the 1994 NATSIS and uses ABS population projections which upwardly adjust previous estimates of working-age numbers. Using customised projections to the year 2006, the number of jobs required for Indigenous people to maintain the status quo in employment status or to achieve an equivalent rate of employment to the non-Indigenous population is calculated.

Also related to the current and future labour force status of Indigenous Australians is the social and economic cost to government, and society, of supporting individuals who are unemployed or not in the labour force. This may be set against the social and economic returns from gainful employment. The calculation of social rates of return is complex and has been attempted for Indigenous Australians in respect of returns to education expenditure (Junankar and Liu 1996). In estimating economic costs, a simpler approach is adopted involving a balance sheet of financial costs to government drawn from data on fiscal flows. This is presented in the second part of the paper as a trade-off between the cost to the Department of Social Security (DSS) of supporting unemployed people set against the additional cost to the Aboriginal and Torres Strait Islander Commission (ATSIC) of supporting CDEP scheme participants and to the Department of Employment, Education, Training and Youth Affairs (DEETYA) of providing labour market programs. Also incorporated in this assessment is the net benefit of shifting from non-employment to employment income with an associated increase in tax revenue.

Future size of the Indigenous working-age population

The data used here to estimate the future size of the working-age population are derived from official medium-series experimental projections produced by the ABS for the period 1991 to 2001 (ABS 1996a) and updated by special request to 2006. It should be noted that only the first part of this period should be considered as a forecast with the second half representing no more than a scenario drawn from possible trends. In addition, if the experience of discrepancies between previous counts of the Indigenous population are any guide, the likelihood of substantial upward revision of projected numbers should not be ruled out following the release of 1996 Census data.

Between 1986 and 1991, the average annual growth rate of the Indigenous population was estimated to be 2.5 per cent (Gray and Gaminiratne 1993: 2). The ABS medium-series projection assumes a progressive reduction in this rate by holding fertility constant throughout the projection period and

assuming a small decline in mortality. The results of the projection are summarised in Table 1. This reveals a rise in the Indigenous population from 283,560 in 1991 to 398,336 by the year 2006 representing a total increase of 40.5 per cent. The most profound shift in population structure from a policy perspective derives from expected changes in the age distribution. The striking feature here is the significant increase in the population of working age. Between 1996 and the middle of the next decade, it is estimated that around 56,000 persons will be added to the working-age population representing an increase of 29 per cent for this group. This is much higher than the projected increase of only 12 per cent for the total adult population (ABS 1996b). As a consequence, the proportion of the Indigenous population over the age of 15 years is expected to rise from 61.1 per cent to 63.1 per cent with further expansion expected beyond this.[1]

Table 1. Distribution of projected Indigenous population by broad age group, 1991-2006.

Age group	1991	1996	2001	2006
Numerical distribution				
<15 years	111,098	124,114	136,101	147,286
15+ years	172,462	195,099	221,401	251,050
Total	283,560	319,213	357,502	398,336
Index of growth (1991=100)				
<15 years	100	112	123	132
15+ years	100	113	128	146
Total	100	113	126	141
Per cent distribution				
<15 years	39.2	38.9	38.1	36.9
15+ years	60.8	61.1	61.9	63.1
Total	100.0	100.0	100.0	100.0

Source: ABS (1996a) for 1991-2001 and customised unpublished data for 2006.

Likely implications for future labour force status

Using projections of the working-age population, it is possible to estimate likely future outcomes in labour force status by extrapolating from previous trends in Indigenous employment levels and labour force participation. Two recent periods of employment growth are relevant to this exercise.

The 1993 Review of the Aboriginal Employment Development Policy (AEDP) noted that the rate of employment growth for Indigenous people

was substantially higher than for the population as a whole over the 1986-91 intercensal period (ATSIC 1994). At a time when overall employment growth was relatively sluggish at 1.7 per cent per annum, Indigenous employment increased at an historically high annual rate of 6.4 per cent.[2] It was also noted, however, that more than half of this increase in employment for Indigenous people derived from a substantial expansion of participation in the CDEP scheme. In Table 2, estimated changes in employment and working-age population are shown for the period 1986-91. Also presented is the growth in CDEP and non-CDEP scheme employment. As indicated, total Indigenous employment is estimated to have increased by 31.8 per cent with the expansion in CDEP scheme employment of 268 per cent, far outstripping mainstream employment growth which was 12 per cent or 2.4 per cent per annum. The combined effect of these increases was to raise the numbers employed as a percentage of the population aged 15 years and over (the employment/population ratio) from 30.8 to 35.8.

Table 2. Change in Indigenous employment, 1986-91.

	1986 Census	1991 Census	Net change	Per cent change
Employed	46,900	61,800	14,900	31.8
Population aged 15+ years	152,043	172,500	20,457	13.5
Employment/population ratio	30.8	35.8	5.0	16.1
CDEP participants	5,018	18,473	13,455	268.1
CDEP employment[a]	3,580	13,179	9,599	268.1
Non-CDEP employment	43,320	48,621	5,301	12.2

a. CDEP employment numbers in 1986 and 1991 are calculated as a proportion of the number of CDEP participants reported by ATSIC in each year using the ratio of CDEP scheme workers to participants of 71 per cent estimated by the 1994 NATSIS.

Subsequent change in employment is presented in Table 3 for the period 1991-94 using data from the 1991 Census and the 1994 NATSIS. While comparison of the NATSIS data with census data on unemployment and labour force participation is rendered difficult by variations in methodology, no such difficulty is encountered with employment statistics (ABS/Centre for Aboriginal Economic Policy Research (CAEPR) 1996). From Table 2, it is apparent that the rate of employment growth in the early 1990s slowed considerably compared to the late 1980s, although CDEP scheme employment growth (30.3 per cent) continued to substantially exceed mainstream employment growth (1.8 per cent). In total, an estimated 4,800 additional jobs were created for Indigenous people, representing a 7.8 per cent increase. However, this had no effect on the employment/population ratio which remained unchanged at

35.8 per cent because the population of working age grew at an equivalent rate. Furthermore, the rate of mainstream employment growth fell to only 0.6 per cent per annum.

These results underline the steadily growing importance of the CDEP scheme in terms of artificially holding up employment levels. Since 1994, the scheme has expanded further with a total of 28,000 participants in 274 communities recorded by mid-1996.

Table 3. Change in Indigenous employment, 1991-94.

	1991 Census	1994 NATSIS	Net change	Per cent change
Employed	61,800	66,600	4,800	7.8
Population aged 15+ years	172,500	185,800	13,300	7.7
Employment/population ratio	35.8	35.8	0.0	0.1
CDEP participants	18,473[a]	24,064	5,591	30.3
CDEP employment	13,179	17,167	3,989	30.3
Non-CDEP employment	48,621	49,480	859	1.8

a. 1991 CDEP scheme employment numbers are calculated as a proportion of the number of CDEP scheme participants reported by ATSIC in 1991 using the ratio of CDEP scheme workers to participants of 71 per cent estimated by the 1994 NATSIS.

Projecting labour force status, 1996-2006

The various steps in projecting labour force status have been outlined elsewhere (Hunter and Taylor 1996) and the key to this exercise is an estimate of the future size of the Indigenous labour force. This is produced by assuming that the labour force participation rate remains at the level recorded by the 1994 NATSIS which is the most recent indicator of Indigenous labour supply. While a lack of employment outcomes might serve to lower the future labour force participation rate through an enhanced discouraged worker effect, no empirical evidence exists for Indigenous people to establish such a relationship at the national level. Indeed, the evidence available points to relative stability in the Indigenous participation rate in recent times. Using ABS projections of the Indigenous working-age population to 2006, age-specific participation rates may then be applied to derive estimates of labour force numbers. The results of these calculations are shown in Table 4.

As for estimating the numbers in mainstream employment, two scenarios are postulated based on the recent labour market experience of Indigenous people. In scenario 1, mainstream growth is assumed to revert to the historically high rate experienced between 1986 and 1991 of 2.4 per cent

per annum. This was a period when considerable resources were made available for labour market and training programs via the AEDP. In scenario 2, it is assumed that growth continues at the much lower rate observed for the period 1991-94 of 0.6 per cent per annum. While this was also a period of considerable program expenditure, it would seem that Indigenous employment outcomes were adversely affected by a general downturn in labour market conditions. Current prognoses for growth in the labour market do not suggest any likely change in this situation in the medium term (Commonwealth of Australia 1997: 8).

In projecting CDEP scheme employment, it is assumed that this will continue to expand beyond 1996 by 550 participants per annum, as per the provisions in the 1996/97 budget for natural (administrative) increase in existing schemes and all are assumed to become working participants in the scheme given post-budget pressures on available places. Table 4 indicates that the number of CDEP scheme participants classified as employed is expected to rise from 19,000 in 1996 to 24,513 by 2006 based on the assumption of continued natural growth. According to the best-case scenario for mainstream employment growth (scenario 1), this increases from 51,884 in 1996 to 65,770 in 2006. Using more realistic assumptions given current labour market conditions (scenario 2) employment growth is very slight rising from 50,076 to just 53,160.

Table 4. Indigenous employment, labour force and working-age population, 1996-2006.

	Mainstream employment		CDEP	Labour	Population
	scenario 1	scenario 2	employment	force	15+ years
1996	51,884	50,076	19,013	113,199	195,099
1997	53,129	50,376	19,563	115,957	200,017
1998	54,404	50,679	20,113	118,803	205,062
1999	55,710	50,983	20,663	121,777	210,387
2000	57,047	51,288	21,213	125,179	215,827
2001	58,416	51,595	21,763	128,179	221,401
2002	59,818	51,904	22,313	131,605	226,905
2003	61,254	52,215	22,863	134,974	232,715
2004	62,724	52,528	23,413	138,381	238,588
2005	64,229	52,843	23,963	142,014	244,852
2006	65,770	53,160	24,513	145,609	251,050

In Table 5, the projected changes in employment numbers are converted to employment/population ratios and unemployment rates. Thus, if mainstream employment growth reverts to the historically high levels of the late 1980s (scenario 1), and natural growth in CDEP scheme

employment continues to add to total employment levels beyond 1996, then the employment/population ratio will remain unchanged at around 36 per cent and the unemployment rate will rise from around 37 per cent of the labour force to 40 per cent. It must be emphasised that these results of static employment levels and slowly rising unemployment would represent the estimated outcome from a substantial turnaround in the fortunes of Indigenous people in the job market. If, on the other hand, the status quo is maintained and the mainstream employment growth rates that have been experienced in recent years continue to apply (scenario 2), then the employment/population ratio is expected to fall from 35.4 in 1996 to 30.9 in 2006 while the unemployment rate is projected to rise from 39.0 to 46.6. This is a stark indicator of the potential impact of demographic changes already underway.

The policy implications of these projected estimates appear unequivocal. To sustain Indigenous employment at its current level would be less than sufficient to meet the growing demand for jobs and the result will be ever worsening labour market outcomes. Perhaps more alarming is the fact that even a return to the much higher employment growth rates of the 1980s would fail to impact on the current low labour force status of Indigenous Australians. What is required to begin to improve their position, before even contemplating a move towards employment equality, is nothing short of a quantum change in the number of new jobs. In the following section estimates of the likely numbers of new job requirements to achieve various policy targets are presented.

Table 5. Indigenous employment/population ratios and unemployment rates, 1996-2006.

	Employment/population ratios[a]		Unemployment rates	
	scenario 1	scenario 2	scenario 1	scenario 2
1996	36.3	35.4	37.4	39.0
1997	36.3	35.0	37.3	39.7
1998	36.3	34.5	37.3	40.4
1999	36.3	34.1	37.3	41.2
2000	36.2	33.6	37.4	42.1
2001	36.2	33.1	37.5	42.9
2002	36.2	32.7	37.6	43.6
2003	36.1	32.3	37.7	44.4
2004	36.1	31.8	37.8	45.1
2005	36.0	31.3	37.9	45.9
2006	36.0	30.9	40.0	46.6

a. Employment/population ratios include CDEP scheme employment. All of the estimates are based on the data in Table 4. Unemployment rates express the unemployed as a percentage of the labour force.

Future employment requirements

The 1994 NATSIS recorded an employment/population ratio for Indigenous people of 35.8. This was substantially below the ratio of 56.7 recorded for all other Australians by the March 1994 Monthly Labour Force Survey. Assuming that the estimated base Indigenous employment of 66,647 persons in 1994 is not eroded, and that the non-Indigenous employment/population ratio also remains constant, two sets of estimated employment requirements are provided for: first, a minimalist scenario which estimates the numbers required simply to maintain the Indigenous employment/population ratio at its 1994 level; second, the numbers required to achieve employment equality with the rest of the population. These are shown according to long-term (1996-2006) projections in Table 6.

Table 6. Required Indigenous employment growth to maintain the status quo or achieve employment equality, 1996-2006.

Employment/ population ratio	Base employment 1996[a]	Required jobs 2006	New jobs required	New jobs per annum[b]
35.8[c]	69,854	89,875	20,021	2,002
56.7[d]	69,854	142,345	72,491	7,249

a. The estimated number of Indigenous Australians in employment in 1996 assuming a constant 1994 employment/population ratio.
b. Over a ten-year period.
c. The 1994 employment/population ratio for Indigenous Australians calculated from the NATSIS.
d. The employment/population ratio for non-Indigenous Australians in March 1994.

Because of growth in the population of working age, an additional 20,000 jobs will be required by the year 2006 just to maintain the rate of Indigenous employment at the 1994 level. This means that by the middle of the next decade, the Indigenous workforce will need to have increased by almost one-third of its estimated present size to avoid any decline in the already low employment level. To achieve employment equality between Indigenous and non-Indigenous Australians by the end of the decade many more new jobs will be required. By the year 2006, around 72,500 new jobs will need to be created. This represents a workforce more than double in size from that estimated for 1996. In annual terms, this translates into more than 7,000 new jobs per annum which is substantially greater than the 1,600 new jobs estimated to have been created each year in the early 1990s (Hunter and Taylor 1996: 4). While the magnitude of this backlog has been appreciated for some time (Australian Government 1987; Gray and Tesfaghiorghis 1991), these figures underline the fact that no in-roads have been achieved and if anything the outlook appears worse than previously estimated.

Estimates of the cost to government of projected Indigenous labour force status

If social and economic conditions for Indigenous people remain the same as presently experienced then the cost to government of providing income support, welfare payments and remedial support to those seeking work or who are not in the labour force will escalate in line with the growth in working-age population. On the other hand, as the Canada Royal Commission on Aboriginal Peoples (Canada 1996: 46) observed, if Indigenous people had more and better jobs then they would be able to meet many of the basic needs that governments now provide for, from their own incomes. Furthermore, current government expenditures redistribute income between all Australian and Indigenous people with the effect of shifting part of the cost of foregone production from Indigenous people to government. Improved employment outcomes would contribute to reducing this cost.

Welfare cost of maintaining the status quo in labour force status
For this accounting exercise, CDEP scheme participants are considered separately from the unemployed and those not in the labour force. In 1994, a total of 24,064 CDEP scheme participants were registered. This was 6,897 higher than the number of CDEP scheme employees estimated by the 1994 NATSIS. Given that participation in the scheme is largely financed by unemployment benefit equivalence, those participants counted as not employed by the 1994 NATSIS are assumed to have been coded as unemployed. Thus, the 1994 estimate of the unemployed is reduced by shifting 6,897 CDEP participants from unemployed status to CDEP employed status.

In the absence of any basis to estimate otherwise, the 1994 participation rate of 58.0 per cent is assumed to remain constant throughout the projection period. Multiplied by the population aged 15 years and over, this provides an estimate of the labour force in each year. Those not in the labour force represent the difference between the labour force and those in mainstream employment, CDEP scheme employment and unemployment as shown in Table 7.

In order to estimate the future cost to government of supporting these projected numbers of CDEP scheme participants, unemployed persons and those not in the labour force, a mix of data sources are used. For the CDEP scheme, expenditure on the scheme reported by ATSIC (1996) for the 1995-96 financial year is divided by the number of scheme participants to produce an average cost per participant of $11,605. For the unemployed, the average amount of income support for recipients of JobSearch Allowance, NewStart Allowance and the Youth Training Wage is estimated using DSS data (Commonwealth of Australia 1996a: 151-3) by dividing total outlays in 1995-96 ($6.6 billion) by the average monthly

number of recipients (812,000). This produces a figure of $8,128 per recipient. A similar calculation using administrative data is more problematic for those not in the labour force. As a proxy measure of government spending on this group, the average income of those not in the labour force reported in the NATSIS in receipt of the age pension, sickness allowance, disability support and sole parent pension ($10,200) is used on the assumption that this is their sole source of income. In 1994, 57 per cent of those not in the labour force were recorded as recipients of such payments and this ratio is applied to the not in the labour force estimates to derive the number of recipients each year (46,700 in 1996, 53,100 in 2001 and 60,100 in 2006).

Table 7. Estimated Indigenous labour force status, 1996-2006.[a]

	1996	2001	2006
Mainstream employment	50,000	51,600	53,160
CDEP scheme participants	28,300	30,750	33,500
Unemployed	35,000	45,760	58,650
Not in the labour force	82,000	93,000	105,440
Total in receipt of government support	145,300	169,510	197,590

a. Assuming a rate of growth in mainstream employment between 1994 and 1996 of 0.6 per cent per annum.

Using these mean income data, the estimated total cost to government of current and future Indigenous labour force status is shown in Table 8. This assumes a continuation of recent low growth in mainstream employment of 0.6 per cent per annum. Figures are shown in real dollar terms estimated using the projected consumer price index (CPI) for each year from 1996-97 to 1999-2000 (Commonwealth of Australia 1997: 10). Beyond this, the 1999-2000 CPI is assumed to persist through to 2006.

Table 8. Estimated cost to government of Indigenous labour force status, 1996-2006.[a]

Labour force status	1996 ($ million)	2001 ($ million)	2006 ($ million)
CDEP scheme	326	399	490
Unemployed	284	418	606
Not in the labour force	511	687	779
Total	1,121	1,504	1,875

a. Assuming mainstream employment growth at 0.6 per cent per annum.

In 1996, the total cost from a labour market perspective of supporting individuals who were not in mainstream employment was estimated to be $1.1 billion. By 2001, this cost is estimated to rise to around $1.5 billion and to almost $1.9 billion by 2006, assuming current low rates of employment growth (0.6 per cent per annum) prevail. If a higher rate of mainstream employment growth is assumed (at 2.4 per cent per annum) the effect of lowering the overall welfare cost to government is minimal with $1.4 billion estimated for 2001 and $1.7 billion by 2006.

Using these same data, if Indigenous unemployment was reduced to the same level as that commensurate with the rest of the population, and assuming that this latter rate remained constant, then the savings to government in payments to the unemployed would be around $318 million by the year 2001 and $478 million by 2006 (in real terms) with unemployment bills of $100 and $130 million respectively. On the credit side, if all those formerly unemployed were to gain full-time mainstream employment (excluding full-time CDEP employees) with an annual income equivalent (in 1996 prices) of $27,600 (based on reported income by non-CDEP full-time employees in 1994), then the estimated tax return to government (using 1996-97 tax rates) would approximate $188 million.

The marginal cost of labour market programs

The experience to date of Indigenous people in the labour market suggests that free market forces are unlikely to generate additional jobs sufficient in quantity even to sustain current employment levels. This is hardly surprising as persistently poor mainstream employment outcomes have been shown to reflect the historical legacy of entrenched structural disadvantage in an increasingly competitive labour market (ABS/CAEPR 1996). On the one hand, demand for Indigenous labour is constrained by the disproportionate location of Indigenous people in areas where mainstream labour markets are either poorly developed, in decline or difficult to access. On the other hand, deep-rooted supply-side limitations and constraints also exist and are highlighted by relatively low labour force participation.

At the same time, it should be acknowledged that factors leading to positive labour market outcomes also exist. For example, the NATSIS reported a strong link between education, training and the acquisition of mainstream employment (ABS/CAEPR 1996: 34-8, 70-5). The problem here, however, is the relatively low base from which a qualified Indigenous workforce may be established. In 1991, for example, only 8 per cent of Indigenous adults had a post-school qualification compared to 28 per cent of all adults. Even though the proportion of Indigenous adults who are qualified shows clear signs of rising over time, the same is true of all adults while those already in work are increasingly multi-skilled. In short, the workforce as a whole is projected to become more skilled over the next decade at the expense of those, such as Indigenous workers, at the lower

end of the occupational scale. This will place an increased premium on individuals who are not just qualified but also multi-skilled and work-ready (Commonwealth of Australia 1995: 73-92). In this context, the marginal cost to DEETYA of placing Indigenous people in labour market programs and achieving a positive outcome, defined by DEETYA (Commonwealth of Australia 1996b: 120) as those in unsubsidised employment, education or training three months after participating in the program, is of interest.

Table 9. Estimated costs of major DEETYA labour market programs.

Program	Unit cost of assistance ($)[a]	Cost per positive outcome ($)	Cost per net impact ($)
JobStart	1,124	1,895	4,887
Job Clubs	669	1,414	6,082
SkillShare	961	2,277	8,008
JobTrain	776	1,883	7,055
JobSkills	6,126	15,015	76,575
Average cost[b]	1,931	4,496	20,521

a. The unit cost of assistance takes into account savings to government accrued through reduced income support payments. Costs are shown for 1993-94.
b. The average cost is unweighted by program participation as the distribution of clients across programs is unknown.

Source: Senate Employment, Education, Training and Youth Affairs Legislation Committee Hearing Budget 1996-97, Questions on Notice: answer to DEETYA Question No. 218 (Senator Margetts).

One means of approaching a rough estimation of the cost to DEETYA of labour market intervention is by using a combination of published information on program placements and expenditure. Post Program Monitoring (PPM) data also provide a basis for estimating the cost of achieving positive outcomes. Such an exercise has been undertaken by DEETYA using data for all clients from a selection of their major labour market programs and the results in terms of average unit costs and net impact costs per positive outcome are shown in Table 9.

On the basis of these figures, the relative cost of providing a DEETYA labour market program can be set against either providing income support to unemployed persons, providing for participation in a CDEP scheme, or achieving a positive outcome from a labour market program. The unit cost of providing unemployment benefit is estimated at around $8,000 while the unit cost of moving people on to a labour market program is estimated to be 25 per cent higher at $10,000. Against this, the cost of CDEP scheme participation is 15 per cent higher again at $11,500. Compared to the cost per net impact of achieving a positive labour market outcome ($20,500),

these marginal costs pale into insignificance. It should also be noted that the cost per net impact is for all DEETYA clients and, as such, probably represents an underestimate of costs for Indigenous people given their multiple disadvantage.

It is tempting to suggest that this cost per positive outcome could be used to estimate global expenditure requirements to achieve selected employment targets. For example, if 55,680 additional jobs are required by the year 2001 to achieve employment equality as per Table 6, then it may seem that the cost (in 1996 dollars) of generating these jobs via labour market programs would be 55,680 x $20,500 which equals $1.1 billion. However, this calculation is not necessarily valid as no direct link exists between expenditure and positive outcomes, not least because of variable regional demand for Indigenous labour which is strongly associated with the distribution of CDEP scheme employment (Altman and Hunter 1996: 14-15).

Spending on Indigenous labour market program commencements

In the financial year 1995-96, a total of 42,725 Indigenous commencements were recorded in DEETYA employment and training programs (Commonwealth of Australia 1996b: 119, 143). Of these, 72 per cent (30,825) were in mainstream programs and 28 per cent (11,900) in Aboriginal Employment and Training Assistance programs. Using the average cost per commencement in each program (from program expenditure data) total expenditure on Indigenous commencements in 1995-96 can be estimated at $170 million as shown in Table 10. If the estimated cost of $10.6 million for providing case management services to Indigenous clients is added to this (Commonwealth of Australia 1996b: 138-9), then the total cost becomes $181 million.

However, not all clients achieve a successful employment outcome and the marginal cost of achieving a positive outcome is perhaps a more meaningful measure of costs to government. Unfortunately, the actual number of successful Indigenous client outcomes is unknown, although the proportion of Indigenous PPM survey respondents in unsubsidised work is reported by DEETYA (Commonwealth of Australia 1996b: 121). One problem in using these data as a basis for estimating the number of clients who achieve a positive outcome is that response rates to PPM surveys vary considerably, particularly among Indigenous clients. If these ratios were truly representative of all Indigenous clients in each program then a total of 7,350 positive outcomes would be estimated, which seems very high given evidence from the NATSIS of recent low growth in mainstream employment (Hunter and Taylor 1996: 2-4). In this context, it is also worth noting that this refers only to outcomes three months after program participation and also includes an unknown proportion of people in non-DEETYA training or education who may, or may not, be considered employed.

Table 10. Estimated cost of Indigenous commencements in DEETYA labour market programs, 1995-96.

Program	Indigenous commencements	Mean cost ($) per commencement	Total cost ($ million)
TAP	11,900	5,294	62.998
JobStart	2,422	2,326	5.557
National Training Wage	3,594	1,909	6.860
JobSkills	1,244	10,111	12.578
LEAP	1,030	6,846	7.051
New Work Opportunities	5,230	10,163	53.152
JobTrain	3,208	1,774	5.690
Special Intervention	2,701	2,155	5.820
Accredited Training Youth	84	5,411	0.454
SkillShare	7,798	1,103	8.601
Job Clubs	1,146	666	0.763
Mobility Assistance	2,288	408	0.933
Other	80	1,751	0.140
Total	42,725		170.597

Source: Commonwealth of Australia (1996b: 119-43).

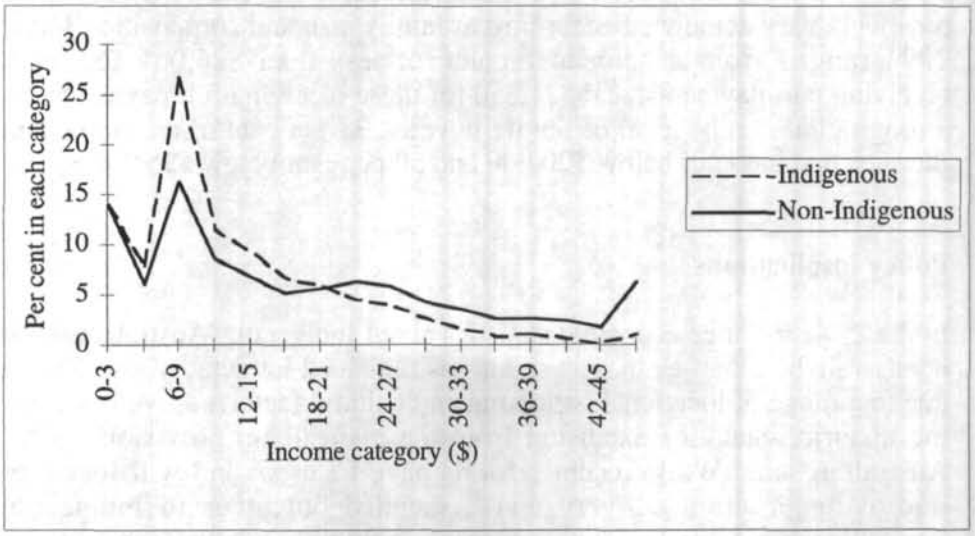
Income requirements

In 1994, the overall average income for Indigenous adults was $14,000 which was 30 per cent less than the average of $20,000 for the total population. While this is partly due to the relatively low employment/population ratio and greater dependence on government spending, it also reflects the overall lower occupational status of Indigenous people who are in work. For example, the average income for Indigenous people in full-time non-CDEP scheme employment in 1994 was $27,300. This was 13 per cent below the average income for all full-time employed people. If the income of all employed Indigenous people is considered, then average income falls to $21,142 which is 24 per cent lower than the average income of all non-Indigenous employees. This reflects the much greater reliance on low status and part-time work experienced by Indigenous workers. As an indicator of the economic cost of foregone earnings, Indigenous workers would have had to earn $440 million more in 1994 in order to have had the same average income as all other workers.

A comparison of Indigenous and non-Indigenous income distribution is shown in Figure 1. This reveals that Indigenous people are over-represented in almost all income categories below $18,000-21,000 and under-represented in all categories above this. The index of dissimilarity of 19.3 between these distributions indicates that around one-fifth of

Indigenous people would have to shift their income category in order to achieve an equivalent income distribution to that of non-Indigenous people.[3] If the distribution of Indigenous incomes was the same as for non-Indigenous incomes then the resultant estimated total income of Indigenous people would rise from $2.2 billion to $3.4 billion, an increase (or relative shortfall compared to non-Indigenous Australians) of $1.1 billion.

Figure 1. Income distribution of the Indigenous and non-Indigenous populations, 1994.



Source: ABS (1996c: 124).

The level of income support

To gain some idea of the number of Indigenous adults who depend directly on government support for their income, the value of unemployment benefit can be used as a proxy measure of the income level deemed by government as the minimum necessary for living. In 1994, the single independent unemployment allowance was $294 per fortnight or about $7,600 per year. Almost half (48.7 per cent) of Indigenous people over 15 years of age were in, or below, the income range that corresponded with this ($6,000-9,000) compared to 37 per cent of non-Indigenous people. This corresponded to 86,911 Indigenous people in 1994 or an estimated 91,243 by 1996. At the other extreme, only 8.6 per cent of the Indigenous adults (16,088 persons by 1996) had incomes above average annual earnings of $27,700 in May 1994 (ABS 1996c: 114). This compared to 24 per cent of all other Australians.

At the simplest level, one measure of economic independence from government is provided by the number of adults in receipt of non-CDEP

employment income. In 1994, this applied to only 24.1 per cent of the Indigenous adult population (43,741 persons) and their average income of $24,802 was below average annual earnings. Alternatively, 63.4 per cent of Indigenous adults in the NATSIS reported government payments as their main source of income and on average their income was $9,576 (ABS 1995: 55).

One further guide to low income status is provided by the distinction between basic and additional family allowance payments. The latter are designed to provide extra support to families on the lowest incomes and may be used as an indicator of the minimum family income required for adequate living. The income levels set to establish eligibility for these payments vary somewhat according to family size and composition but in 1994 ranged from an annual income of less than $26,061 for those receiving part payments, and $21,350 for those receiving full payments. As a rough guide to the level of family poverty, 37 per cent of all Indigenous families had incomes below $20,000 and 50 per cent below $25,000.

Policy implications

In the 25 years since economic statistics about Indigenous Australians have been available, their economic status has remained intractably low. This is due to a range of locational, structural and cultural factors, as well as being the historic legacy of exclusion from the mainstream provisions of the Australian state. While recent reforms have focused, and will focus, on improving program delivery and associated outcomes to Indigenous Australians in a wide range of areas including health, housing and infrastructure, education and training and employment, there is an underlying demographic trend that could see the economic situation of Indigenous Australians worsen despite considerable government intervention. Because of this, there is an on-going need for some form of targeted assistance. Furthermore, the dynamics suggest that investments in economic policy measures should be sustained into the medium-term in order to possibly reap benefits to government and to Indigenous people in the longer term. International scrutiny of Indigenous economic circumstances will not decline in the next five to ten years; nor will the social costs to Australia associated with the continuing economic marginality of one very visible section of society.

In terms of target groups within the Indigenous population, approximately 65 per cent of adults can be said to currently depend on some form of government assistance to support their presence in the labour force or to sustain them outside of it (ABS 1995: 55). In respect of these, it seems safe to assume that those on the CDEP scheme are there for sound structural reasons, such as lack of local labour markets, and that the numbers could expand substantially if the fiscal brake were released, not least in the

context of proposals for a national work for the dole scheme. However, one of the features of the CDEP scheme to date has been the lack of movement away from the scheme towards unsubsidised employment or towards providing greater earning capacity. To avoid this becoming a perpetual state, mechanisms need to be found that encourage upward mobility with examples drawn from the job training and enterprise development packages that some of the more successful schemes appear to have developed (Smith 1994, 1996).

In terms of demand for labour market programs, once again there are no indications that this will diminish even if more favourable rates of mainstream employment growth than experienced in the recent past are achieved. The same applies to the need for welfare support for those not in the labour force. Evidence from the NATSIS points to a number of structural reasons for people requiring welfare support including poor health, family responsibilities, discouraged worker effects due to lack of local job opportunities and lack of qualifications and skills (ABS/CAEPR 1996). Reducing these effects will require change over the long-term, in some instances over generations.

With these sizeable policy target groups in place for some time to come, there is need for continued support from government to avoid a situation of serious disadvantage becoming even worse. Moreover investments should be made now if there is to be any hope of turning the future tide. This will require a mix of policies that provide a holding pattern on the one hand and that invest in human capital and economic development on the other. Among the main features of such a policy mix are the following:

- Sustain the CDEP scheme in situations where mainstream labour markets simply do not exist or where the local skills of the population prevent them from competing in an increasingly competitive labour market. At the same time, mechanisms should be established to encourage movement off CDEP scheme and into mainstream work where possible and desired;

- In mainly urban and metropolitan locations underwrite participation in labour market programs with a greater focus on a program mix which produces positive outcomes;

- Encourage greater business opportunities (joint venturing) productively using Indigenous-owned land and Indigenous competitive advantage where it exists, for example in cultural industries;

- Increase efforts through training, financing and government tendering processes to facilitate further self-employment and Indigenous entrepreneurship; and

- Boost resources aimed at holistically improving the underlying determinants of poor Indigenous employment outcomes - education, housing, health, incarceration - recognising their interdependence.

The opportunity cost of inaction is potentially huge with both economic and social consequences for government. As for what to do: in economic policy terms, it should first be acknowledged that government initiatives to free the Australian labour market and make it more competitive will have limited positive impact on Indigenous circumstances, especially for people who live in remote regional Australia. New government initiatives, such as the proposed work for the dole scheme, have already been applied in Indigenous communities for the past 20 years and it is ironic that funding for the CDEP scheme has been pegged at a time when new resources are being mooted for a similar scheme for other Australians. The key point to note is that over the next decade the workforce as a whole is projected to become more skilled at the expense of those, such as most Indigenous workers, who are at the lower end of the occupational scale. This will place an increased premium on individuals who are not just qualified but also multi-skilled and work-ready.

Notes

1. Over the same period the Indigenous population aged 65 years and above will remain relatively insignificant at around 2.6 per cent of the total.

2. Historic in the sense that this was the highest rate of employment growth for any intercensal period since Indigenous people were first included in official census counts of the Australian population in 1971.

3. A relative measure of difference in the pattern of proportional distribution between two otherwise similar data sets is provided by the index of dissimilarity. This is calculated by summing the absolute differences between the percentages of Indigenous and non-Indigenous people in each income category and dividing the answer by two. For example, using hypothetical data showing the percentages of Indigenous and non-Indigenous people in three income categories:

Income category ($)	Indigenous (per cent)	Non-Indigenous (per cent)	Absolute difference
0-3,000	65	20	45
3,000-6,000	10	50	40
6,000-9,000	20	30	10
Total	100	100	95

In this case, the index of dissimilarity would equal 95/2 = 47.5 per cent. In other words, almost half of Indigenous people (or non-Indigenous workers) would have to change their income category in order to eliminate the difference in the statistical distributions. The index thus ranges from zero (no difference) to 100 (complete difference).

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