

Are the Gaps Closing? – Regional Trends and Forecasts of Indigenous Employment

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Abstract

This paper examines the extent to which Indigenous Australians have shared in the large expansion of the Australian workforce as revealed by a comparison of 2001 and 2006 census results and whether there have been any associated general patterns. As such, it provides the first comprehensive assessment of possible impacts of federal Indigenous employment policies introduced just prior to the 2001 Census and it contributes to the policy discourse on ‘closing the gap’ between Indigenous and other Australians. Conventional census measures of labour force status are established for each of 37 Indigenous Regions with a particular focus on changes in full-time private sector employment. In line with the policy focus on gap analysis an attempt is made to estimate future job requirements using a projection of the Indigenous working-age population to 2016. This reveals a need for more than 170,000 additional jobs to meet current government targets.

1. Introduction

Improving the mainstream employment prospects of Indigenous Australians has been a key strategy of successive Federal Governments for many decades. From the Aboriginal Employment Development Policy of the Hawke Labor Government in the 1980s to the focus on Practical Reconciliation of the Liberal/National Howard Government and now the emphasis on ‘Closing the Gap’ of the Rudd Labor Government, the integration of a greater proportion of Indigenous Australians into the mainstream labour market has been seen as the most effective way of reducing Indigenous socioeconomic disadvantage. For the most part, census data remain the most effective way of tracking progress towards this end.

For analysts of Indigenous employment, results from the 2006 Census were eagerly anticipated as the 2001 Census came too soon after the establishment of the Indigenous Employment Policy (IEP) in mid-1999 to allow sufficient time for any assessment of its possible impacts on Indigenous labour force outcomes (Hunter and Taylor, 2004). Over the years since that census, the full panoply of IEP measures have been in place with the particular aim of facilitating an expansion of private sector

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opportunities for the Indigenous population. Over the same period other significant labour market policies have been enacted – most notably a shift in emphasis away from community development aspects of the original Community Development Employment Projects (CDEP) scheme towards the preparation-for-mainstream employment focus of the current CDEP program. All these policy changes occurred during a time of strong economic growth and rapid employment expansion. There were around 800,000 additional people counted as employed in the 2006 Census compared to 2001, an increase of almost 10 per cent. The 2006 Census, therefore, allows us to consider whether Indigenous Australians shared equally in this expansion.

While many studies have pointed to sporadic improvement in Indigenous labour market outcomes (DEWR, 2002, 2003; Altman and Hunter, 2003; Hunter and Taylor, 2004; ABS, 2008a; SCRGSP, 2007, 2009) these have been national-level partial analyses only and heavily reliant on sample survey or program data that do not always provide direct comparison with the rest of the workforce. By contrast, the census yields a fully comprehensive set of labour force data that provide for such comparative analysis at disaggregated levels of geography. Of course, the census has its own limitations to do with population coverage (Taylor and Biddle, 2008) but it remains the key resource for Indigenous labour market analysis. Thus, it is the outcomes for Indigenous people that are revealed from census to census in both absolute and relative terms that shed most light on the net effect of policy and the economy on changing economic status. While results from 2006 suggest that a combination of the IEP and favourable economic conditions led to an improvement in employment outcomes for Indigenous adults, closing the gap in labour force status with other Australians against the timetable set by current policy settings is another matter altogether because of disproportionately high growth in the Indigenous population of working-age.

The difficulty of this challenge is illustrated by the fact that, despite sustained employment growth in the Australian economy since the early 1990s, the 2006 census-derived employment rate of the Indigenous adult population was little different from that recorded in 1971 (Altman, Biddle and Hunter, 2008). While the numbers in work undoubtedly increased over that period, so too did the size of the Indigenous adult population. As a consequence, the proportion of the Indigenous adult population counted at the 2006 Census that was in employment (46.1 per cent) was only slightly higher than the figure of 42.0 per cent recorded for the equivalent population counted 35 years earlier at the 1971 Census (Altman, Biddle and Hunter, 2008). This is a remarkably stable outcome over a long time-span, and all the more so because the 2006 Census-identified population was substantially more urban than its predecessor and was therefore located in much closer proximity to established labour markets in regional and metropolitan Australia. Equally surprising is the ratio of Indigenous to non-Indigenous employment rates which was only slightly higher in 2006 than it was for the population counted 35 years earlier (0.75 in 2006 compared to 0.73 in 1971). In effect, after decades of government policy aimed at enhancing Indigenous workforce participation, the gap in employment rates barely shifted.

While this historical perspective provides an inauspicious backdrop to the current Council of Australian Governments (COAG) ambition of halving the gap in employment outcomes within a decade (by 2018, the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA, 2009), it is useful to place this time series in a more contemporary context in order to gauge the strength and

composition of current trends in labour force outcomes. We do this here by comparing 2006 Census results with 2001 and, in particular, by examining changes in Indigenous employment to population percentages at the Indigenous Region level. This regional approach is in recognition of the fact that labour markets vary geographically with important interactions between labour demand and supply at the local level.

Demographic and employment results from the 2006 Census also provide an opportunity to quantify the likely task ahead in terms of meeting current targets. Biddle and Taylor (2009) project the Indigenous adult population to grow at a rate of 2.9 per cent per annum between 2006 and 2016 (the closest census period to consider the prospects for achieving the aims of the Federal Government and COAG outlined above). We analyse the implications of this large influx of young Indigenous Australians into the working age population and hence the labour force in terms of maintaining the current Indigenous employment rate as well as making significant inroads into the gap between Indigenous and non-Indigenous Australians. In doing so, we provide estimates of the extra Indigenous adults who will need to be in work by 2016 in order to meet government targets at both the national and regional level.

2. Data and Geography

Data for this analysis are mostly extracted from the 2001 and 2006 Censuses. Our primary spatial unit is the Indigenous Region level drawn from the Australian Indigenous Standard Classification (AIGC), as shown in figure 1.

Figure 1 - Indigenous Region Structure, 2006



For the 2006 Census there were 37 Indigenous Regions across Australia loosely based initially on the ATSIC (Aboriginal and Torres Strait Islander Commission) Regions that were used for the 2001 and earlier censuses but restructured for the 2006 Census to reflect new administrative arrangements (Indigenous Coordination Centres) and population redistribution.

Given these and other minor changes (some small towns and Indigenous Areas reallocated between regions), the 2001 data used in the present paper are based on Indigenous Areas, the level below ATSIC regions in 2001. These were then aggregated to 2006 Indigenous Regions using a quasi-population based concordance (Biddle, 2008).

Although Indigenous Regions are broader in scale than previous attempts to define 'natural' labour markets in Australia using Local Government Areas (Department of Employment, Education and Training (DEET) 1993), it nonetheless reflects a much closer approximation to the spatial distribution of Indigenous people. While it is recognised that there is heterogeneity within these regions in relation to the characteristics of the labour markets that Indigenous Australians are likely to interact with, the style of analysis undertaken in this paper would not be amenable to a more disaggregated geography. However, the distribution in 2006 of Indigenous socioeconomic outcomes by 531 Indigenous Areas, as well as the change in that distribution since 2001, is available through a separate analysis (Biddle, 2009).

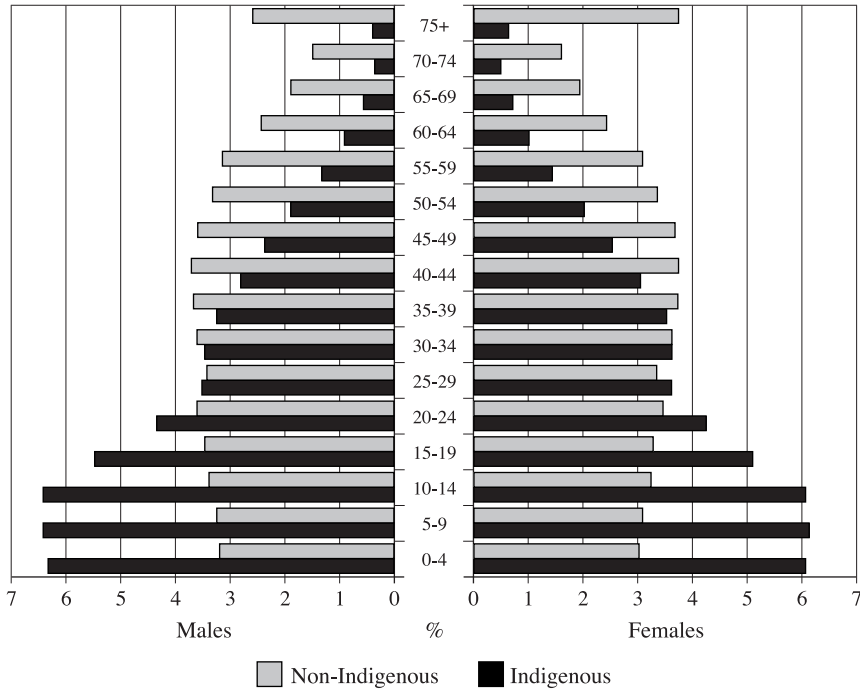
A final note of caution is required prior to any consideration of these census data given the widespread and substantial undercount of Indigenous population in 2006 especially in remote towns, Aboriginal towns and outstations across remote parts of Western Australia, Northern Territory and to some extent Queensland (Taylor and Biddle, 2008). In these areas of inadequate enumeration the census is more akin to a large sample survey. The drawback is that it is unlikely to be a random sample and we have no estimate of the characteristics (including labour force status) of those not captured.

3. Size and Distribution of the Adult Population

A fundamental component of labour supply is the size of the adult population (defined here as 15 years and over)¹. Significantly, the size of the Indigenous adult population counted in the census has grown rapidly over the past few decades with a more than four-fold increase since 1971. The current national estimate is an Indigenous adult population of 323,756 (ABS, 2008b). This represents almost two-thirds (62.6 per cent) of the total estimated Indigenous population and represents an increase of 43,928 (16 per cent) from the 2001 estimate. Furthermore, the current estimated age structure of the Indigenous population (figure 2) and its associated population momentum mean that the adult group, especially those of younger working-age (15-29), is set to increase considerably in the years ahead.

¹ This is somewhat broader than the commonly used working-age population of 15 to 64 years. We use this broader definition to remain consistent with COAG targets. However, it should be kept in mind that population aged 65 years and over (who are less likely to be working) accounts for a much larger proportion of the non-Indigenous population. This means that the gap in employment rates between the Indigenous and non-Indigenous population expressed in this paper will be smaller than those for the working-age population. However, these effects are likely to be small with age standardised rates of employment leading to qualitatively similar conclusions through time and by region.

Figure 2 - Indigenous and Non-Indigenous Age and Sex Distribution, 2006



Source: ABS (2008c)

Compared to the rest of the population, this expansion of numbers in younger working-age groups reinforces a widening gap in the focus and purpose of social and economic policy. For the population as a whole this is increasingly concerned with the effects and implications of ageing and retirement funding, whereas for Indigenous Australians the focus of social and economic policy remains fixed on issues of raising families, housing, education, training, and entry into employment.

The distribution of adult numbers by Indigenous Region provides an initial indication of the relative weight of these various needs across the country. This is shown in table 1 for both the Indigenous and non-Indigenous population using the Estimated Resident Population (ERP) of those aged 15 years and over for each particular region. For both populations, the second and fourth column gives the respective per cent of the total Australian adult ERP that reside in that region whereas the final column of the table shows the per cent of the adult population in the region estimated to be Indigenous.

Table 1 - Indigenous and Non-Indigenous Adult Population by Indigenous Region, 2006

<i>Indigenous Region</i>	<i>Indigenous</i>		<i>Non-Indigenous</i>		<i>Indigenous Share of Region (%)</i>
	<i>ERP ('000)</i>	<i>Australian Share (%)</i>	<i>ERP ('000)</i>	<i>Australian Share (%)</i>	
Queanbeyan	5.8	1.8	257.6	1.6	2.2
Bourke	5.3	1.6	30.0	0.18	15.1
Coffs Harbour	26.7	8.3	1,114.0	6.8	2.3
Sydney	30.1	9.3	3,411.0	20.9	0.9
Tamworth	9.8	3.0	154.9	0.9	5.9
Wagga Wagga	10.8	3.3	357.4	2.2	2.9
Dubbo	6.0	1.8	63.8	0.4	8.5
Melbourne	10.5	3.2	3,039.3	18.6	0.3
Non-Met. Victoria	10.6	3.3	1,091.8	6.7	1.0
Brisbane	28.3	8.8	2,145.8	13.1	1.3
Cairns	13.4	4.2	154.6	0.9	8.0
Mt Isa	5.1	1.6	17.9	0.1	22.4
Cape York	5.1	1.6	4.7	0.0	52.0
Rockhampton	10.2	3.2	325.0	2.0	3.1
Roma	7.9	2.5	245.6	1.5	3.1
Torres Strait	4.9	1.5	1.2	0.0	80.2
Townsville	13.5	4.2	273.0	1.7	4.7
Adelaide	11.6	3.6	1,175.9	7.2	1.0
Ceduna	1.4	0.4	26.1	0.2	5.2
Port Augusta	4.7	1.5	60.9	0.4	7.2
Perth	16.0	4.9	1,212.7	7.4	1.3
Broome	3.2	1.0	7.6	0.0	29.5
Kununurra	3.3	1.0	4.0	0.0	45.3
Narrogin	5.9	1.8	269.2	1.6	2.1
South Hedland	5.0	1.6	29.8	0.2	14.4
Derby	3.4	1.0	2.1	0.0	61.5
Kalgoorlie	4.0	1.2	38.5	0.2	9.5
Geraldton	4.2	1.3	40.8	0.2	9.4
Tasmania	11.7	3.6	381.8	2.3	3.0
Alice Springs	3.7	1.2	17.1	0.1	17.9
Jabiru	6.8	2.1	2.4	0.0	73.9
Katherine	6.3	1.9	6.9	0.0	47.7
Apatula	7.1	2.2	2.3	0.0	75.7
Nhulunbuy	6.6	2.1	4.5	0.0	59.7
Tennant Creek	2.7	0.8	1.9	0.0	58.8
Darwin	8.4	2.6	82.5	0.5	9.2
Australian Capital Territory	2.7	0.8	268.7	1.6	1.0
Australia (total)	322.8	100.0	16,324.6	100.0	1.9

Note: ERP refers to the Estimated Resident Population, Australian share refers to the percentage of the total Indigenous or non-Indigenous population usually resident in that region and Indigenous share refers to the percentage of that Indigenous Region who identified as being Indigenous.

Source: ABS (2008b)

Table 1 suggests that the greatest concentrations of Indigenous adult populations are in major cities and in a line extending along the east coast from Cairns to Sydney. Numbers in the various regions associated with this pattern tend to be over 10,000 persons and up to 25,000 persons. Elsewhere, in more inland and remote parts of Australia, the Indigenous adult population averages around 5,000 per region.

Of further interest is the Indigenous share of the adult population in any given region, as this reflects the extent to which Indigenous people comprise the potential *in situ* labour supply apart from any other considerations. Even despite substantial undercount in Western Australia, Queensland and Northern Territory, table 1 shows that Indigenous people in many parts of these jurisdictions constitute from around half to as much as 80 per cent of the adult population. In major cities and in many regional areas, on the other hand, the Indigenous share of potential labour supply is very small.

This relative share of adult population in a region is likely to have some bearing on the distribution of demand for Indigenous labour. In capital cities and other parts of coastal Australia, Indigenous people are far more likely to be competing as a minority in labour markets where human capital characteristics are the main differentiating factor influencing outcomes. There is potential for racial discrimination in employment to also have some explanatory power (Hunter, 2004: 78-80).

By comparison, in areas where Indigenous people constitute a high proportion of the adult population there has been a growing focus on the engagement of Indigenous labour either because of social responsibility policies of resource companies in regard to the use of local labour or because of directives by government to move people from CDEP and income support into mainstream work. Relatively low levels of Indigenous labour force participation juxtaposed (at least regionally) with areas experiencing high labour demand have significant implications in the continuing mutual obligation policy environment, and this now appears to have been recognised (Taylor, 2005).

4. Indigenous and Non-Indigenous Employment to Population Percentages: 2001 to 2006

Looking back, it is clear that the first few years of the 21st Century was a time of rapid economic expansion. Between the 3rd Quarter of 2001 and the 3rd Quarter of 2006 (when the two Censuses occurred) the ABS estimates that economic output in Australia increased by 17.7 per cent after controlling for inflation. So, while there was strong growth in Indigenous employment both numerically and in terms of percentages (Biddle, Taylor and Yap, 2008), it is important to consider these figures alongside the non-Indigenous population.

In line with our focus on regional labour market analysis, change in Indigenous and non-Indigenous employment percentages are examined at the Indigenous Region level. This is done in table 2 through the per cent of the relevant adult population employed in 2001 and 2006, as well as the percentage change over the period. The final three columns of the table give the ratio of Indigenous to non-Indigenous outcomes in 2001, 2006 and the change between the two years.

Table 2 - Indigenous and Non-Indigenous Employment Percentages by Indigenous Region, 2001 and 2006

<i>Indigenous Region</i>	<i>Indigenous</i>			<i>Non-Indigenous</i>			<i>Ratio</i>		
	<i>2001 (%)</i>	<i>2006 (%)</i>	<i>Change (%)</i>	<i>2001 (%)</i>	<i>2006 (%)</i>	<i>Change (%)</i>	<i>2001</i>	<i>2006</i>	<i>Change (%)</i>
Queanbeyan	37.6	42.7	13.6	53.5	55.8	4.3	0.70	0.77	9.0
Bourke	36.4	38.7	6.4	53.9	56.1	4.2	0.67	0.69	2.1
Coffs Harbour	37.9	42.9	13.1	49.9	53.2	6.6	0.76	0.80	6.1
Sydney	48.6	49.0	0.8	61.3	62.6	2.1	0.79	0.78	-1.3
Tamworth	33.9	38.5	13.9	56.8	58.9	3.6	0.60	0.65	9.9
Wagga Wagga	36.6	38.9	6.4	58.7	60.1	2.3	0.62	0.65	4.0
Dubbo	36.0	40.9	13.6	59.0	60.9	3.2	0.61	0.67	10.1
Melbourne	52.2	54.0	3.5	60.2	62.1	3.2	0.87	0.87	0.3
Non-Met. Victoria	40.3	41.9	3.9	56.6	58.8	3.8	0.71	0.71	0.1
Brisbane	46.1	54.8	18.9	59.0	64.0	8.4	0.78	0.86	9.7
Cairns	42.1	47.5	12.8	64.5	67.7	4.9	0.65	0.70	7.6
Mt Isa	46.9	50.5	7.6	75.8	78.8	3.9	0.62	0.64	3.5
Cape York	61.2	56.7	-7.4	69.2	76.3	10.3	0.88	0.74	-16.0
Rockhampton	39.7	48.0	21.1	55.1	58.8	6.8	0.72	0.82	13.4
Roma	42.8	47.0	9.9	58.5	60.8	4.0	0.73	0.77	5.7
Torres Strait	59.5	64.5	8.4	77.4	83.0	7.3	0.77	0.78	1.0
Townsville	37.8	47.2	24.8	62.6	67.4	7.7	0.60	0.70	15.9
Adelaide	39.3	43.3	10.3	56.4	59.5	5.6	0.70	0.73	4.5
Ceduna	49.2	45.8	-6.9	60.2	63.8	5.9	0.82	0.72	-12.0
Port Augusta	38.0	41.3	8.6	53.4	56.7	6.0	0.71	0.73	2.4
Perth	37.4	42.8	14.5	60.5	65.4	8.1	0.62	0.66	5.9
Broome	50.9	48.3	-5.1	77.0	79.6	3.5	0.66	0.61	-8.3
Kununurra	45.9	46.6	1.5	82.7	85.2	3.0	0.56	0.55	-1.4
Narrogin	41.7	43.9	5.1	58.5	61.1	4.5	0.71	0.72	0.7
South Hedland	43.3	44.3	2.3	79.4	83.0	4.6	0.55	0.53	-2.2
Derby	59.2	59.4	0.4	80.1	82.1	2.5	0.74	0.72	-2.1
Kalgoorlie	43.7	47.3	8.1	71.2	74.3	4.3	0.61	0.64	3.7
Geraldton	36.5	41.6	13.9	61.5	64.8	5.5	0.59	0.64	8.0
Tasmania	47.1	52.0	10.4	53.1	57.0	7.3	0.89	0.91	2.9
Alice Springs	37.9	42.5	12.3	79.6	81.9	2.9	0.48	0.52	9.2
Jabiru	32.6	38.7	18.9	81.0	83.1	2.5	0.40	0.47	15.9
Katherine	40.1	44.3	10.3	79.0	81.2	2.8	0.51	0.54	7.4
Apatula	22.3	24.8	10.8	89.4	88.9	-0.6	0.25	0.28	11.5
Nhulunbuy	28.6	33.5	17.1	83.2	88.0	5.8	0.34	0.38	10.7
Tennant Creek	32.1	32.5	1.3	80.0	83.3	4.1	0.40	0.39	-2.7
Darwin	41.8	46.0	10.0	73.3	76.5	4.4	0.57	0.60	5.4
Australian Capital Territory	59.6	62.7	5.2	68.2	70.9	4.0	0.87	0.88	1.1
Australia (total)	41.9	46.1	10.0	59.0	61.7	4.7	0.71	0.75	5.0

Note: Yearly figures are calculated as a per cent of the relevant usual resident population 15 years and over, the change through time are expressed as a per cent of the base year (2001) and the ratios are found by dividing the Indigenous by the non-Indigenous percentages.

Source: ABS 2001 and 2006 Census customised usual residence tables.

At the regional level, no obvious spatial pattern of change in employment rates is evident. In the Sydney and Melbourne labour markets, Indigenous employment outcomes remained virtually unaltered whereas in Brisbane the employment rate increased substantially from 46 per cent to 55 per cent. In Cape York, the Indigenous employment rate declined, while across the Gulf of Carpentaria, in Nhulunbuy, it notably improved. This diversity in outcomes supports the idea of approaching the analysis of Indigenous labour market issues from a regional perspective rather than focusing on classifications such as remoteness, or State and Territory. This same point can also be made in terms of intra-regional variation, although this will be the subject of later research outputs.

Given the generally favourable economic conditions between 2001 and 2006, perhaps the most telling measures from table 2 in terms of success in Indigenous employment creation are the Indigenous/non-Indigenous ratios (the last three columns). These show the degree to which employment rates for Indigenous adults are moving closer to, or further away from, non-Indigenous rates. For the most part, there was positive change in this ratio with many regions recording a reduced gap of more than 10 per cent. Notable examples include Dubbo, Rockhampton, Townsville, Jabiru, Apatula and Nhulunbuy. This closing of the gap in employment outcomes does not reflect a decline in the regional non-Indigenous employment rate as the change in this variable was almost universally positive. Rather it appears to reflect an even faster rate of growth for the Indigenous population. It should be noted that in the Jabiru, Apatula and Nhulunbuy regions some caution is required in interpreting outcomes because of the relatively small size of the non-Indigenous population (see table 1).

Regions that stand out for their negative change (or worsening) in this ratio include Sydney, Cape York, Ceduna, Broome, Kununurra, South Hedland, Derby and Tennant Creek. Aside from Sydney, this most likely reflects differential engagement with expanding employment opportunities in remote labour markets, especially in resource development projects (Taylor and Scambary, 2005). For the most part, though, Indigenous employment rates improved between 2001 and 2006, both absolutely as well as compared to the rest of the population.

One of the notable aspects of growth in Indigenous employment between 2001 and 2006 was that it occurred alongside stable or in some areas declining participation in the CDEP scheme. In many ways, from a government policy perspective the corollary of CDEP in terms of planned objectives is full-time private sector employment.

Since 1999, the IEP has placed a focus on facilitating Indigenous participation in the private sector and much of the subsequent stimulus for Indigenous welfare reform has reflected an attempt to articulate with what has been the fastest growing part of many regional labour markets in recent years. Nationally, almost one million (917,334) additional private sector jobs were created between 2001 and 2006 (an increase of 13.6 per cent), whereas jobs in the government sector fell by 31,209 (a decline of 2.3 per cent). Over the same period, total full-time private sector employment increased from 4,357,645 to 4,897,154 an increase of 12.4 per cent.

Overall, it appears that Indigenous workers more than shared in this expansion of full-time private sector employment with the ratio of Indigenous to non-Indigenous employment in full-time private sector jobs rising from 0.48 in 2001 to 0.52 in 2006. table 3 shows the regional change in these rates.

Table 3 - Indigenous and Non-Indigenous Full-time, Private Sector Employment Rates by Indigenous Region, 2001 and 2006

<i>Indigenous Region</i>	<i>Indigenous</i>			<i>Non-Indigenous</i>			<i>Ratio</i>		
	<i>2001 (%)</i>	<i>2006 (%)</i>	<i>Change (%)</i>	<i>2001 (%)</i>	<i>2006 (%)</i>	<i>Change (%)</i>	<i>2001</i>	<i>2006</i>	<i>Change (%)</i>
Queanbeyan	13.1	16.9	29.5	25.3	26.4	4.2	0.52	0.64	24.3
Bourke	10.5	12.6	19.2	27.9	29.6	6.3	0.38	0.42	12.1
Coffs Harbour	13.8	16.9	22.2	24.3	26.2	7.9	0.57	0.64	13.3
Sydney	22.7	23.0	1.6	35.6	36.3	1.9	0.64	0.63	-0.3
Tamworth	10.3	14.3	38.9	30.6	31.9	4.3	0.34	0.45	33.2
Wagga Wagga	15.1	17.0	12.3	31.5	32.9	4.4	0.48	0.52	7.6
Dubbo	12.7	16.4	28.8	32.1	32.9	2.5	0.40	0.50	25.7
Melbourne	26.3	27.3	3.9	34.6	34.8	0.4	0.76	0.78	3.5
Non-Met. Victoria	18.1	18.3	1.2	30.3	30.1	-0.5	0.60	0.61	1.7
Brisbane	20.2	25.4	25.9	31.1	34.5	11.1	0.65	0.74	13.3
Cairns	12.6	16.0	26.8	35.5	37.5	5.8	0.36	0.43	19.8
Mt Isa	16.0	17.8	11.9	47.7	51.0	7.0	0.33	0.35	4.6
Cape York	11.5	8.6	-25.6	37.7	42.5	12.7	0.31	0.20	-34.0
Rockhampton	15.1	19.8	30.8	28.9	31.9	10.1	0.52	0.62	18.8
Roma	16.2	19.6	21.0	31.1	32.9	5.8	0.52	0.60	14.4
Torres Strait	15.9	8.7	-45.2	27.3	26.6	-2.5	0.58	0.33	-43.7
Townsville	13.8	20.2	46.0	32.9	37.7	14.5	0.42	0.54	27.6
Adelaide	15.3	17.4	14.2	29.5	30.8	4.3	0.52	0.57	9.5
Ceduna	9.4	12.6	33.8	34.1	34.5	1.2	0.28	0.37	32.2
Port Augusta	7.5	9.9	32.4	28.3	30.7	8.6	0.27	0.32	21.9
Perth	14.9	18.6	24.3	31.7	34.9	10.0	0.47	0.53	13.0
Broome	15.5	13.7	-11.6	46.4	46.7	0.5	0.33	0.29	-12.0
Kununurra	12.0	10.0	-16.8	50.9	54.1	6.3	0.24	0.18	-21.7
Narrogin	12.8	16.2	26.4	31.2	33.1	6.0	0.41	0.49	19.2
South Hedland	15.6	17.8	14.2	50.5	55.0	8.8	0.31	0.32	5.0
Derby	12.9	11.5	-10.9	47.1	46.3	-1.7	0.27	0.25	-9.3
Kalgoorlie	12.6	12.8	1.7	45.7	46.9	2.8	0.28	0.27	-1.0
Geraldton	12.9	15.2	17.9	33.3	35.0	5.2	0.39	0.43	12.1
Tasmania	21.8	24.3	11.3	25.7	27.2	5.7	0.85	0.90	5.3
Alice Springs	13.1	14.8	13.5	42.7	44.4	3.9	0.31	0.33	9.2
Jabiru	10.8	5.8	-46.7	49.2	48.1	-2.4	0.22	0.12	-45.4
Katherine	6.7	6.9	2.6	36.4	38.1	4.9	0.18	0.18	-2.1
Apatula	3.2	3.0	-6.8	67.7	62.3	-8.0	0.05	0.05	1.3
Nhulunbuy	9.8	3.9	-60.0	49.4	56.7	14.8	0.20	0.07	-65.1
Tennant Creek	6.7	6.1	-8.4	42.7	49.5	16.0	0.16	0.12	-21.1
Darwin	14.9	15.4	3.6	34.4	37.6	9.4	0.43	0.41	-5.4
Australian Capital Territory	16.2	20.5	26.9	23.7	25.7	8.5	0.68	0.80	16.9
Australia (total)	15.4	17.4	13.6	31.9	33.4	4.5	0.48	0.52	8.7

Note: Yearly figures are calculated as a per cent of the relevant usual resident population 15 years and over, the change through time are expressed as a per cent of the base year (2001) and the ratios are found by dividing the Indigenous by the non-Indigenous percentages. Source: ABS 2001 and 2006 Census customised usual residence tables.

Once again, table 3 shows substantial variation by Indigenous Region. In Sydney, Melbourne, Brisbane, Townsville, Tasmania, and the Australian Capital Territory, over 20 per cent of Indigenous adults were employed full-time in the private sector. By contrast, the lowest proportions (mostly below 10 per cent) were in remote regions including most of the Northern Territory, the Kimberley, Port Augusta, Cape York, and the Torres Strait. These latter regions also tend to have the highest non-Indigenous rates leading to a substantial contrast in full-time private sector employment outcomes. This in part reflects the non-Indigenous population being more likely to have moved to those regions for work purposes. Nonetheless, that the gap widened between 2001 and 2006 shows that it was not so much that these types of jobs declined in these regions but rather that Indigenous participation in them fell.

In most other regions Indigenous outcomes were far more positive with substantial growth in full-time private sector employment in Queanbeyan, Coffs Harbour, Tamworth, Dubbo, Brisbane, Cairns, Rockhampton, Roma, Townsville, Ceduna, Port Augusta, Perth and Narrogin. Overall, the rate of increase in such employment was highest for the Indigenous population leading to some closure in the ratio with other workers. Tamworth and Townsville present standout cases where the gap in such employment rates narrowed considerably, although Indigenous people generally still occupy such jobs at barely half the rate of others.

5. Future Job Needs for ‘Halving the Gap’ in Employment Outcomes

Previous discussions around employment equality for Indigenous Australians have emphasised the need to account for a growing population of adults when setting targets for future job needs. First, Gray and Tesfaghiorghis (1991), then Taylor and Altman (1997) and Taylor and Hunter (1998), all measured employment requirements as a function of the additional jobs required to achieve parity in employment rates inflated by projected adult population over specified periods (typically 10 years).

A comparison of the projected employment requirements from Taylor and Hunter (1998) and the actual number of jobs that were created over the 1996 to 2006 period presents a cautionary tale for the ‘closing the gaps’ agenda of the Rudd Government (Biddle, Taylor and Yap, 2008). It is, however, still worth considering the magnitude of the task that this agenda implies under certain scenarios. To do this we set up two goals for the 2006 to 2016 period: maintaining the status quo in the face of continued population growth and halving the employment rate gap. For these two scenarios we use projections of the adult population from Biddle and Taylor (2009) and estimate the number of jobs required if CDEP were to be maintained over the period and the number of jobs required if CDEP were to be phased out. The figures are provided in table 4 below, alongside annualised growth rates and interim targets for 2011.

Table 4 - Projected Indigenous Jobs Required to Meet Employment Targets by 2016

	<i>Status Quo</i>		<i>Halve the Gap</i>	
	<i>CDEP Kept</i>	<i>No CDEP</i>	<i>CDEP Kept</i>	<i>No CDEP</i>
Employment rate, 2006	43.2	43.2	43.2	43.2
Employment rate, 2016 target	43.2	43.2	51.9	51.9
Indigenous employment, 2016 projection	184,969	184,969	222,006	222,006
Jobs required, 2016 projection	45,528	80,252	82,565	117,289

Note: The projected number of jobs in 2016 under the two different scenarios is found by multiplying the relevant employment to population targets (in the second row) by the projection in Biddle and Taylor (2009) of 428,169 Indigenous adults. The number of jobs required is then found by subtracting the number of jobs estimated at the time of the 2006 Census (139,441). The level of CDEP employment in 2006 is also subtracted for the 'No CDEP' scenario.

According to the projection assumptions adopted, the Indigenous adult population will grow at a rate of 2.9 per cent per annum between 2006 and 2016 rising from 322,794 to 428,169 over the period. To maintain the current employment rate, this translates to 45,528 additional jobs required. To meet the Rudd Government's target of halving the gap in employment rates, however, a total of 82,565 new jobs would be required in net terms over the period. To put these projections into perspective it is worth revisiting the 49,235 new jobs created over the decade up until 2006 given in Biddle, Taylor and Yap (2008). Clearly, to meet the targets the Rudd government has set for itself, employment creation will need to be greater than that which was previously achieved during a time of rapid economic expansion, conditions not expected to necessarily continue.

The above job creation requirements are in one sense a lower bound in that they assume that CDEP employment will be maintained at its current level over the period. However this is unlikely to occur with the Federal Government announcing substantial changes to the scheme in the 2009-10 budget (Commonwealth of Australia, 2009: 211). Under the most extreme scenario of abolishing CDEP entirely, these jobs would need to be replaced through other means. Some of this would occur through reallocation to other government departments (for example, Aboriginal health workers may start being paid out of the health budget); however, there is likely to be a shortfall that will need to be made up through other sources. Whether this is through the private sector or through the creation of new public sector positions, to achieve the Rudd Government's aims, a total of 117,289 jobs would be required were CDEP to be abolished entirely.

In attempting to meet the target of halving the gap in employment outcomes over a decade, there are likely to be regions within Australia that have relatively high need. For example, it has already been shown that the Apatula Indigenous Region had an employment rate in 2006 of 24.8 per cent, well below the national average. For other regions, for example the Australian Capital Territory or the Torres Strait Indigenous Region, the employment rate is already well above the national target. In these areas, the priority will be keeping up with population growth or, in the case of the Torres Strait, any loss in CDEP jobs that will occur over the next decade.

Table 5 - Projected Indigenous Jobs required to Meet Employment Targets by 2016 for Indigenous Regions

Indigenous Region	2006 Estimates		Additional Jobs Required by 2016			
	Total Employed	CDEP Employed	Status Quo		Halve the Gap	
			CDEP Kept	No CDEP	CDEP Kept	No CDEP
Queanbeyan	2,476	228	901	1,129	1,787	2,015
Bourke	2,067	1041	641	1,682	1,704	2,745
Coffs Harbour	11,457	1830	4,229	6,059	8,251	10,081
Sydney	14,764	505	4,543	5,048	6,473	6,978
Tamworth	3,762	753	1,409	2,162	3,477	4,230
Wagga Wagga	4,193	519	1,572	2,091	3,794	4,313
Dubbo	2,436	191	1,006	1,197	2,100	2,291
Melbourne	5,656	106	1,595	1,701	1,595	1,701
Non-Met. Victoria	4,436	475	1,676	2,151	3,427	3,902
Brisbane	15,509	562	5,616	6,178	5,616	6,178
Cairns	6,383	1654	2,155	3,809	3,305	4,959
Mt Isa	2,600	721	829	1,550	1,060	1,781
Cape York	2,904	2223	715	2,938	715	2,938
Rockhampton	4,910	729	1,960	2,689	2,804	3,533
Roma	3,732	718	1,580	2,298	2,360	3,078
Torres Strait	3,130	1942	958	2,900	958	2,900
Townsville	6,352	794	2,278	3,072	3,503	4,297
Adelaide	5,033	479	1,636	2,115	3,269	3,748
Ceduna	659	403	205	608	358	761
Port Augusta	1,959	1152	467	1,619	1,208	2,360
Perth	6,830	818	2,138	2,956	4,464	5,282
Broome	1,538	1277	378	1,655	600	1,877
Kununurra	1,550	1276	439	1,715	751	2,027
Narrogin	2,577	822	1,026	1,848	1,846	2,668
South Hedland	2,222	500	540	1,040	1,139	1,639
Derby	1,997	1681	518	2,199	518	2,199
Kalgoorlie	1,906	1700	522	2,222	861	2,561
Geraldton	1,763	917	574	1,491	1,265	2,182
Tasmania	6,060	103	2,000	2,103	2,295	2,398
Alice Springs	1,590	424	336	760	853	1,277
Jabiru	2,613	2066	736	2,802	2,052	4,118
Katherine	2,786	2086	754	2,840	1,522	3,608
Apatula	1,766	992	373	1,365	2,884	3,876
Nhulunbuy	2,224	1600	518	2,118	2,189	3,789
Tennant Creek	864	874	204	1,078	907	1,781
Darwin	3,850	357	1,163	1,520	2,024	2,381
Australian Capital Territory	1,710	98	575	673	575	673

Note: The projected number of jobs in 2016 under the two different scenarios is found by multiplying the relevant employment to population percentage by the regional projections of the adult population in Biddle and Taylor (2009) with the number of jobs required found by subtracting the number of jobs estimated at the time of the 2006 Census.

Using the information in table 1 and table 2, region-specific CDEP data² and region-specific population projections from Biddle and Taylor (2009), table 5 outlines the job requirements for each Indigenous Region under two scenarios. The first scenario is the maintenance of the status quo if the adult population grows at the projected rate. The second scenario is the more ambitious aim of achieving a minimum employment rate of 53.9 per cent, half way between the national averages for the Indigenous and non-Indigenous rates presented in table 2.³ Alongside the job requirements, we present the estimated employed population in 2006 (using the implied Indigenous Region specific undercount rate) as well as the estimated number of people in the CDEP scheme. Once again, the alternate assumptions of maintaining the current level of CDEP employment and abolishing it entirely are tested.

There were six Indigenous Regions that already had an employment rate above the minimum target of 53.9 per cent used to construct table 5. In these areas, the job requirements came about purely in order to cover the growth in the adult population over the period. However three of these regions – Cape York, the Torres Strait and Derby – had high rates of CDEP employment in 2006, meaning that in these areas a large number of new jobs would be required if CDEP was phased out over the decade.

In total, there were 17 regions that were estimated to require at least a doubling in the estimated number of people employed in 2016 compared to 2006 (were the CDEP scheme to be abolished). Of these regions, a tripling of the number of Indigenous people employed will be required in Apatula and Tennant Creek. Clearly if the aim of government policy is to make substantial inroads into the disparity in employment rates between the Indigenous and non-Indigenous populations, any scaling back of the CDEP scheme in these areas will require a level of non-CDEP employment growth of a scale unseen in contemporary labour markets.

If the policy response to the large relative need for additional jobs in remote Australia is to encourage people to migrate to settled Australia, then this is going to put additional requirements on city and regional labour markets. However, what table 5 shows is that the four regions with the greatest absolute requirement for additional jobs in order to reach the 53.9 per cent minimum employment rate were in fact in regional Australia (Coffs Harbour) or in the capital cities (Sydney, Brisbane and Perth). While the jobs required may be relatively low in proportion to the size of the population, clearly urban and regional Australian job markets cannot be ignored under any policy aim of reducing employment disparities between the Indigenous and non-Indigenous populations.

² CDEP data comes from the Commonwealth Department of FaHCSIA and the Torres Strait Regional Authority. They are available in graphical form in Biddle, Taylor and Yap (2008).

³ This is a slightly more ambitious target than the one set by the Rudd Government in that the aim is to achieve a minimum employment to population percentage in all regions (with some allowed to be higher) rather than an average across Australia. It should also be noted that the employment to population percentage aim under the 'halving the gap' scenario is slightly higher than that outlined in table 4. This is because those who stated their place of usual residence were more likely to be employed than those who did not. The relative gap between the Indigenous and non-Indigenous populations is, however, roughly the same in table 2 and table 4.

6. Conclusion

The intercensal period between 2001 and 2006 was a time of rapid economic and employment expansion in Australia. The 2006 Census recorded 9.1 million employed Australians, an increase of more than 800,000 people in work compared to the previous Census. Over the same period there was a fall in the total unemployment rate from 7.4 per cent to 5.2 per cent. However, the per cent of the Indigenous adult population in 2006 who were employed was still around three-quarters of the non-Indigenous percentage. This paper has considered three broad questions in relation to these changes: Firstly, have Indigenous Australians shared equally in this rapid expansion of the workforce? Secondly, is there a regional pattern to any associated changes in Indigenous labour force status? Finally, how many jobs are required in order to achieve the stated aim of COAG to ‘halve the gap’ in employment outcomes?

In considering the first question, the census would appear to provide *prima facie* evidence that targeted Indigenous employment policy was very successful in its primary aim of raising Indigenous employment levels, especially in the private sector, given the far higher rate of growth in the latter form of employment compared to that observed for the rest of the workforce. Having said that, it is impossible to isolate any effects of government programs from those brought about by the generally favourable economic circumstances that prevailed in the five years to 2006. Whatever the cause, the fact is that better than average Indigenous performance in the labour market in terms of the basic measure of employment increase led to a reduction in the gap with other Australians for this key national indicator.

Between 2001 and 2006 Indigenous Australians also moved into jobs that historically they had found difficult to secure, with large relative and absolute gains in full-time private sector employment. These gains sit alongside relatively stable CDEP employment numbers. Against a growing Indigenous adult population, this translated into a reduced CDEP share of total employment.

With regard to the second question – whether there were any regional patterns to the change in employment related outcomes for the Indigenous population – the answer is a qualified yes. In general, it appears that improvement in employment outcomes was greatest in urban and regional parts of Australia. Townsville, Rockhampton, Brisbane and Perth in particular, all experienced gains in employment that were notably more substantial than in other Indigenous Regions. Compared to this, remote parts of Australia fared relatively poorly in terms of employment outcomes over the period. Cape York, Broome, Ceduna, Tennant Creek and Kununurra were all remote regions that experienced below average gains in employment rates – in fact, these actually fell in the first three of these regions.

There were, however, exceptions to this broad remote/non-remote pattern, both in terms of regions and in terms of indicators. For example, Indigenous employment outcomes in Sydney stagnated between 2001 and 2006 with the percentage of the population employed staying roughly the same in 2006 (49.0 per cent) compared to 2001 (48.6 per cent). Relative to the non-Indigenous population, it was one of only eight regions where the employment gap widened (the rest mainly being in remote Australia). Thus, while providing some insight, the standard remoteness classification masks a degree of diversity that is occurring at the level at which labour markets are constructed.

In answering the final question of future job needs, it is important to note that as with many aspects of Indigenous policy, just to maintain employment outcomes at their present level will require additional investments because of population growth. Specifically, 45,528 additional jobs will be required between 2006 and 2016 just to keep up with the projected 2.9 per cent per annum growth in the adult population. To meet the Rudd Government's target of halving the gap in employment rates, however, a total of 82,565 new jobs would be required in net terms over the period, rising to 117,289 if the CDEP jobs that were in existence in 2006 are abolished.

To do more than just stand still, a major part of this investment will need to address Indigenous supply-side factors as demonstrated in a number of regional studies (Taylor, 2003, 2006a, 2008; Taylor and Scambary, 2005). Many of these structural barriers accumulate over the life course and while premature mortality shortens the overall span of social and economic participation for many Indigenous people, social and economic disadvantage at early ages also serves to diminish its effectiveness in terms of human capital accumulation. The point is now well-made – if Indigenous people are to successfully compete for mainstream jobs then they require at least an equivalent human capital base from which to do so. This is especially the case with the type of skilled jobs that will be necessary to improve relative income status and associated standards of living.

There is a demand-side issue here as well. Despite initiatives such as the Australian Employment Covenant there is a continued need for flexible and realistic approaches to raising participation in economic activity especially in the more remote regions that are identified in this paper as doing relatively poorly in terms of standard economic indicators. In many remote communities, and to some extent in towns as well, this broadening of activity is most likely to occur via an import substitution model that embraces activities such as the construction and maintenance of physical infrastructure, education, health services, retailing, public administration, transport, media, land restoration, land management, and tourism. Some of the diversity in economic activity encompassed here is also already in place via the CDEP program in the form of land and sea management jobs (Altman and Sanders, 2008).

Of course, in urban areas CDEP withdrawal is underway, and this is likely to have raised the unemployment rate in many regions unless former CDEP workers have subsequently acquired alternate employment. Certainly, in any economic downturn, the lack of CDEP to fall back on will have the same effect. In this context, it is interesting to note that our analysis reveals urbanised regions to be those that require the greatest absolute number of additional jobs over the next 10 years if the Rudd Government's employment target is to be met. This is reinforced by the fact that identified migration patterns continue to reveal net rural-urban flows (Taylor, 2006b). Even within this general prescription, the basic geography of job need dictates that particular attention will need to be paid to certain non-metropolitan labour markets – especially in New South Wales and Queensland – in order to meet expected goals.

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