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**Indigenous labour force status
to the year 2000: estimated
impacts of recent Budget cuts**

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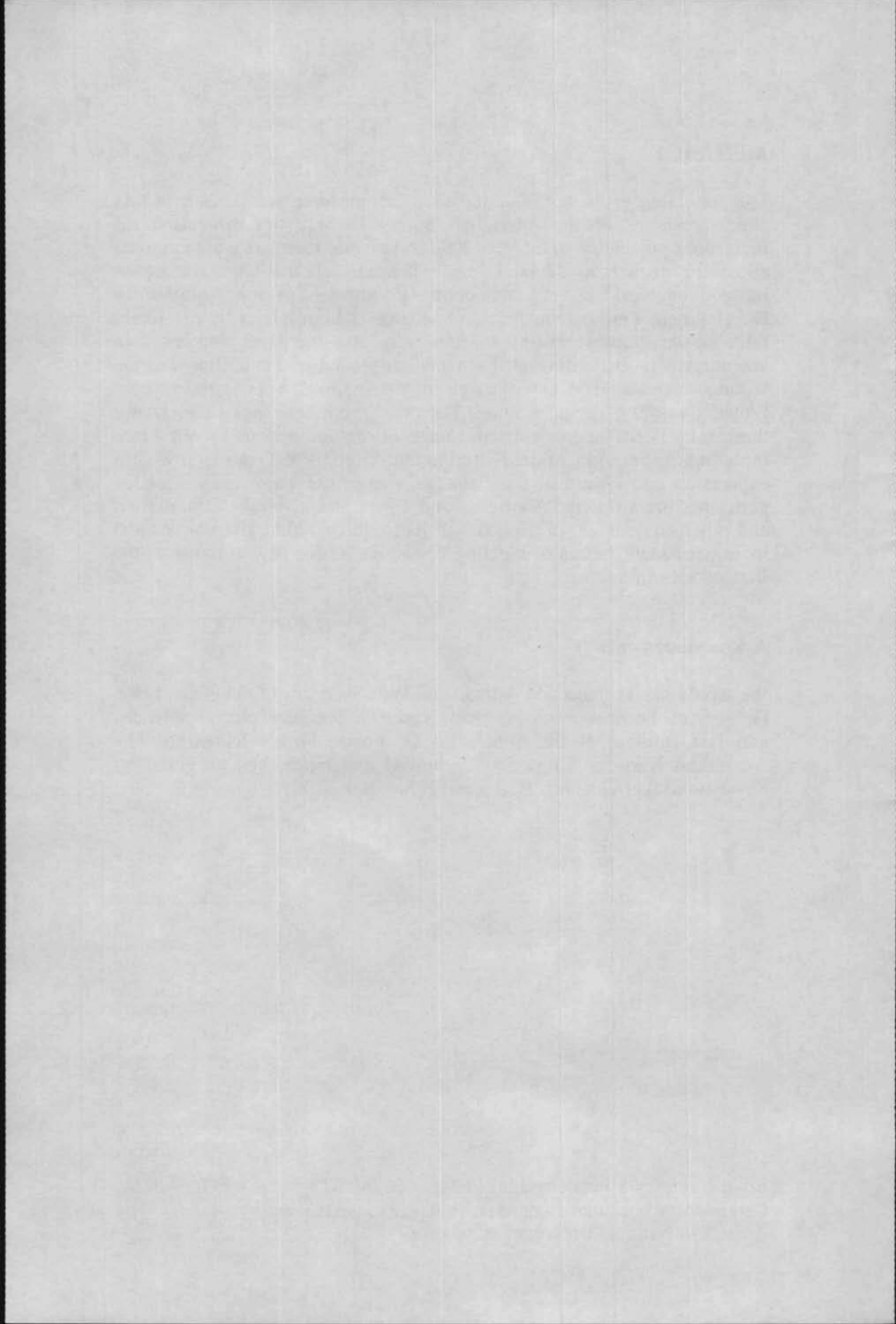
ABSTRACT

The simulated estimates of Indigenous labour force status used in this paper are based on the Australian Bureau of Statistics projections of Indigenous population to the year 2000 and several reasonable assumptions about the growth in demand for Indigenous labour. The reliance of Indigenous workforce on the continued growth of the Community Development Employment Projects scheme is highlighted by the likely falls in the employment/population ratio and the large increases in unemployment that will result from any budget-induced curtailment of the scheme's growth. The key dynamic of these simulations is the rapidly growing working-age population. The other prominent factor underlying the results is the ongoing disadvantage of the Indigenous labour force including: poor educational attainment, high arrest rates, low life expectancy and locational disadvantage. One of the major challenges for policy makers within the Aboriginal and Torres Strait Islander Commission and other government portfolios will be to quickly find alternatives and more permanent means of creating opportunities for new entrants to the Indigenous workforce.

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A concern previously articulated in regard to over-reliance on government programs for job growth among Indigenous people is the vulnerability to any significant shift in government policy that this entails (Altman and Daly 1992, 1996; Taylor 1993a: 47). This dilemma stems from the much greater dependence of Indigenous people on work in the public and community sectors of the labour market, a fact established by census analysis (Taylor 1993b) and confirmed more recently by data from the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) (Australian Bureau of Statistics (ABS) 1996a). An extreme example of this reliance is provided by the Community Development Employment Projects (CDEP) scheme which has expanded rapidly since 1987 to the present time under the umbrella of the Aboriginal Employment Development Policy (AEDP) and the Labor Government's *Working Nation* initiatives (Commonwealth of Australia 1994; Sanders 1993).

Over this period the number of communities participating in the CDEP scheme rose from 38 to 262 with participant numbers increasing from around 4,000 to over 27,000. Between 1986 and 1991, around 60 per cent of additional jobs created for Indigenous people are estimated to have derived from this expansion of the CDEP scheme (Taylor 1993b: 33-7), while over the more recent period of 1991-94 the equivalent proportion was in the region of 80 per cent (ABS 1996a: 15). Because of the nature of the scheme as a partial substitute mechanism for payment of unemployment benefits, this also implies a sizeable transfer of people away from unemployment to employment status. Not surprisingly, the NATSIS estimated that as much as 26 per cent of all Indigenous workers were participants in the CDEP scheme in 1994.

The announcement in the 1996-97 Budget of reductions in global funding to the Aboriginal and Torres Strait Islander Commission (ATSIC) marks a break with recent Indigenous affairs policy. The key feature, after years of fiscal expansion, is the curtailment of growth in program spending in a number of policy areas including the CDEP scheme and programs affecting community employment within the ATSIC portfolio ('ATSIC Budget 1996-97', *Media Release*, 16 August 1996). This reduction in spending is a salutary reminder of the improvised nature of much recent Indigenous employment growth, particularly that emanating from the CDEP scheme. However, given the important role played by the CDEP scheme in providing a degree of buoyancy in Indigenous labour market outcomes, there is clearly an urgent need to estimate the likely effects of alterations in program spending on future labour force status.

As a preliminary step in this process, this paper calculates a number of possible outcomes in Indigenous labour force status to the year 1999 based on extrapolation of known parameters in labour market performance between 1986 and 1994. These calculations explore a combination of interactions between employment in the CDEP scheme, mainstream (non-

CDEP scheme) employment growth, and projected increases in the working-age population according to various assumptions regarding changes to these parameters. Also incorporated are adjustments to population and employment counts in line with the ABS medium series experimental projections of the Indigenous working-age population (Benham and Howe 1994; ABS 1996b). These reveal a rapidly growing population of working age which, in turn, provides the key underlying dynamic to any projection of labour force change.

The first part of the paper outlines the empirical base for the calculations followed by an explanation of assumptions used in estimating some of the interactions and in modelling the effects of government policy. Using these data, forward projections of employment/population ratios and unemployment rates are presented in the form of a best-case outcome, a worst-case outcome and an average of these two outcomes. In conclusion, a number of interpretative issues are raised and likely implications for policy are examined.

Indigenous employment growth 1986-94

The 1993 Review of the 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 annual rate of 5.4 per cent. 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 1986, the CDEP scheme operated in only 38 communities Australia-wide with a total of some 5,000 participants. By the time of the 1991 Census, 165 communities were involved in the scheme with the number of participants totalling 18,500.

Following the 1994 NATSIS, which acquired comprehensive information for the first time on the numbers directly employed by the CDEP scheme, it is possible to revisit previous estimates of CDEP scheme employment and apply a more rigorous formula.¹ This represents the number of CDEP scheme workers from the NATSIS (17,167) divided by the number of CDEP scheme participants at the time of the 1994 Survey (24,064) and produces a ratio of 71 workers per hundred participants.² Using this ratio, CDEP scheme employment accounted for an estimated 8 per cent of total Indigenous employment in 1986 and by 1991 this is estimated to have risen to 23 per cent.

With the availability, since the AEDP Review, of experimental estimates of the Indigenous working-age population, it is possible to upwardly adjust employment figures from the 1986 and 1991 Censuses in line with estimates of under-enumeration.

These revisions have been applied to the data in Table 1 which shows estimated changes in employment and the working-age population for the period 1986-1991. 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 (268 per cent) far outstripping mainstream employment growth (12 per cent). The combined effect of these increases in employment 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 1. 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 2 for the period 1991-94 using data from the 1991 Census and the 1994 NATSIS. While comparison of the NATSIS 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 1996c). Table 2, shows 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 because the population of working age grew at an equivalent rate.

These results underline the steadily growing importance of the CDEP scheme, not only in terms of artificially upholding employment levels, but also in lowering the unemployment rate. Since the time of the NATSIS, the scheme has expanded further with a total of 28,000 participants in 274 communities recorded by mid-1996. Data from the NATSIS, which for the

first time provided a direct measure of employment in CDEP schemes, shows that the trend towards an increasing CDEP scheme share of total employment also seems to have continued with the scheme accounting for fully 26 per cent of those in work in mid-1994.

Table 2. 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/pop ratio	35.8	35.8	0.0	0.1
CDEP participants	18,473	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

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

Estimating budget impacts on labour force status, 1996-99

As part of a reduction in global funding to ATSIC announced in the 1996-97 Federal budget, planned provision of an additional 2,500 CDEP scheme places in 1996-97 and 1997-98 has been curtailed. Also affected are capital outlays for the CDEP scheme. In particular, the government has decided that there should be a 12 per cent reduction in CDEP scheme capital and administrative on-costs for projects with 150 or more participants ('ATSIC Budget 1996-97', *Media Release*, 16 August 1996). On the credit side, provision is to be made for some natural growth in participation in existing schemes and ATSIC has estimated this to be at the rate of 1.96 per cent of the current participant level, or 550 persons per annum.

While this natural increase provides for continued growth in CDEP scheme participant numbers, the future rate of expansion will be much reduced compared to recent years. At the same time, it should be noted that a freeze on CDEP participant number has occurred before, only to be followed by further growth (Sanders 1993: 3). More importantly, however, it is probable that any effect of natural increase in participation on employment growth will be nullified in the medium-term by reductions in spending on CDEP scheme on-costs and training given ATSIC's own estimation that this action will put at risk the viability of a number of schemes ('ATSIC Budget 1996-97', *Media Release*, 16 August 1996). In addition, from the perspective of employment growth, are expenditure cuts in the Community and Youth Support Program and the Community Training Program which will also result in job losses. While the extent of such job loss remains

unknown at this stage given the lead time for these to take effect, it is potentially far greater than the current proposals for limited expansion in CDEP scheme participation.

The first step in estimating the impact of these budget-related measures on future labour force status is to calculate the future size of the Indigenous labour force. This is done by assuming that the labour force participation rate would remain at the level recorded by the 1994 NATSIS which is the most recent indicator of Indigenous labour supply. The empirical basis for this assumption is the relative stability observed in the Indigenous participation rate in recent times. Using ABS experimental projections of the Indigenous working-age population to 1999 (ABS 1996b), age-specific participation rates were then applied to derive estimates of labour force numbers. The results of these calculations are shown in Table 3.

Table 3. Indigenous employment, labour force and working-age population, 1994-99.

	Mainstream employment			CDEP employment	Labour Force	Population 15+ years
	Scenario 1	Scenario 2	Scenario 3			
1994	49,480	49,480	49,480	17,167	107,939	185,836
1995	50,668	49,777	50,222	18,090	110,566	190,438
1996	51,884	50,076	50,976	19,013	113,199	195,099
1997	53,129	50,376	51,740	19,563	115,957	200,017
1998	54,404	50,679	52,517	20,113	118,803	205,062
1999	55,710	50,983	53,304	20,663	121,777	210,387

The estimated number of CDEP scheme employees in the NATSIS is adjusted proportionally by the difference between the total NATSIS population and the experimental projections. The CDEP employment projections assume a growth of 71 per cent of 1,300 CDEP scheme participants per annum between 1994 and 1996 and 550 participants thereafter.

Source: ABS (1996a, 1996b).

As for estimating the numbers in mainstream employment, three scenarios are postulated. 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. 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. Finally, scenario 3 assumes an average of these growth rates at 1.5 per cent per annum. It is important to note that Indigenous-specific rates of employment growth are preferred here as opposed to national growth rates because of the segmented nature of the Indigenous labour force (Altman and Daly 1992; Taylor 1993a; Altman and Hunter 1996).

In projecting CDEP scheme employment, two possibilities are canvassed. First that growth in CDEP scheme employment between 1994 and 1996

occurred at a rate of 1,300 per annum. This is based on the observation from the NATSIS that only 71 per cent of CDEP scheme participants were recorded as workers in the scheme (ABS 1996a). This same ratio of workers to participants is then applied to known numbers of participants in June of each year to 1996 on the understanding that for this period participant lists included a number of non-working individuals, such as dependent spouses. For the period 1996-99, two possibilities are provided for. First, that employment in the CDEP scheme will continue to expand by 550 participants per annum, as per the budget provisions for natural increase in existing schemes. Unlike previous practice, all of these are assumed to become working participants in the scheme given post-budget pressures on available places. Second, that this natural growth will be nullified by the effect of other budget measures related to the scheme and, as a consequence, CDEP scheme employment will remain at the 1996 level.

Table 3 shows that the numbers employed in the CDEP scheme are expected to rise from 17,167 in 1994 to 20,663 by 1999 based on the assumption of continued natural growth beyond 1996. According to the best-case scenario for mainstream employment growth (scenario 1), this increases from 49,480 in 1994 to 55,710 in 1999. Using worst-case assumptions (scenario 2) employment growth is very slightly rising from 49,480 to just 50,983.

Table 4. Indigenous employment/population ratios and unemployment rates, 1994-99.

	Employment/population ratios			Unemployment rates		
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
1994	35.9	35.9	35.9	38.3	38.3	38.3
1995	36.1	35.6	35.9	37.8	38.6	38.2
1996	36.3	35.4	35.9	37.4	39.0	38.2
1997	36.3	35.0	35.6	37.3	39.7	38.5
1998	36.3	34.5	35.4	37.3	40.4	38.9
1999	36.3	34.1	35.2	37.3	41.2	39.3

Employment/population ratios include CDEP scheme employment. All the estimates are based on the data in Table 3. Unemployment rates express the unemployed as a percentage of the labour force.

In Table 4, 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 best outcome that can be expected is that the employment/

population ratio and the unemployment rate will remain unchanged at 36.3 and 37.3 respectively. If, however, 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 34.1 in 1999 while the unemployment rate is projected to rise from 39.0 to 41.2.

Table 5. Indigenous employment change assuming no growth in CDEP participation, 1994-99.

	Mainstream employment			CDEP ^a employment	Labour force	Population 15+ years
	Scenario 1	Scenario 2	Scenario 3			
1994	49,480	49,480	49,480	17,167	107,939	185,836
1995	50,668	49,777	50,222	18,038	110,566	190,438
1996	51,884	50,076	50,976	18,909	113,199	195,099
1997	53,129	50,376	51,740	18,909	115,957	200,017
1998	54,404	50,679	52,517	18,909	118,803	205,062
1999	55,710	50,983	53,304	18,909	121,777	210,387

- a. The estimated number of CDEP scheme employees in the NATSIS is adjusted proportionally by the difference between the total NATSIS population and the experimental projections. The CDEP employment projections assume a growth of 1,300 CDEP scheme participants per annum between 1994 and 1996 and 71 per cent of these participants are assumed to be employed between 1994 and 1996.

Source: ABS (1996a, 1996b).

Table 6. Indigenous employment/population ratios and unemployment rates assuming no growth in CDEP participation, 1994-99.

	Employment/population ratio ^a			Unemployment rates		
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
1994	35.9	35.9	35.9	38.3	38.3	38.3
1995	36.1	35.6	35.8	37.9	38.7	38.3
1996	36.3	35.4	35.8	37.5	39.1	38.3
1997	36.0	34.6	35.3	37.9	40.2	39.1
1998	35.8	33.9	34.8	38.3	41.4	39.9
1999	35.5	33.2	34.3	38.7	42.6	40.7

- a. Employment/population ratios include CDEP scheme employment. All estimates are based on the data in Table 5. Unemployment rates express the unemployed as a percentage of the labour force.

The alternative assumption regarding no further growth in CDEP scheme employment is applied in Table 5 and the effects of this on calculations of future labour force status are shown in Table 6. In this event, the employment/population ratio falls in all cases while the unemployment rate

consistently rises. In the worst-case scenario, this increase in the unemployment rate is greater than four percentage points, from 38.3 to 42.6.

Policy implications

A key point to note is that the projected estimates of labour force status are based on conservative assumptions. Consequently, the outcomes from the worst-case scenario are, in fact, the most likely. This is because the probable effects on Indigenous employment levels of cuts in non-CDEP areas of ATSIC's budget, as well as in other portfolio areas of government that employ relatively large numbers of Indigenous people and may be affected by downsizing, have not been factored into any of the calculations due to an absence of data. At the same time, it should be recognised that the predicted outcomes do assume a constant labour force participation rate, although in recent time this has only fluctuated slightly.³

Unfortunately, it will prove difficult to assess any effects of more general fiscal tightening given the timing of the 1996 Census prior to the 1996-97 budget and in advance of any budget-related labour market impacts. This will render use of the forthcoming census results ineffective as a means of measuring Indigenous labour force status into the medium-term. If anything, the 1996 Census data will simply describe the high-water mark outcomes of program efforts by the previous Labor Government as well as reflect the prevailing economic conditions of the time. As yet, no other alternative source of data on labour market outcomes for Indigenous Australians exists and the first possibility for any national level assessment of their labour force status would derive from a repeat of the NATSIS if this were to proceed in 1999 as mooted by the ABS (1996d).⁴

More than one-quarter of all jobs for Indigenous people are now derived from the CDEP scheme. Given the very real possibility of no further expansion in overall participant numbers, this places the emphasis for future employment growth firmly back onto the mainstream labour market. Because of downsizing in the public sector, the focus for this growth will fall most prominently on potential outcomes in the private sector - precisely the sector of the labour market where Indigenous people have consistently fared worst in recent years (Altman and Taylor 1995; Altman and Daly 1996).

One consequence of these new realities should be a reconsideration of the role that CDEP has acquired as the primary means of achieving employment growth for Indigenous people. Certainly, a valid criticism of the scheme has been the way in which it masks the reality with regard to Indigenous employment and unemployment rates. For how long was uninterrupted growth in CDEP scheme employment expected to continue?

What proportion of the Indigenous workforce was to have been supported by the CDEP scheme? If recent trends had continued it is not inconceivable that CDEP scheme participants would have accounted for up to half of Indigenous people in work in the years ahead. Was this taking the stimulus away from efforts to generate mainstream jobs? One certainty is that despite the effect of CDEP in buoying up Indigenous employment rates, there has been no concomitant improvement in individual income levels (Altman and Daly 1996) nor in the level of family poverty (Ross and Mikalauskas 1996).

While questions about employment alternatives to the CDEP scheme are now thrown into stark relief, the recent experience of a relative lack of growth in mainstream employment for Indigenous people suggests that a rapid return to the historically high growth rates of the late 1980s (as postulated in scenario 1 of the projections) is most unlikely. This is not least because the most recent Treasury forecast of overall employment growth stands at 1.5 per cent per annum in 1996-97 (Commonwealth of Australia 1996: 2-24). Furthermore, no official change in the overall unemployment rate is anticipated to the year 1998 (Commonwealth of Australia 1996: 3-29). In these circumstances, the diminished ability of the CDEP scheme to take up the growing slack in Indigenous labour supply that stems from continued expansion of the working-age population will have immediate effect by reducing employment levels and adding further to the already high unemployment rate. In this context, it is worth bearing in mind the even starker hypothetical fact that without the scheme the employment/population ratio would be a quarter below its already low level and the unemployment rate would be almost twice as high.

How then are Indigenous job-seekers likely to fare in a new policy-era of fiscal restraint? The evidence from the former government's experience with the AEDP (Sanders 1991), and from recent analysis of data from the NATSIS (ABS 1996a), suggests that long lead times are required for any relative improvements to emerge. The fact is that persistently poor mainstream employment outcomes reflect the historical legacy of entrenched structural disadvantage in an increasingly competitive labour market. On the one hand, demand for Indigenous labour is constrained by disproportionate location 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.

To take just two examples of constraints, the NATSIS found a strong negative relationship between arrest rates and subsequent employment outcomes. Since one-fifth of the Indigenous adult population reported being arrested at least once during the five years prior to the survey, this alone has a substantial dampening effect on successful employment

outcomes. Also, significant is the fact that average life expectancy for Indigenous Australians remains some 20 years below the national average, and health status during working-age is demonstrably far worse. This places clear physical limits on prolonged and full participation in the workforce.

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 1996a). The problem here, however, is the very low base from which a qualified Indigenous workforce is being established. Of further relevance is the fact that the proportion of the total population with post-school qualifications also continues to rise as does the level of skill-deepening required for those already in work. 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).

Conclusion

The key dynamic in projecting Indigenous labour force status remains the fact of demographic ageing. This is manifest for Indigenous people in a rapidly growing population of working age (Altman and Gaminiratne 1994; Taylor 1995; ABS 1996b). 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 past, the CDEP scheme has helped absorb much of this expanded labour supply. Now that this capacity is curtailed, the challenge for policy makers within ATSIC and in other government portfolios will be to quickly find alternative and more permanent means of creating opportunities for new entrants to the workforce.

In the past, changes in the macroeconomic environment have had limited impact on Indigenous labour market indicators due to increasing subsidies to Indigenous employment (Altman and Daly 1992). This now appears to be less so. Among the indirect impacts of the Government's deficit reduction strategy is our projected decline in Indigenous employment rates and an increase in unemployment. A key question to consider in this new policy environment is the opportunity cost of worsening labour force status, in particular the potential costs associated with a greater number of Indigenous people in unemployment.

Notes

1. Previous estimates of CDEP scheme workers have been based on a ratio of 60:40 CDEP scheme workers to participants that was derived from case study material. For a fuller discussion of this see Taylor (1993b: 33-7).
2. The NATSIS recorded a total of 16,800 CDEP scheme workers but this number has been upwardly adjusted using the most recent ABS experimental estimates of the 1994 population (ABS 1996b).
3. While the labour force participation of Indigenous people will vary according to prevailing macroeconomic conditions and to changes in the Indigenous labour market, there is no empirical base to determine whether this would increase or reduce Indigenous labour supply.
4. The monthly Labour Force Survey is the primary source of regular data on labour market outcomes for the total population. However, this only recently included an Indigenous identifier (in March 1994, February 1995 and February 1996). Use of this identifier was purely experimental and only data from the March 1994 Labour Force Survey have been published to date (ABS 1996c). The indication from this analysis of 1994 data is that labour force profiles for Indigenous people from the Labour Force Survey are unreliable due to sampling problems. In any event, the Labour Force Survey does not separately identify CDEP scheme employment.

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